USGROUP

To,

The Registrar,

National Electric Power Regulatory Authority.

Subject: Application for Grant of ELECTRIC POWER SUPPLY License

I, Muhammad Saqib, being the duly authorized representative of US Apparel & Textile Pvt. Limited, 20 KM Ferozepur Road Lahore by virtue of BOARD RESOLUTION dated 30-05-2023, hereby apply to the National Electric Power Regulatory Authority for the grant of a ELECTRIC POWER SUPPLY LICENSE to the US APPAREL & TEXTILES Private Limited pursuant to section I of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

I hereby certify that the documents-in-support attached with this application are prepared and submitted in conformity with the provisions of the National Electric Power Regulatory Authority Licensing Application Procedure Regulations, 2021, and undertake to abide by the terms and provisions of the above-said regulations. I further undertake and confirm that the information provided in the attached documents-in-support is true and correct to the best of my knowledge and no material omission has been made.

A PAY ORDER in the sum of Rupees 709,669 being the license application fee calculated in accordance with Schedule II to the National Electric Power Regulatory Authority Licensing Application Procedure Regulations, 2021, is also attached herewith.

Signature

Muhammad Saqib

Director

US Apparel and Textiles Private Limited

Company Seal

Account Payee Only

NOT OVER Rs. *657,742.00*

Meezan Bank
The Premier Islamic Bank

(1164) Izmir Society Lahore Branch-Pakistan.

Pay to *NATIONAL ELECTRIC POWER REQULATORY AUTHORITY (NEPRA)* or Order

Rupees *SIX HUNDRED AND FIFTY SEVEN THOUSAND SEVEN HUNDRED AND FORTY TWO ONLY*

PAYABLE AT ANY BRANCH
Please do not write below this line.

P.O. No. PO.1164.0348802

Stationery/Ref No: **00348802**

2	7	0	3	2	3

PKR *657,742.00*

Authorized Signatory
Attorney No.

Authorized Signatory
Attorney No.

⑈00348802⑈089116417571000111164⑈020⑈

Account Payee Only

NOT OVER Rs. *51,927.00*

Meezan Bank
The Premier Islamic Bank

(1164) Izmir Society Lahore Branch-Pakistan.

Pay to *NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (NEPRA)* or Order

Rupees *FIFTY ONE THOUSAND NINE HUNDRED AND TWENTY SEVEN - ONLY*

PAYABLE AT ANY BRANCH
Please do not write below this line.

P.O. No. PO.1164.0348929

Stationery/Ref No: **00348929**

0	9	0	6	2	3

PKR *51,927.00*

Authorized Signatory
Attorney No.

Authorized Signatory
Attorney No.

⑈00348929⑈089116417571000111164⑈020⑈

3(4)(b)	A prospectus

PROSPECTUS

US Group, is a family-owned business having sales of around 350 million USD a year and employing 20,000 workers. The Company built its first manufacturing facility in 1985 and quickly became Pakistan's leading exporters of bottom-wear twills and denim. US Group includes a variety of denim fashion companies as well as US Apparel and Textiles Pvt. Limited (USA&TPL) with manufacturing plants in Lahore and sales and design offices in fashion centers across the world. US Group is a vertically integrated provider with the capacity to produce almost 40 million meters of fabric and 30 million units of apparel annually. The denim manufacturing facility of the Company is one of the most modern facilities in the world. According to submitted information, the total assets of the applicant company (i.e., USA&TPL) are around Rs. 16.00 billion.

The power house at US Apparel and Textiles Pvt. Ltd. employs three internal combustion engines-based power gensets offering a gross capacity of 3.90MWe while utilizing HFO and HSD as the recommended fuels. HFO is the primary plant fuel while HSD is fall-back.

The three gensets provide net useful output of 3.82 MWe at 100% loading conditions.

The turbocharged engines are manufactured by MAN B&W (GmbH) and Caterpillar while the power generating units (synchronous Alternators) are made by AEM (GmbH) and Caterpillar. All units are coupled to provide optimized performance. To accommodate the higher viscosity of HFO, a pre-heater on the engines primes the fuel for the engines on demand.

Cogeneration using a WHRSG allows the power plant to be more environment friendly while providing extra output in the form of High Energy Content Water (Steam) from the exhaust heat which otherwise would have been wasted and vented into the atmosphere.

In this regard the National Electric Power Regulatory Authority (NEPRA) has granted a generation License (SGC/131/2019) to USA&TPL for its Power generation facility to supply surplus electricity to affiliates/sister concerns, Bulk Power Consumer (BPC) from this generation facility on as-and-when required basis (to cater both for prime and emergency requirement).

USA & TPL always follow the environmental compliance standard. We perform quarterly emissions test from EPA certified labs (for ref Latest emission test reports are attached).

Power House features

Installed Capacity of Power Plant	3.90 MWe
Auxiliary consumption of Power Plant	0.08 MWe
Net Capacity of Power Plant at mean site conditions	3.82 MWe

Mean site conditions	
Intake air temperature	45 ^{o}C
Barometric Pressure	100 kPa
Relative humidity	30%
Cooling water temperature bef. charge air cooler	35 ^{o}C
Net calorific value	42,700 Kj/Kg

HFO Engine Specifications

Sr. No	Specification	DG# 01	DG# 02
1	Year of Manufacturing	2006	2006
2	Make:	MAN B&W DIESEL A/S HOLEBY	MAN B&W DIESEL A/S HOLEBY
3	Model:	5L27/38	5L27/38
4	Engine Serial No.	22214	22215
5	RPM:	750	750

Alternator Specification			
Sr. No	**Specification**	**DG# 01**	**DG# 02**
1	Make:	AEM DESSAU GMBH	AEM DESSAU GMBH
2	Model:	SE 630 SAB	SE 630 SAB
3	Amperes (A)	2605	2605
4	Alternator Serial No.	300600169	300600170
5	RPM:	750	750

PAK GREEN ENVIRO-ENGINEERING (Pvt.) Ltd.
ISO/IEC 17025:2017 Accreditated Testing Lab, ISO 9001:2015, ISO 14001:2015, ISO 45001:2018
Doc # PGG-IKE-LF-003 | Rev. Date 27 Jan 22 | Rev # 01
Head Office: 46-M, Gulberg III, Lahore-Pakistan. Ph: +9242-35441444 Cell: 0303-4442334
EPA Certified

TEST REPORT

Ref #: PGG/LAB/2023-0900/SE

Date: 22-Feb-23

Name of Industry/Client:	M/S US Apparel & Textile (Pvt.) Ltd
Address of Industry:	20-Km, Ferozepur Road, Glaxo Town, Lahore
Nature of Monitoring:	Stack Emissions
Monitoring By:	Pak Green Laboratories
Emission Source:	Generator # 2
Capacity:	1805 KVA
Fuel:	Diesel
Load:	Normal
Monitoring Instrument:	MRU-Optima 7, Ringelmann Scale
Monitoring Date:	16-Feb-23

Results:

Sr. No.	Parameters	Units	PEQS	Reading 1	Reading 2	Reading 3	Average
1.	O_2	%	NGVS	16.71	16.72	16.73	16.72
2.	CO_2	%	NGVS	3.21	3.23	3.24	3.23
3.	CO	mg/Nm³	800	339.25	340.40	341.55	340.40
4.	NO	mg/Nm³	NGVS	281.67	282.90	284.13	282.90
5.	NO_2	mg/Nm³	NGVS	9.80	11.76	13.72	11.76
6.	NOx	mg/Nm³	600	291.47	294.66	297.85	294.66
7.	SO_x	mg/Nm³	1700	670.3	670.5	670.7	670.5
8.	Smoke	%	40	20	20	20	20
9.	Temperature	°C	-	127.3	128.4	127.9	127.9

……………………………………………………End of Report……………………………………………………

PEQS: Punjab Environmental Quality Standards **NGVS: No Guideline Value Set**

Remarks: All parameters are in compliance with PEQS Limits.

Terms & Conditions:

- Analysis was conducted on the request of project proponent for his own use/PEQS Compliance.
- Report cannot be used regarding compliance of any complaint, EPO or any other court case.
- This report should be reproduced as a whole and not in parts.
- The responsibility of the ethical use of the results reported in this report lies with the client. Consequently, the laboratory is absolved of its responsibility for any claim that may result through the use by the client or others of the results appearing in this report.
- The report is not valid for any negotiations.
- Dually calibrated instrument was used during monitoring

Field Analyst	Chief Analyst	Laboratory Incharge

Pak Green Enviro-Engineering (Pvt) Ltd. 46-M, Gulberg-III, Lahore. Lahore Pakistan

PAK GREEN ENVIRO-ENGINEERING (Pvt.) Ltd.

ISO/IEC 17025:2017 Accreditated Testing Lab, ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

Doc #: PGG/IMS/FF/063 | Rev. Date: 27-Jan-22 | Rev. # 01

EPA Certified

Head Office: 46-M, Gulberg III, Lahore-Pakistan. Ph: +9242-35441444 Cell: 0303-4442334

TEST REPORT

Ref #: PGG/LAB/2023-0901/SE

Date: 22-Feb-23

Name of Industry/Client:	M/S US Apparel & Textile (Pvt.) Ltd
Address of Industry:	20-Km, Ferozepur Road, Glaxo Town, Lahore
Nature of Monitoring:	Stack Emissions
Monitoring By:	Pak Green Laboratories
Emission Source:	Generator # 3
Capacity:	1.440 MW
Fuel:	HFO
Load:	Normal
Monitoring Instrument:	MRU-Optima 7, Ringelmann Scale
Monitoring Date:	16-Feb-23

Results:

Sr. No.	Parameters	Units	PEQS	Reading 1	Reading 2	Reading 3	Average
1.	O_2	%	NGVS	17.13	17.14	17.15	17.14
2.	CO_2	%	NGVS	2.42	2.45	2.47	2.45
3.	CO	mg/Nm³	800	374.90	376.05	377.20	376.05
4.	NO	mg/Nm³	NGVS	292.74	293.97	295.20	293.97
5.	NO_2	mg/Nm³	NGVS	58.80	62.72	66.64	62.72
6.	NOx	mg/Nm³	600	351.54	356.69	361.84	356.69
7.	SOx	mg/Nm³	1700	589.9	589.7	589.8	589.8
8.	Smoke	%	40	20	20	20	20
9.	Temperature	°C	-	131.4	131.5	131.6	131.5

.....End of Report.....

PEQS: Punjab Environmental Quality Standards NGVS: No Guideline Value Set

Remarks: All parameters are in compliance with PEQS Limits.

Terms & Conditions:

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- The report is not valid for any negotiations.
- Dually calibrated instrument was used during monitoring

Field Analyst	Chief Analyst	Laboratory Incharge

Pak Green Enviro-Engineering (Pvt) Ltd. 46-M, Gulberg III, Lahore Pakistan

3(4)(C)(i)(a)	Certified copies of certificate of incorpration

بسم اللہ الرحمن الرحیم

GOVERNMENT OF PAKISTAN

Certificate of Incorporation

(Under Section 32 of the Companies Ordinance, 1984 (XLVII of 1984)

Company Registration No. L 00030

I hereby certify that " U. L. APPAREL AND TEXTILES (PRIVATE) LIMITED " xx xx xx xx xx xx xx

is this day incorporated under the Companies Ordinance, 1984 (XLVII of 1984) and that the Company is limited by shares.

Given under my hand at LAHORE this 16th day of February, 1987 one thousand nine hundred and eighty seven

Fee Rs. 11120/- (Rupees Eleven thousand one hundred & twenty only).

Company Registration Office Lahore — Securities and Exchange Commission of Pakistan — SECP

CERTIFIED TO BE TRUE COPY 17/3/23

ADDITIONAL JOINT REGISTRAR OF COMPANIES COMPANY REGISTRATION OFFICE LAHORE.

(ABDUL RAHMAN JAMALI)
JOINT REGISTRAR OF COMPANIES
LAHORE

No. JRL/ 3578-

Dated 22/2/87

3(4)(C)(i)(b)	Certified copies of memorandum and articles of associatin

THE COMPANIES ORDINANCE, 1984

COMPANY LIMITED BY SHARES

Memorandum of Association

Of

U.S. APPAREL AND TEXTILES (PRIVATE) LIMITED

PRELIMINARY

I. The name of the Company is **"U.S. APPAREL AND TEXTILES (PRIVATE) LIMITED."**

II. The Registered Office of the Company shall be situated in the Province of Punjab Pakistan

III. The objects for which the Company is established are as follows:

1. To establish set and operate a Tailoring & Stitching plant for the manufacture of readymade garments of various types, patterns and designs and to carry on all such functions and business as are incidental and required to be a producer of ready made garments.

2. To carry on the business of weaving manufacturing and making fabrics from cotton, wool, silk, jute, yarn and other fibrous substances whether natural or artificial and the preparation dyeing, finishing etc, of the said substances and the sale of fibers, fabric cloths textiles items and allied products.

3. To export , import , purchase , sell, comb, prepare, spin, weave, dye and otherwise deal in carpets, handicrafts, furniture, garments, yarn cloth, cotton, flat, jute, wool, silk and all or any fabrics item and other allied products.

4. To carry on business of carpet and linen manufacturing, bleaching, printing, combing, preparing , manufacturing, selling, buying and otherwise dealing

in yarn, line, cloth, carpets and other goods and fabrics made from raw cotton, silk, flax, hemp, jute, wool and other materials.

5. To supply yam to handloom and carpet weavers, to assist, employ and hire such weavers and to buy and deal in carpets, handloom produce and to market such produce.

6. To carry on all or any of the business of silk mercers, silk weavers, furriers haber dashers, manufacture, importers and wholesale and retail dealers of and in textile and gold and silver thread fabrics of all kinds, milliners dress makers tailors, batters, clothiers, out fitters, glovers, lace manufactures and feathers dressers and allied products of all descriptions.

7. To carry on the business of general manufactures and to manufacture, buy, sell and deal in apparatus, machinery, materials, and articles of all kinds which this company is authorized to deal in.

8. To carry on the business of weaving or manufacturing bleaching, printing and selling cloth, fabrics all types of textiles, including texturised and selling cloth, fabrics all types of textiles, including texturised double knitted fabrics, linen, hosiery and other goods ,or merchandise made thereof.

9. To carry on the business of manufacturers of and dealers in leather and leather goods, waterproof materials and fabrics, tarpaulins, floor cloth and all kinds of information leathers, rubbers and plastics.

10. To buy, sell, import, export, manufacture, manipulate, treat, repair and deal in merchandise commodities and articles of all kinds which the company is authorized to deal in.

11. To erect, maintain, alter, extend and purchase plant and machinery for the purpose of ginning, preparing, combing, spinning, weaving, manufacturing, bleaching, dyeing mercerizing printing or otherwise working any of fabrics and materials and erect, maintain, alter, extent, purchase and sell mills, factories, warehouses, engine houses, dwelling house for employees, other buildings on any land purchased, leased or otherwise acquire by or for the company and of any of the purpose connected with the business of the company.

12. To carry on all or any of the businesses of generating, purchasing, importing, transforming, converting, distributing, supplying, exporting and dealing in electricity and all other forms of energy and products or services associated therewith and of promoting the conservation and efficient use of electricity and to perform all other acts which are necessary or incidental to the business of electricity generation, transmission, distribution and supply, subject to permission of concerned authorities; and to locate, establish, construct, equip, operate, use, manage, and maintain thermal power plants, coal fired power plants, hydal power plants, wind mills, power grid

station, furnace oil/ diesel power plants, cables, overhead lines, sub-stations, switching stations, tunnels, cable bridges, link boxes, heat pumps, plant and equipment for combined heat and power schemes, offices, computer centers, shops, and necessary devices, showrooms, depots, factories, workshops, plants and to provide transforming, switching, conversion and transmission facilities, subject to permission of relevant authorities.

13. To apply-for and obtain consents, permissions and licenses for the establishment and operation / maintenance of Power generation facility, including system for distribution of such Power produced for in-house and B to B transactions. To further, improve upon, increase in capacity, to effect change of technology / use of fuel, to increase the efficiency of such plants systems and to employ different forms of energy for the Power generation facility.

14. To make known or give publicity to the business and productions of the company by means of advertisements in the press, pamphlets, hand bills, circulars, advertisement posters cinema slides or publications of books or by granting awards, prizes and donations or in any other suitable mode.

15. To procure the incorporation, registration of the company in any country, state or place outside Pakistan.

16. To take part in the promotion, floatation, management, supervision or control of the business or operation of any company or undertaking having or proposing have similar objects of the Company.

17. To amalgamate with any person or company whether by sale, purchase (for fully paid shares) of the undertaking subject to the liabilities of this or any such other company with or without winding up or by purchase (or fully paid shares).

18. To draw, accept, endorse, discount, execute, issue, negotiate and deal in hundies, cheques, promissory notes, bills of exchange, bill of lading, warrants, debentures, Government promissory notes, port Trust debentures for the purpose of the company's business and to open company's banking accounts and give instructions for their operation except doing banking business.

19. To borrow or raise funds, by means of loans from shareholders, directors, commercial banks or Government financial institutions for the Company's trading and allied business and in particulars by mortgage of or charges to the undertaking and all or any of the property, assets (present or future) of the company or by the creation and issue of debentures, debenture stock, bonds, obligations or securities of any description or by issue of shares as fully paid.

20. To guarantee the performance of contracts, agreements, obligations or discharge of any debt of the Company or on behalf of any company or person in relation to the payment of any financial facility including but not limited to loans, advances, letters of credit or other obligations through creation of any or all types of mortgages, charges, pledges, hypothecation, on execution of the usual banking documents or instruments or otherwise encumbrance on any or all of the moveable and immovable properties of the Company, either present or future or both and issuance of any other securities or sureties by any other means in favor of banks, Non-Banking Finance Company (NBFCs) or any financial institutions and to borrow money for purpose of the Company on such terms and conditions as may be considered proper.

21. To pay all expenses, give remuneration, commission, brokerage or other compensation or reward for services rendered or to be rendered in or about the formation of the company or the conduct of its business and services rendered in placing or assisting to place or guaranteeing the placing or underwriting of any of the shares in the capital of the Company or any debentures of securities of the company.

22. To invest and deal with moneys of the Company not immediately required in such manners as may from time to time, determined but not to act as investment Company.

23. To create any reserve funds, sinking fund, insurance fund or any other special fund whether for depreciation or for repairing insuring, improving extending, or maintain any of the property of the Company.

24. To foster, encourage and conduct research work in the field of operation of the Company and with that end to establish, maintain and run laboratories to give subsidies and aid to research institution whether private or public and to award scholarship to students and research workers on certain conditions or unconditionally.

25. To sell or dispose of the undertaking of the Company or any part thereof for such consideration as the company may be think fit and in particular for shares, debentures or other securities of any company.

26. To establish branded items and get them registered all over the world to manufacture denim/fabrics raw materials for the purposes of the Company or otherwise sale in the local and international markets and also to sell and purchase franchise for business of the Company.

27. To open, establish, manage and run I.T services or I.T. enabled services including call centers, shared accounting services centers, financial and bookkeeping services data processing H.R. services graphic design, telemedicine centers, medical transcription services and get them affiliated

with local and foreign institution and corporations including development of softwares.

28. To acquire land, building, machinery, computer hardware, electronic transmitters, equipments, furniture and fixtures by purchase or otherwise for establishing institutions and data processing centers for accounting, academic, technical particularly programming i.e. development of software of all types and/or imparting training throughout the world.

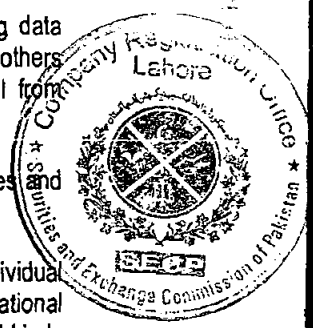
29. To obtain licenses for establishment of business of electronic information services such as Internet Services Provider (ISP), Internet, Intranet, Email, Mobile Phone, Cabling, Telecommunication, E-commerce, ATM, Mobile/GSM, VOIP Operations, Web Development, Hosting, File/Data Transfer, Advertisement/Classified Section on Internet, B to B, M to M and M-commerce after obtaining approval from the relevant authorities.

30. To provide education, training and services related to Information Technology, Computer Controlled Design, Computer Aided Manufacturing, Computer controlled Engineering, Computerized Numerical Controlled Engineering and Manufacturing, Electronic Engineering, System Development, System Analysis, Computer Programming, Computer Techniques, Data Control and supervision, conversation, Maintenance, Acquisition, Consultancy, Feasibility Studies, Information Technology, Training and Courses or any electronic or computer based developed in future and allied training and services, and to open, establish and run branches, research center, training centers, institutions and System Analysis Development Center in all parts of Pakistan, native states or foreign countries and to send trained and technical persons abroad.

31. To set-up a countrywide data communication network for providing data communication facilities to financial and business communities and others using fiber optic, VSAT (satellite) and radios (Subject to approval from competent authorities).

32. To design, develop and implement software, information technologies and related services for export from Pakistan.

33. To act as consultants or agents for companies, firms, individual association, local or government bodies, foreign governments, international agencies, to enter into agreements to act as suppliers of any and all kinds of goods, software, machinery, technology, equipment, products, materials, to act as intermediatories in the introduction of sellers, purchases, partners, employees and to employ exports to investigate, examine into the condition, design, management prospect, value and circumstances of any business, concerns and undertakings and generally of any assets, property or rights of any kind, subject to any permission required under the law.



34. To carry on the business of export, import and deal in computer software, computer hardware, machinery and all -types of equipments related to information technology including graphics designing, development work and to engage in business of development, purchase, acquire, rent, sell computer software and software applications independently or associated with other persons or companies.

35. To carry on the business of word processor, data processor, outsourcing services punched card operator, call centers, computer based composer, publisher, graphics, graphics solutions, designer, video animation, systems analysis, research, development, manufacturing, fabrication, information technologies and system engineering.

36. To carry on all or any of the business of establishing developing, expanding, enhancing, managing and operating telecommunication systems including systems signals, data or messages of any and all kinds and to carry on and to extend the business of telecommunication or any part thereof.

37. To sponsor, promote, float, incorporate, organize, manage, administer, operate, invest or participate in and collaborate or cooperate with modaraba companies, modaraba funds and modarabas of all types and descriptions, mutual funds, unit trusts and other similar concerns and either in syndicates or otherwise provided that none of such enterprises in or the funds thereof invested in, any business or venture which is opposed to the injunctions of Islam after obtaining approval from the relevant authorities.

38. To develop land for forests and otherwise for cultivation of food grain, cash crops, pulses, fruits and to sell them and their products.

39. To do the business as caterers, franchised or otherwise, keepers of hotels, motels, restaurants, coffee/tea houses and manufacturers/sellers/importers/exporters of soft drinks, aerated waters, drinks, all kinds of foods, goods, necessary for marriages and other entertainments, sports, amusements, indoor/outdoor games, exhibitions for the healthy growth of environment.

40. To set up industrial units for iron, steel, textile including embroidery and towel manufacturing, engineering and Hi- tech goods, electronic goods, pharmaceutical, chemicals, paper publishing matter/material, inks, colours, writing instruments, leather garments, footwears, information technology for human, animals, birds and sale of their products, by products in local and foreign markets and manufacture all kinds of moulds. To purchase, take on lease or otherwise acquire industrial undertakings or undertake industrial activity of all kinds without limitation and to operate the same.

41. To work as traders, buying houses, stockists, commission agents, transporters of any mode, traveling, clearing, forwarding agents, couriers,

purchasers, sellers, storekeepers, importers, exporters or otherwise deal in goods, merchandise and commodities of all any kind and generally to carry on business as merchants, dealers, distributors, wholesalers, retailers, importers and exporters and to act as or appoint agents, sub-agents, attorneys, consultants, brokers and contractors in connection with the business of the Company but not to act as managing agents as restricted under law. To act as business financier, investor, technical, managerial and professional experts, consultants and advisors.

42. To purchase and acquire, from leasing companies or otherwise on lease land, machinery, equipments of all types or nature for agricultural, industrial, commercial and domestic purposes and to takeover any existing undertaking by negotiation or otherwise with any Government, Authority and/or private party.

43. To make payments out of the profits of the Company, for the benefits of present/past Directors, all other employees and their dependents for the purchase of a piece of land for building a house or a house building, education in Pakistan or abroad, treatment/restoration of health in Pakistan or abroad and performing of Haj/Umrah.

44. To subscribe or contribute or collect or otherwise to assist or to guarantee money to charitable, benevolent, religious, literary scientific, technical, public, or any institution, for its objects or purpose or for any exhibition. To donate out of the funds of the company, any amount or article or property as charity or zakat to mustehqeen of all types or otherwise, to individuals worship places, hospitals, health care centers, trusts of any kind, charitable institutions, educational and institutions of public utilities, associations and clubs formed for the benefit of general public at large.

45. To enter into any type of lawful contract, agreement with any individual firm, co-operative or other society, trust, company, corporate body, Government or local authority other legal entity necessary or expedient for the purpose of carrying on any business of the Company.

46. To establish and maintain of any contributory or non-contributory pension or superannuation funds for the benefit of, and give or procure the giving of donations, gratuities, pensions, allowances or emoluments to any persons who are or were at any time in the employment or services of the Company, or of any Company which is a subsidiary of the Company or is allied to or associated with Company or with any such subsidiary Company, or who are or were at any time directors or officers of the Company or of any such other Company as aforesaid, and the wives, widows, families and dependent of any such persons, and also to establish and subsidies and to any institutions, associations, clubs or funds calculated to be for the benefit or to advance the interests and well-being of the Company or of any such other Company as aforesaid, and make a

payments to or towards the insurance of any such person as aforesaid and do any of the matters aforesaid either alone or in conjunction with any such other Company as aforesaid.

47. To employ and remunerate managers and other officers, employees and servants of the Company or any person or firm or Company rendering services to the Company upon such terms as the Company may determine.

48. To open branches, get registration of the Company and to undertake all or any of the business of the Company in any part of the world and to become a member of various associations and trade bodies whether in Pakistan or abroad

49. To apply for and obtain necessary consents, permissions and licenses from any Government, State, Local and other authorities for enabling the Company to carry any of its objects into effect or for extending any of the powers of the Company or for effecting any modification of the constitution of the Company or for any other purpose which may seem expedient and to oppose any proceedings or applications which may seem calculated, directly or indirectly to prejudice the interests of the Company, and to enter into arrangements with any government or authorities, central, provincial, municipal, local or otherwise, public or quasi-public bodies, or with any other persons, in any place where the Company may have interests that may seem conducive to the Company or any of them and to obtain from any such Government, authorities, or persons any rights, privileges and concessions which the Company may think fit to obtain, and to carry out, exercise and comply therewith.

50. To get insured the property, assets, and employees of the Company in any manner as deemed fit by the Company, and to create any reserve fund, sinking fund, insurance fund or . any other special fund whether for depreciation or for, repairing, insuring, improving, extending or maintaining of property of the Company or for, any other purpose conducive to the interest of the Company but not to act as an insurance Company.

51. To give trade advances or give trade credits to such persons or companies and on such terms as may seem expedient, and in particular to customers and others having dealings with the Company, and to guarantee the performance of any contract or obligation and the payment of money of or by any such persons or companies, and generally to give guarantee and indemnities but not to act as a banking company.

52. To apply for, purchase, or otherwise acquire, and protect and renew in any part of the world any patents, patent rights, brevets and invention (trademarks, designs) ,licenses, concessions, and the like, conferring any exclusive or nonexclusive or limited right to their use, or any secret or other information to any invention which may seem capable of being used for any

of the purpose of the Company, or the acquisition of which may seem calculated directly or indirectly to benefit the Company, and to use, exercise, develop, or grant licenses in respect of, or otherwise turn to account the property, rights or information so acquired and to expend money in experimenting upon, testing or improving any such patents, inventions or rights; and to sell any patent rights or privileges belonging to the Company or which may be acquired by it, or any interest in the same, and to grant licenses for the use and practice of the same, or any of them and to let or allow to be used or otherwise deal with any inventions patents or privileges in which the Company may be interested, and do all such acts and things as may be deemed expedient for turning to account any inventions, patents and privileges in which the Company may be interested.

53. To receive, declare and distribute profits and to capitalize such portion of the profits of the Company as are not distributed among shareholders of the issue bonus shares, as fully paid up, in favour of the shareholders of the Company.

54. To accept, buy, sell, market, supply, transfer (including transfer of actionable claims) or deliver any and every kind of moveable property for such price and subject to such terms, conditions and warranties as the Company may think fit.

55. To accept or give security, including but not limited to promissory notes, indemnity bonds, guarantees, assignments, receipts, bailments, pledges, hypothecations, liens, mortgages and charges against the credit extended or moneys borrowed in connection with the business of the Company.

56. To settle disputes by negotiation, conciliation, mediation, arbitration, litigation or other means and to enter into compromise with creditors, members and any to her persons in respect of any difference or dispute with them

57. To develop and/or transfer technology and to acquire or pass on technical know-how.

58. To train personal and workers, both in Pakistan and abroad, to obtain technical proficiency in various specialties connected with the business of the Company

59. To carry on the business of common carrier of goods and passengers by road, rail, air or water and also to carry on the business of designers, manufacturers, buyers sellers, hirers, retainers, agents, dealers, distributors, repairers, exporters, importers, owners and charters of road vehicles, aircraft and ships and to engage in any business of communication.

60. To vest any real or personal property, rights or interest acquired by or belonging to the Company in any person or company on behalf of or for the Company, and with or without any declared trust in favour of the Company, and to undertake and execute any trust undertaking whereof may seem desirable, and either gratuitously or otherwise.

61. To do all such other lawful things as may be deemed incidental or conducive to the attainment of the above objects or any of them.

62. It is declared that notwithstanding anything contained forgiving objects clauses of this Memorandum of Association nothing shall be construed empowering the Company indulge in or undertake business of banking company directly or indirectly banking, investment or insurance business or any other unlawful business.

iv. The liability of the members is limited.

v. The authorized capital of the Company is Rs.133,000,000 (Rupees One Hundred thirty three Million Only) divided into 1,330,000 ordinary shares of Rs.100/- (Rupees One hundred only) each with powers to increase and reduce the capital of the Company and to divide the shares in the capital for the time being several classes in accordance with the provisions of the Companies Ordinance, 1984.

We, the several persons, whose names and addresses are subscribed, below are desirous of being formed into a Company, under the Companies Ordinance, 1984 in pursuance of this Memorandum of Association, and we respectively agree to take the number of shares in the capital of the Company set opposite our respective name(s).

Name and Surname(Present & Former) in full (in block Letter)	Father's/ Husband 's Name in Full	Nationality with any Former Nationality	Occupation	Residential Address Full	Number of Share taken by each subscriber	Signature
1. Mian Mohammad Ahsan	S/O Naimatull ah	Pakistan	Director Leeds Deen Garments (Pvt) Ltd	65-Tippu Block New Garden Town Lahore	100	
2. Javed Arshad Bhatti	S/O Mohamm ad Saleem Bhatti	Pakistan	-do-	5-B Sher Shah Block, New Garden Town, Lahore	100	
3. Mrs. Shabnam Ahsan	W/O Mian M Ahsan	Pakistan	-do-	65-Tippu Block New Garden Town Lahore	100	
4. Mrs. Shama Javed	W/O Javed Arshad Bhatti	Pakistan	-do-	5-B Sher Shah Block, New Garden Town, Lahore	100	

CERTIFIED TO BE TRUE COPY

ADDITIONAL JOINT REGISTRAR OF COMPANIES
COMPANY REGISTRATION OFFICE, LAHORE

This Certified True Copy is not valid for purpose of bank account opening. The Bank may verify company's record through bank portal launched by the SECP

Dated the.....Day of

Witness:
Full Name: .....
Father's Name: .....

Signature: .....
Occupation: .....
Full Address: .....

THE COMPANIES ORDINANCE, 1984

COMPANY LIMITED BY SHARES

Articles of Association

Of

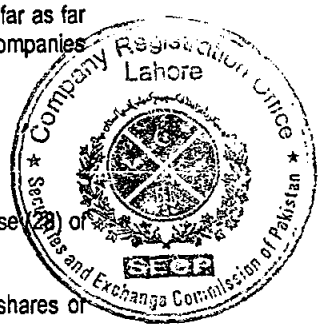
U. S. APPAREL AND TEXTILES (PRIVATE) LIMITED

PRELIMINARY

1. In these regulations:-
   a) "Section" means section of companies ordinance 1984.
   b) "The Ordinance means" the company means the common seal of the company.
   c) "The Seal" in relation to the company means the common seal of the Company.

(ii) Unless the context otherwise requires, words or expressions contained in these regulations shall have the same meanings as the Ordinance and words importing singular shall include the plural and vice versa and words importing the masculine gender shall include females and the words importing persons shall include females and the words importing persons shall include bodies corporate.

(iii) Subject to as hereunder provided the regulations contained in " Table A" in the first schedule to the companies, 1984 will apply to the Company so far as far as those are applicable to private companies under the Companies Ordinance, 1984.



PRIVATE COMPANY

2. The Company is a private within the meanings of Section 2(1), Clause (29) of the Companies Ordinance 1984 and accordingly:

   a) No invitation shall be issued to the public to subscribe for any shares or debentures or of the Company;

   b) The number of members of the Company (exclusive of the persons in employment of the Company) shall be limited to fifty provided that for the purpose of this provision where two or more persons hold one or more shares jointly they shall be treated as single member and.

   c) The right to transfer shares in the Company is restricted.

REGISTERED OFFICE

3. The Registered office of the company shall be situated at such a place in the province of Punjab as the Directors may determine from time to time

BUSINESS

4. The business of the Company shall include all or any of the objects enumerated in the Memorandum of Association and can be immediately after the incorporation of the Company, notwithstanding that a part of the capital has been subscribed.

CAPITAL

5. The authorised capital of the Company is Rupees 133,000,000 (Rupees One Hundred thirty three Million only) divided into 1,330,000 ordinary shares of Rupees 100 each with the powers to increase, reduce, consolidate, sub-divide or otherwise re-organize its share capital by variation in the rights and privileges of its shareholders in a kind or nature of share capital or class or classes including and namely:

   a) Different Voting Right; voting rights disproportionate to the paid up value of shares held; voting rights for specific purpose only; or no voting rights at all;
   b) Different rights for entitlement of dividend, right shares or bonus shares or entitlement to receive the notices and to attend the general meeting; and
   c) Rights and privileges for indefinite period, for a limited specified period or for such periods as may from time to time be determined by the shareholders through special resolution.

6. Subject to the provisions of the Ordinance, the shares, shall be under the control of the Board of Directors who may allot or otherwise dispose of the same to such persons, firm or corporation, on such terms and conditions for such consideration and at such time as may be thought.

7. The Shares in the capital of the Company may be allotted or issued in payment or part payment of any land, building, machinery or goods supplied or any services rendered to the Company in promotion and establishment thereof or in conduct of its business. Any share so allotted may be issued as fully paid up and not otherwise.

8. If a share certificate is defaced, lost or destroyed, it may be rendered on payment of such fee, if any, one rupee, and on such terms, if any, as to evidence and indemnity and payment of expenses incurred by the Company investing title as the directors think fit.

9. Except to the extent and in the manner allowed by Section 95, no part of the funds of the company shall be employed in the purchase of, or in loans upon the security of, the Company's shares.

TRANSFER AND TRANSMISSION OF SHARES

10. The instrument of transfer of any share in the Company shall be executed both by the transferor and transferee and the transferor shall be deemed to remain holder of the share until the name of the transferee is entered in the Register of Members in respect thereof.

11. Shares in the Company shall be transferred in the following form or in any usual or common form which the Directors shall approve:

I ..... of ..... in consideration of the sum of Rupees ..... paid to me be ..... of .....(hereinafter called "the transferee"). Do hereby transfer to the said transferee ..... The share (or shares) numbered ..... to ..... inclusive, in the ..... (private) limited, to hold up to the said transferee, his executors, administrators and assigns, subject to the several conditions on which I held the same at the time of the execution thereof, and I, the said Transferee, do hereby agree to take the said share (or shares) subject to the conditions aforesaid.

As witness our hands this ..... Day of .....

Witness:	Transferor's Signature .....
Occupation.....	Occupation .....
Full Address	Full Address .....
Witness.....	Transferee's Signature .....
Occupation.....	Occupation .....
Address.....	Nationality .....
Nationality.....	Address .....

12. The directors shall not refuse to transfer any fully paid shares unless the transfer deed is defective or invalid. The directors may also suspend the registration of transfers during ten days immediately preceding a general meeting or prior to the determination of entitlement or rights of shareholders by giving seven day's previous notice in the manner provided in the Ordinance. The directors may decline to recognize any instrument of transfer unless:-

a) A fee not exceeding two rupees as may be determined by the directors is paid to Company in respect thereof; and

b) The duly stamped instrument of transfer is accompanied by the certificate of the shares to which it relates and such other evidence as the directors may reasonably require to show the right of transferor.

If any directors refuse to register a transfer of shares, they shall within one month after the date of which the transfer deed was lodged with the company send to the transferee and the transferor notice of the refusal indicating the defect or invalidity to the transfer, who shall, after removal of such defect or invalidity be entitled to re-lodge the transfer deed with the company.

TRANSMISSION OF SHARES

13. The executors, administrators, heirs or nominees as the case may be, of a deceased share holder of a share shall be the only persons recognized by the Company as having any title to the shares. In the case of a share registered in the names of two or more holders, the survivor or survivors, or executors or administrators of the deceased survivor shall be the only person recognized by the Company as having any title to the share.

14. Any person becoming entitled to a share in consequence of the death or insolvency of a member shall, upon such evidence being produced as may from time to time be required by the Directors have the right either to be registered as a member in respect of the share or instead of being registered himself to make such transfer of the share as the deceased or insolvent person could have made but the directors shall, in either case have the same right to decline or suspend registration as they would have had in the case of a transfer of the share by the deceased or insolvent person before the death or insolvency.

15. A person becoming entitled to a share by reason of the death or insolvency of the holder shall be entitled to the same dividends and other advantages to which he would be entitled if he were the registered holder of the share, except that he shall not, before being registered as a member in respect of the share be entitled in respect of it to exercise any right conferred by membership in relation to meetings of the Company.

ALTERATION OF CAPITAL

16. The Company may from time to time by ordinary resolution increase the share capital by such sum, to be divided into shares of such amount, as the resolution shall prescribe.

17. Subject to the provisions of the Ordinance, all new shares shall, before issue, be offered to such persons as at the date of the offer are entitled to receive notices from the company of general meetings in proportion, as nearly as the circumstances admit, to the amount of the existing shares to which they are entitled. The offer shall be made by notice specifying the number of—

shares offered, and limiting a time within which the offer if not accepted, will be deemed to be declined and after the expiration of that time, or on the receipt of an intimation from the person to whom the offer is made that he declines to accept the shares offered, the directors may dispose of the same in such manner as they think most beneficial to Company. The directors may likewise so dispose of any new shares which (by reason of the ratio which the new shares bear to shares held by persons entitled to an offer of new shares) cannot, in the opinion of the directors, be conveniently offered under this regulation.

18. The new shares shall be subject to the same provisions with reference to transfer, transmission and otherwise as the shares in the original share capital.

19. The Company may, by ordinary resolution:-

a) consolidate and divide its share capital into shares of larger amount than its existing shares;

b) Sub-divide its existing shares or any of them into shares of smaller amount than is fixed by the Company's Memorandum of Association, subject, nevertheless, to the provisions of Clause (d) of sub-section (1) of Section (92).

c) Cancel any shares which, at the date of the passing of the resolution, have not been taken or agreed to be taken by any person.

20. The Company may, by Special Resolution, reduce its share capital in any manner and with, and subject to, any incident, authorized and consent required by law.

GENERAL MEETINGS

21. A general meeting to be called annual general meeting, shall be held in accordance with provisions of Section 158, within eighteen months from the date incorporation of the Company and thereafter once at least in every year within a period of six months following the close of its financial years and not more than fifteen months after the holding of its last proceeding annual general meeting as may be determined by the directors.

22. All general meetings of the Company other than the annual general meeting shall be called extraordinary general meetings.

23. The Directors may whenever they think fit call an extraordinary general meetings shall also be called on such requisition, in default, may be called by requisitions, as is provided by Section 159. If at any time there are not within Pakistan sufficient Directors capable of acting to form a quorum, any Director of the Company may call an extraordinary general meeting in the same manner as nearly as possible as that in which meetings may be called by the Directors.

PROCEEDINGS AT GENERAL MEETINGS

24. Subject to the provisions of sub-section (3) of section 158 of the Companies Ordinance, 1984, 21 days' notice at least (exclusive of the day on which notice is given) specifying the place, the date and the hour of meeting and in case of special business, the general nature of that business shall be given in General Meeting to such persons as are under the Companies Ordinance, 1984, or the regulation of the Company, entitled to receive such notice from the Company, but the accidental omission to give such notice to or non-receipt of such notice by any member shall not invalidate the proceedings at any General Meeting.

DIRECTORS

42. The number of Directors and the names of the first directors as determined in writing by the subscribers of the memorandum of association, are four and the number shall not, in any case, be less than two.

43. Following shall be the first directors of the Company who shall hold office till the election of directors in the first Annual General Meeting.

1. Mian Mohammad Ahsan
2. Mr Javed Arshad Bhatti
3. Mrs Shabnam Ahsan
4. Mrs Shama Javed

44. The Elections of the Directors shall be held every third year at the Annual General Meeting in accordance with the section 178 of the companies Ordinance 1984. A director elected shall stay in office for a period of three years unless he ceases to be a Director under the provisions of Companies ordinance, 1984.

45. A company may be in resolution General meeting remove a director appointed under section 176 or section 180 or elected in the manner provided for in section 178 of Companies Ordinance, 1984.

46. A retiring Director shall be eligible for re-election

47. The remuneration of the directors shall from time to time be determined by the Company in general meeting subject to the provisions of Companies Ordinance, 1984.

48. Save as provided in Section 187, no person shall be appointed as a Director unless he is a member of the Company.

FILLING OF VACANCIES

49. At the first annual General Meeting of the Company, all the directors shall stand retired from office and directors shall be elected in their place in accordance with section 178 for term of three years.

50. The directors shall comply with provision of section 174 to 178 and section 180 relating to the election of directors and matters ancillary thereto.

51. Subject to the provisions of the Ordinance, the Company may from time to time in general meeting increase or decreases the number of directors.

52. Any casual vacancy occurring on the board of directors may be filled up by the directors but the person so chosen shall be subject to retirement at the same time as if he had become a director

on the day on which the director in whose place he is chosen was last elected as director.

53. The Company may remove a director but only in accordance with the provisions of the Ordinance.

54. Subject to the provisions of the Companies Ordinance, the remuneration of Directors shall from time be determined by the Board of Directors and according to the conditions as laid down under the Capital issues (Exemption) order, 1967.

55. The Directors may also sanction the payment of such additional sums as , they may think fit to any director for any special service, he may render to the Company subject to the approval of the shareholders at a General Meeting and in accordance with the provisions of the Companies Ordinance, 1984.

56. The Director who reside out of station shall also be entitled to be paid such traveling and other expenses as may be fixed by the Directors from time to time.

57. The quorum necessary for the meeting of Board of Director may be fixed by the Directors and unless so fixed shall be two Directors present in person

58. A resolution in writing signed by all the Directors without a meeting of Directors shall be as effective you all purposes as a resolution' passed at the meeting of the Directors duly held, called and constituted.

59. The Directors may from time to time appoint one or more of their body to the office of the Chief Executive, Technical Directors, Directors of Sales . and Purchases, Director in Charge, General Manger or Manager for such terms and at such remuneration as they may think fit subject to the approval of shareholder at General Meeting and the Companies Ordinance, 1984.

DISQUALIFICATION OF DIRECTORS

60. No person shall become the director of a Company if he suffers from any . of the disabilities or disqualifications mentioned in section 187 and if already a director, shall cease to hold such office from the date he so becomes disqualified or disabled.

Provided however, that no director shall vacate his office by reason only of his being a member of any Company which has entered into contracts with, or done any work for, the Company of which he is directors, but such director shall not vote in respect of any such contract or work, and if he does so vote, his vote shall not be counted.

MANAGEMENT

61. The whole business of the Company will be carried on by the Board of Directors who shall have all powers, authorities and discretions as are given to them by the Companies Ordinance 1984.

62. Appointment and terms of Chief Executive of the Company will be governed by the Companies ordinance, 1984. The first chief executive of the will be **Mian Mohammad Ahsan**.

POWER AND DUTIES OF DIRECTORS

63. The Business of the Company shall be managed by directors, who may pay all incurred in promoting and registering the Company, and may exercise all such powers of the Company as are not by the ordinance or any modification thereof for the time being in force, or by these regulations, required to be exercised by the Company in general meeting, subject to nevertheless to the provision of ordinance or to any of these regulations, and such regulations being not inconsistent with the aforesaid provisions as may be prescribed by the Company in general meeting but no regulation made by the company in general meeting shall individual any prior act of the directors which would have been valid if that regulation had not been made.

64. The amount for the time being remaining undischarged of money's borrowed or raised by the directors for the purposes Of the Company (otherwise that by the issue of share capital) shall not any time, without the sanction of the . Company in general meeting, exceed the issued share capital of the Company

65. The directors shall duly comply with the provisions of the ordinance, or any statutory in modification thereof for the time being in force and in particular with the provisions in regard to the registration Of the particulars of mortgage and charges affecting the property of the Company or created by it, to the keeping of a register of the directors, and to the sending to the register of an annual list of members, and a summary Of particulars relating thereto and notice of any consolidation or increase Of share capital, or sub-division of shares, and copies of special resolution and a copy the register of directors and notifications of any change herein.

66. The directors shall cause minutes to be made -in books provided for the purpose:-

a) Of all appointments of officers made by the director;-
b) Of the names of the directors present at each meeting of the directors and of any committee of the directors;
c) Of all resolution and proceeding at all meeting of the Company and of the director and committees of directors;

and every directors present at any meeting of directors or committee of directors shall sign his name in a book to be kept for the purposes;

67. The board of directors, without prejudice or any way restricting or limiting the general powers and authorities heretofore, conferred by these presents or the Companies Ordinance, 1984 shall have the powers to do or concur in doing all or any of the fc 'owing acts arid things;

a) To take, lease, purchase, erect are otherwise acquire for the Company any land, building, property. Rights or privileges which the Company is authorized to acquire at such price and generally on such terms and conditions as they think fit.
b) To sell, let exchange or otherwise dispose of absolutely or conditionally ail or any 'part of the property, privileges and undertaking of the Company upon such terms and conditions and for consideration as they may think fit.
c) To buy, sell, import export or procure the supply of all plants and machinery, material stock in trade and other movable and immovable property and things required for the purpose of the Company.

d) To engage, fix and pay the remuneration of and dismiss or discharge I managers, engines, agents, secretaries, clerks, accountants, servants, workmen, experts, technical advisers, or other persons employed or to be employed in or in connection with the business of the Company.

e) To appoint any person to be attorneys of the Company for such purpose and with such powers, authorities and discretions for such period and subject to such conditions as they may from time to time think fit and to revoke such power at pleasure.

f) To enter into, carry rescind or vary all financial arrangements with any banks, persons and or corporations for, in connection with the Company's business and affairs and pursuant to be in connection with such arrangements to deposit, pledge. Hypothecate the property of the Company or the documents representing or relating to the same.

g) To take and give receipt release, and other discharge for money payable to the Company, and for the claim and demands of the
Company and to draw, accent, endorse negotiable promissory notes, bills of exchange and instruments.

h) To invest and deal with the money not immediately required for the purpose thereof upon such term and to such persons as may be thought expedient.

i) To determine who shall be entitled to sign of the Company's behalf bills, cheques, notes receipts, acceptance, endorsements, release contract and documents.

j) To enter into such negotiation and contracts and. rescind or rescind or vary all such contracts and execute and do all such acts, deeds and things in the name of the Company as they may consider expedient.

k) To open accounts with any Dank or bankers or with any Company firm or individual, and to pay into and withdraw money from such accounts from time to time.

l) To insure the property movable of the Company

m) To give to any person employed by the Company a commission on the profits the Company of any particulars business or transaction of the Company.

n) The institute combat, prosecute defend, compound, settle, compromise, adjust, refer to arbitration, abandon, any real proceeding by or against the Company or its officers or otherwise concerning the affairs or the Company.

o) To make advances, deposits, or loans of any money of the Company for the business of the Company to such person upon such security or out as they may think fit, and generally to direct/ manager control receipts, custody employment, investment and expenditure of the money's and funds of the Company and the keeping of accounts of the
Company.

p) To appear for an on behalf of the Company in any court of justice, criminal civil or revenue, before any execute judicial, municipal, revenue, police, postal, excise, transport, income tax , or other offices In action or proceeding or matters in which the Company be interested .to promote, safeguard or defend its interests.

q) To sign and verify plaints, written statements, petitions, compromise mukhtarnameas, vakalat namas, authorizing legal practitioner to act on behalf of the Company in all courts criminal or revenue.

BORROWING POWER

68. subject to the provisions of the ordinance, the board of directors, shall have the powers to take or borrow any sums of money for and on behalf of the Company from the members or other persons, companies, banks, from time to time or they may themselves advance money to Company at such interest and on Such terms as may be approved by the directors.

ACCOUNTS AUDIT

69. Once at least in every year the accounts of the Company shall be audited and the correctness of the balance sheet shall be ascertained by one or more auditors. The auditors shall be appointed and their duties regulated in accordance with section 252 to 255 of the ordinance,

THE SEAL

70. The director shall provide for the safe custody of the seal and seal shall not be affixed to any instruments except by the authority of a resolution of the board of directors or by a committee of directors authorized in the behalf of the directors and the presence of at least two director and secretary or such other person as the directors may appoint for the purpose; and those two directors and secretary or other person as aforesaid shall sign every instrument to which the seal of the Company is so affixed in their presence.

WINDING UP

71. If the Company is wound up the liquidator may, with the sanction of a special resolution of the Company and any other sanction required by the ordinance, divide amongst the members, in special or kind the whole any part of the assets of the Company, whether they consist of property of the same kind or not:-

a) For the purpose aforesaid, the liquidator may set values as he deems fair upon any property to be divided as aforesaid and may determine how such division shall be carried out as between the members of different class of members.

b) Liquidator may, with the like sanction, vest the Whole or any part of in trustees upon such trusts for the benefit of the as the liquidator, with the like sanction, thinks fit, but so no member shall be compelled to accept any shares or other securities whereon there is any liability.

INDEMNITY

72. Every officer or agent for the time being of the Company may be indemnified out of the assets of the Company against any liability incurred by him in defending any proceedings whether civil or criminal, arising out of his dealings in relation to the affairs of the Company, except those brought by the Company against him, in which judgment is given nigh favour in which he is acquitted or in connection with any application under section 488 in which relief is granted to him by the Court.

We, the several persons, whose names and addresses are subscribed below, are desirous of being formed into a Company, under the Companies ordinance. 1984 in pursuance of this articles of association, and we respectively agree to take the number of shares in the capital of the Company opposite our respective name(s).

Name and Surname (present & former) in full (in block letters)	Father's/ Husband's Name in Full	Nationality with any former Nationality	Occupation	Residential Address in Full	Number of Shares taken by each Subscriber	Sign
Mian Mohammad Ahsan	S/O Haji Naimatullah	Pakistan	Director Leeds Deen Garments (pvt) Ltd	65- Tippu Block, New Garden Town, Lahore	100	
Mr Javed Arshad Bhatti	S/O Mohammad Saleem Bhatti	Pakistan	-do-	5-B Sher Shah Block, New Garden Town, Lahore	100	
Mrs Shabnam Ahsan	W/O Mian M Ahsan	Pakistan	-do-	65- Tippu Block, New Garden Town, Lahore	100	
Mrs Shama JAved	W/O Javed Arshad Bhatti	Pakistan	-do-	5-B Sher Shah Block, New Garden Town, Lahore	100	

Dated the .....day of

Witness:

Signature

Full Name: .....

Occupation

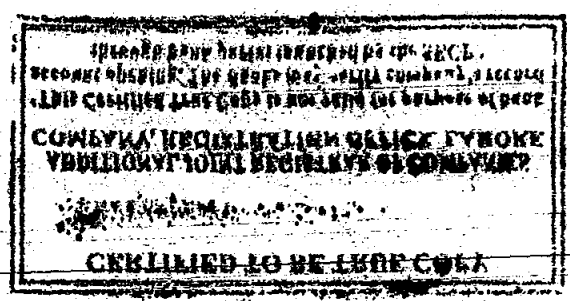
Father's/Husband's Full Name: .....

Full Address: .....

CERTIFIED TO BE TRUE COPY

ADDITIONAL JOINT REGISTRAR OF COMPANIES
COMPANY REGISTRATION OFFICE, LAHORE.

"This Certified True Copy is not valid for purpose of bank account opening. The Banks may verify company's record through bank portal launched by the SECP"



3(4)(c)(i)(c)	**certified copies of annual reports of the company**

Building a better working world

U.S. APPAREL AND TEXTILES (PRIVATE) LIMITED

FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2020

EY Ford Rhodes
Chartered Accountants
96-B-I, 4th Floor, Pace Mall Building
M. M. Alam Road, Gulberg-II
P.O. Box 104, Lahore-54660

Building a better working world

P.O. Box 101, Lahore 54600

INDEPENDENT AUDITOR'S REPORT

To the members of U.S. Apparel and Textiles (Private) Limited

Report on the Audit of the Financial Statements for the year ended 30 June 2020

Opinion

We have audited the annexed financial statements of U.S. Apparel and Textiles (Private) Limited (the Company), which comprise the statement of financial position as at 30 June 2020, and the statement of profit or loss, the statement of comprehensive income, the statement of changes in equity, the statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies and other explanatory information, and we state that we have obtained all the information and explanations which, to the best of our knowledge and belief, were necessary for the purposes of the audit.

In our opinion and to the best of our information and according to the explanations given to us, the statement of financial position, statement of profit or loss, statement of comprehensive income, the statement of changes in equity and the statement of cash flows together with the notes forming part thereof conform with the accounting and reporting standards as applicable in Pakistan and give the information required by the Companies Act, 2017 (XIX of 2017), in the manner so required and respectively give a true and fair view of the state of the Company's affairs as at 30 June 2020 and of the profit, total comprehensive income, the changes in equity and its cash flows for the year then ended.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs) as applicable in Pakistan. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants as adopted by the Institute of Chartered Accountants of Pakistan (the Code) and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Information Other than the Financial Statements and Auditor's Report Thereon

Management is responsible for the other information. The other information comprises Directors' Report, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Board of Directors for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the accounting and reporting standards as applicable in Pakistan and the

determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Board of directors are responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs as applicable in Pakistan will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs as applicable in Pakistan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the board of directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Building a better working world

Report on Other Legal and Regulatory Requirements

Based on our audit, we further report that in our opinion:

a) proper books of account have been kept by the Company as required by the Companies Act, 2017 (XIX of 2017);

b) the statement of financial position, the statement of profit or loss, statement of comprehensive income, the statement of changes in equity and the statement of cash flows together with the notes thereon have been drawn up in conformity with the Companies Act, 2017 (XIX of 2017) and are in agreement with the books of account and returns;

c) investments made, expenditure incurred and guarantees extended during the year were for the purpose of the Company's business; and

d) no Zakat was deductible at source under the Zakat and Ushr Ordinance, 1980 (XVIII of 1980).

Other Matters

The financial statements for the year ended 30 June 2019 were audited by another firm of chartered accountants whose report dated 03 October 2019 expressed a qualified opinion relating to non-verification of assets outside Pakistan.

The engagement partner on the audit resulting in this independent auditor's report is Abdullah Fahad Masood.

EY Ford Rhodes

EY Ford Rhodes
Chartered Accountants
Lahore: 08 October 2020

U.S. APPAREL AND TEXTILES (PRIVATE) LIMITED
STATEMENT OF FINANCIAL POSITION
AS AT 30 JUNE 2020

	Note	2020	2019	As at 01 July 2018
ASSETS		Rupees	Rupees (Restated)	Rupees (Restated)
NON-CURRENT ASSETS				
Property, plant and equipment	6	4,900,453,577	4,310,211,945	3,876,124,292
Investment property	7	1,092,383,018	673,150,453	778,981,006
Intangible assets	8	14,637,788	26,207,842	37,233,896
Long term deposits	9	2,641,925	2,641,925	2,641,925
		6,010,116,308	5,012,212,165	4,694,981,119
CURRENT ASSETS				
Stores, spares and loose tools	10	54,575,019	54,161,090	93,429,287
Stock-in-trade	11	3,143,603,857	2,644,272,595	3,074,942,994
Trade debts	12	2,198,963,742	2,552,169,149	1,887,536,134
Due from related parties	13	913,504,727	880,523,736	2,405,612,162
Advances, deposits, prepayments and other receivables	14	919,053,472	1,292,498,873	2,501,908,053
Due from the Government	15	1,229,221,568	1,099,018,241	1,336,381,697
Cash and bank balances	16	1,897,068,098	2,372,433,382	2,298,544,568
		10,355,990,482	10,895,077,066	13,598,354,895
TOTAL ASSETS		16,366,106,790	15,907,289,231	18,293,336,014
EQUITY AND LIABILITIES				
SHARE CAPITAL AND RESERVES				
Authorized share capital				
1,330,000 (2019: 1,330,000) ordinary shares of Rs. 100 each		133,000,000	133,000,000	133,000,000
Issued, subscribed and paid-up share capital	17	13,109,100	13,109,100	13,109,100
Reserves	18	11,501,964,437	12,126,767,454	14,768,506,254
TOTAL EQUITY		11,515,073,537	12,139,876,554	14,781,615,354
LIABILITIES				
NON-CURRENT LIABILITIES				
CURRENT LIABILITIES				
Employees' retirement benefits	19	328,282,877	198,378,428	134,191,672
Trade and other payables	20	4,395,219,604	3,441,503,477	3,270,231,601
Due to related parties	21	127,530,772	127,530,772	107,297,387
		4,851,033,253	3,767,412,677	3,511,720,660
TOTAL LIABILITIES		4,851,033,253	3,767,412,677	3,511,720,660
CONTINGENCIES AND COMMITMENTS	22			
TOTAL EQUITY AND LIABILITIES		16,366,106,790	15,907,289,231	18,293,336,014

The annexed notes from 1 to 38 form an integral part of these financial statements.

U.S. APPAREL AND TEXTILES (PRIVATE) LIMITED
STATEMENT OF PROFIT OR LOSS
FOR THE YEAR ENDED 30 JUNE 2020

	Note	2020	2019
		Rupees	Rupees
Revenue from contracts with customers - net	23	**29,654,934,679**	30,256,947,294
Cost of sales	24	**(23,275,697,567)**	(23,641,739,076)
Gross profit		**6,379,237,112**	6,615,208,218
Distribution cost	25	**(999,439,989)**	(819,227,611)
Administrative expenses	26	**(1,257,370,772)**	(1,090,607,194)
Other operating expenses	27	**(1,853,635,946)**	(1,020,676,435)
		(4,110,446,707)	(2,930,511,240)
		2,268,790,405	3,684,696,978
Other income	28	**441,658,802**	1,545,649,260
Operating profit		**2,710,449,207**	5,230,346,238
Finance cost	29	**(216,219,931)**	(213,160,598)
Profit before taxation		**2,494,229,276**	5,017,185,640
Taxation	30	**(290,371,686)**	(239,155,887)
Profit after taxation		**2,203,857,590**	4,778,029,753

The annexed notes from 1 to 38 form an integral part of these financial statements.

Chief Executive

Director

U.S. APPAREL AND TEXTILES (PRIVATE) LIMITED
STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED 30 JUNE 2020

	Note	2020	2019
		Rupees	Rupees
Profit after taxation		**2,203,857,590**	4,778,029,753
Other comprehensive loss			
Items not to be reclassified to profit or loss in subsequent periods:			
Re-measurement loss on retirement benefits - net	19.2.1	(27,767,934)	(81,523,437)
Items to be reclassified to profit or loss in subsequent periods		-	-
Other comprehensive loss for the year		**(27,767,934)**	(81,523,437)
Total comprehensive income for the year		**2,176,089,656**	4,696,506,316

The annexed notes from 1 to 38 form an integral part of these financial statements.

Chief Executive

Director

3(4)(c)(ii)	the last annual return of the Company submitted in compliance of section 130 of the Companies Act or, in case of an applicant to whom section 130 of the Companies Act does not apply, a return comprising of all such information and particulars as required by the specified form under section 130 of the Companies Act, as the case may be;

The detailed report is attached in 3(4)(c)(i)(c)

3(4)(c)(iii)	**the authorised, issued, subscribed and paid up share capital of the applicant**

THE COMPANIES ACT, 2017
THE COMPANIES (GENERAL PROVISIONS AND FORMS) REGULATIONS, 20

[Section 130(1) and Regulation 4]

ANNUAL RETURN OF COMPANY HAVING SHARE CAPITAL

PART-I

1.1	CUIN (Registration Number)	L - 0 0 0 3 0
1.2	Name of the Company	U.S APPAREL AND TEXTILES (PRIVATE) LIMITED
1.3	Fee payment Details	1.3.1 Challan No: 1.3.2 Amount:
1.4	Form A made up to	dd: 2 8 mm: 1 0 yyyy: 2 0 2
1.4	Date of AGM	dd: 2 8 mm: 1 0 yyyy: 2 0 2

PART-II

Section

2.1	Registered office address:	3 - KM, Defence-Raiwind Road, Lahore
2.2	Email address:	afnanmansoor@usaparel.com
2.3	Office Tel. No.:	042-35340034-40
2.4	Office Fax No.:	042-35340049-50
2.5	Principal line of Business:	Manufacturing and Export of Garments
2.6	Mobile No. of Authorized officer (Chief Executive/ Director/ Company Secretary/ Chief Financial Officer)	0300-4433923

Company Registration Office Lahore — Securities and Exchange Commission of Pakistan

2.7 Authorized Share Capital

Class of Kinds of Shares	No. of Shares	Amount (Rs.)	Face Value (Rs.)
Ordinary Shares	1,330,000	133,000,000	100

2.8 Paid up Capital

Classes of Shares	No. of Shares	Amount (Rs.)	Face Value (Rs.)
Ordinary	131,091	13,109,100/-	100
Total Shares	**131,091**	**13,109,100/-**	**100**

Form-A

THE COMPANIES ACT, 2017
THE COMPANIES (GENERAL PROVISIONS AND FORMS) REGULATIONS, 2018
[Section 130(1) and Regulation 4]

ANNUAL RETURN OF COMPANY HAVING SHARE CAPITAL

PART-I

1.1	CUIN (Registration Number)	L - 0 0 0 3 0	
1.2	Name of the Company	U.S APPAREL AND TEXTILES (PRIVATE) LIMITED	
1.3	Fee payment Details	1.3.1 Challan No	1.3.2 Amount
1.4	Form A made up to	dd: 2 8	mm: 1 0 / yyyy: 2 0 2 2
1.4	Date of AGM	dd: 2 8	mm: 1 0 / yyyy: 2 0 2 2

PART-II

Section-A

2.1	Registered office address:	3 - KM, Defence-Raiwind Road, Lahore
2.2	Email Address:	afnanmansoor@usaparel.com
2.3	Office Tel. No.:	042-35340034-40
2.4	Office Fax No.:	042-35340049-50
2.5	Principal line of Business:	Manufacturing and Export of Garments
2.6	Mobile No. of Authorized officer (Chief Executive And Director/ Company Secretary/ Chief Financial Officer)	0300-4433923

2.7

Authorized Share Capital			
Classes and Kinds of Shares	No. of Shares	Amount (Rs.)	Face Value (Rs.)
Ordinary Shares	1,330,000	133,000,000	100

2.8

Paid up Share Capital			
Classes and Kinds of Shares	No. of Shares	Amount (Rs.)	Face Value (Rs.)
Ordinary Shares	131,091	13,109,100/-	100
Total Shares	**131,091**	**13,109,100/-**	**100**

2.9	**Particulars of the holding/subsidiary company, if any**			
	Name of the Company		Holding/Subsidiary	% of shares held
	A.J. Holdings (Pvt) Ltd		Holding	100%
2.10	**Chief Executive Officer**	Mian Muhammad Ahsan	NIC	35202-2424092-3
	Address	71-A Izmir (PECHS), Lahore		
2.11	**Chief Financial Officer**	Afnan Mansoor	NIC	35201-6335089-1
	Address	280-F, Phase-VI, DHA, Lahore		
2.12	**Company Secretary**	Muhammad Umer	NIC	35202-2836136-9
	Address	160-A, Izmir Town, Lahore		
2.13	**Legal Adviser**	M/S Hassan & Hassan (Advocates)		
	Address	PAAF Building, 7 D, Kashmir Egerton Road, Lahore-54000		
	NIC No	N/A		
2.14	**Particulars of Auditors**	M/S EY Ford Rhodes, Chartered Accountants		
	Address:	Pace Mall Building, M.M. Alam Road, Block B, Gulberg III, Lahore		
	NIC No	N/A		
2.15	**Particulars of Share Registrar (if applicable)**	N/A		
	Address	N/A		
	e-mail	N/A		

2.16 **List of Directors as on the date annual return is made**

Sr.	Name of Director	Residential Address	Nationality	NIC / Passport No.	Date of Appointment or election
1.	Mian Muhammad Ahsan	71-A, Izmir (PECHS), Lahore	Pakistani	35202-2424092-3	26-06-2022
2.	Mr. Javed Arshad Bhatti	55-A, Izmir Town, Lahore	Pakistani	35202-8469816-7	26-06-2022
3.	Mr. Muhammad Umer	160-A, Izmir Town, Lahore	Pakistani	35202-2836136-9	26-06-2022
4.	Mr. M. Siddique Bhatti	88-A, Izmir Town, Lahore	Pakistani	35202-2836138-3	26-06-2022
5.	Mr. Usman Ahsan	76-A, Izmir Town, Lahore	Pakistani	35202-2808307-1	26-06-2022
6.	Mr. Ali Ahsan	156-A, Izmir Town, Lahore	Pakistani	35202-2808300-5	26-06-2022
7.	Mr. Muhammad Saqib	57/58-A, Izmir Town, Lahore	Pakistani	35202-3800578-3	26-06-2022
8.	Mr. Sohaib Javed	55-A, Izmir Town, Lahore	Pakistani	35202-1179291-9	26-06-2022
9.	Mian Salman Ahsan	71-A, Izmir Town, Lahore	Pakistani	35202-3045442-7	26-06-2022
10.	Mrs. Ayesha Haroon	55-60 Sultan Town, Al-Noor Garden Thoker Niaz baig, Lahore	Pakistani	35202-3195965-8	26-06-2022

2.17 List of Members & Debenture Holders on the date up to which this Form is made

Sr.	Name of Member(s)	Address	Nationality	No. of Shares	NIC / Passport #
1.	Mian Muhammad Ahsan	71-A, Izmir (PECHS), Lahore	Pakistani	1	35202-2424092-3
2.	Mr. Javed Arshad Bhatti	55-A, Izmir Town, Lahore	Pakistani	1	35202-8469816-7
3.	Mr. Muhammad Umer	160-A, Izmir Town, Lahore	Pakistani	1	35202-2836136-9
4.	Mr. M. Siddique Bhatti	88-A, Izmir Town, Lahore	Pakistani	1	35202-2836138-3
5.	Mr. Usman Ahsan	76-A, Izmir Town, Lahore	Pakistani	1	35202-2808307-1
6.	Mr. Ali Ahsan	156-A, Izmir Town, Lahore	Pakistani	1	35202-2808300-5
7.	Mr. Muhammad Saqib	57/58-A, Izmir Town, Lahore	Pakistani	1	35202-3800578-3
8.	Mr. Sohaib Javed	55-A, Izmir Town, Lahore	Pakistani	1	35202-1179291-9
9.	Mian Salman Ahsan	71-A, Izmir Town, Lahore	Pakistani	1	35202-3045442-7
10.	Mst. Ayesha Haroon	55-60 Sultan Town, Al-Noor Garden Thoker Niaz baig, Lahore	Pakistani	1	35202-3195965-8
11.	A.J. Holdings (Private) Limited	3 – KM, Defence-Raiwind Road, Lahore	-	131,081	-

2.18 Transfer of shares (Debenture) since last Form A was made

Name of Transferor	Name of Transferee	Number of shares Transferred	Date of Registration of Transfer

PART-III

3.1 Declaration

I do hereby solemnly, and sincerely declare that the information provided in the form is:

(i) True and correct to the best of my knowledge, in consonance with the record as maintained by the company and nothing has been concealed; and

(ii) Hereby reported after complying with and fulfilling all requirements under the relevant provisions of law, rules, regulations, directives, circulars and notifications whichever is applicable,

3.2 Name of Authorized Officer with designation/Authorized Intermediary (Director)

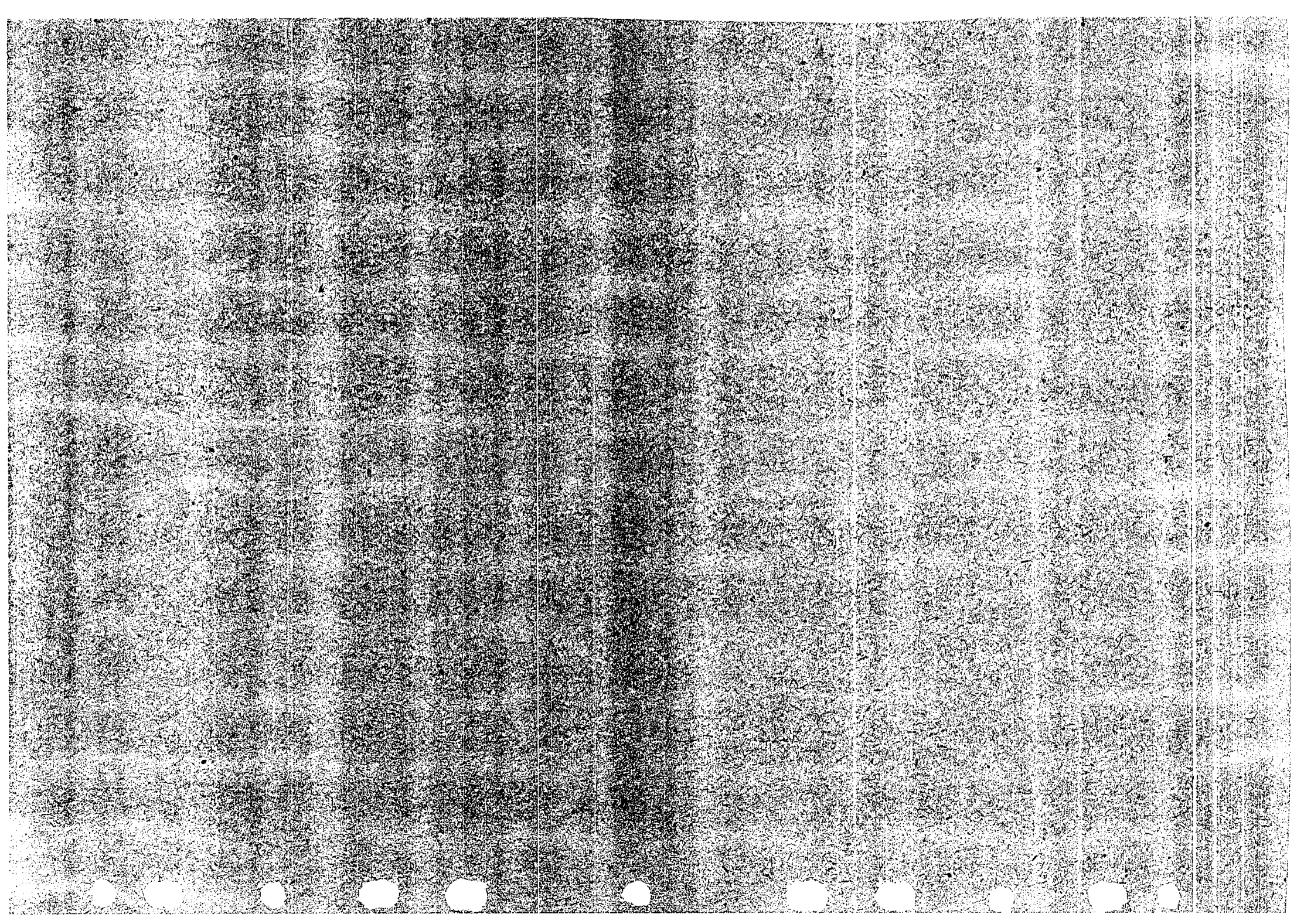
3.3 Signature

CERTIFIED TO BE TRUE COPY 17/3/22
ADDITIONAL JOINT REGISTRAR OF COMPANIES
COMPANY REGISTRATION OFFICE, LAHORE
This Certified True Copy is not valid for purpose of bank account opening. The Banks may verify company's record through bank portal launched by the SECP

3.4 Registration No. of Authorized Intermediary, if applicable

3.5 Date

Day	Month	Year
2 8	1 0	2 0 2 2



3(4)(c)(iv)	the shareholding pattern of the applicant including list of shareholders holding 5% or more shares, number of shares held by each of them and percentage shares of the total paid-up capital

Form-A

THE COMPANIES ACT, 2017
THE COMPANIES (GENERAL PROVISIONS AND FORMS) REGULATIONS, 2018
[Section 130(1) and Regulation 4]

ANNUAL RETURN OF COMPANY HAVING SHARE CAPITAL

PART-I

1.1	CUIN (Registration Number)	L - 0 0 0 3 0	
1.2	Name of the Company	U.S APPAREL AND TEXTILES (PRIVATE) LIMITED	
1.3	Fee payment Details	1.3.1 Challan No	1.3.2 Amount
1.4	Form A made up to	dd: 2 8	mm: 1 0 / yyyy: 2 0 2 2
1.4	Date of AGM	2 8	1 0 / 2 0 2 2

PART-II

Section-A

2.1	Registered office address:	3 - M, Defence-Raiwind Road, Lahore
2.2	Email Address:	afnanmansoor@usaparel.com
2.3	Office Tel. No.:	042-35340034-40
2.4	Office Fax No.:	042-35340049-50
2.5	Principal line of Business:	Manufacturing and Export of Garments
2.6	Mobile No. of Authorized officer (Chief Executive/ Director/ Company Secretary/ Chief Financial Officer)	0300-4433923

Company Registration Office Lahore * Securities And Exchange Commission of Pakistan *

2.7

Authorized Share Capital			
Classes and Kinds of Shares	No. of Shares	Amount (Rs.)	Face Value (Rs.)
Ordinary Shares	1,330,000	133,000,000	100

2.8

Paid up Share Capital			
Classes and Kinds of Shares	No. of Shares	Amount (Rs.)	Face Value (Rs.)
Ordinary Shares	131,091	13,109,100/-	100
Total Shares	131,091	13,109,100/-	100

2.9	**Particulars of the holding/subsidiary company, if any**			
	Name of the Company		Holding/Subsidiary	% of shares held
	A.J. Holdings (Pvt) Ltd		Holding	100%
2.10	**Chief Executive Officer**	Mian Muhammad Ahsan	NIC	35202-2424092-3
	Address	71-A Izmir (PECHS), Lahore		
2.11	**Chief Financial Officer**	Afnan Mansoor	NIC	35201-6335089-1
	Address	280-F, Phase-VI, DHA, Lahore		
2.12	**Company Secretary**	Muhammad Umer	NIC	35202-2836136-9
	Address	160-A, Izmir Town, Lahore		
2.13	**Legal Adviser**	M/S Hassan & Hassan (Advocates)		
	Address	PAAF Building, 7 D, Kashmir Egerton Road, Lahore-54000		
	NIC No	N/A		
2.14	**Particulars of Auditors**	M/S EY Ford Rhodes, Chartered Accountants		
	Address:	Pace Mall Building, M.M. Alam Road, Block B1, Gulberg III, Lahore		
	NIC No	N/A		
2.15	**Particulars of Share Registrar (if applicable)**	N/A		
	Address	N/A		
	e-mail	N/A		

2.16 **List of Directors as on the date annual return is made**

Sr.	Name of Director	Residential Address	Nationality	NIC / Passport No.	Date of Appointment or election
1.	Mian Muhammad Ahsan	71-A, Izmir (PECHS), Lahore	Pakistani	35202-2424092-3	26-06-2022
2.	Mr. Javed Arshad Bhatti	55-A, Izmir Town, Lahore	Pakistani	35202-8469816-7	26-06-2022
3.	Mr. Muhammad Umer	160-A, Izmir Town, Lahore	Pakistani	35202-2836136-9	26-06-2022
4.	Mr. M. Siddique Bhatti	88-A, Izmir Town, Lahore	Pakistani	35202-2836138-3	26-06-2022
5.	Mr. Usman Ahsan	76-A, Izmir Town, Lahore	Pakistani	35202-2808307-1	26-06-2022
6.	Mr. Ali Ahsan	156-A, Izmir Town, Lahore	Pakistani	35202-2808300-5	26-06-2022
7.	Mr. Muhammad Saqib	57/58-A, Izmir Town, Lahore	Pakistani	35202-3800578-3	26-06-2022
8.	Mr. Sohaib Javed	55-A, Izmir Town, Lahore	Pakistani	35202-1179291-9	26-06-2022
9.	Mian Salman Ahsan	71-A, Izmir Town, Lahore	Pakistani	35202-3045442-7	26-06-2022
10.	Mrs. Ayesha Haroon	55-60 Sultan Town, Al-Noor Garden Thoker Niaz baig, Lahore	Pakistani	35202-3195965-8	26-06-2022

2.17

List of Members & Debenture Holders on the date up to which this Form is made					
Sr.	Name of Member(s)	Address	Nationality	No. of Shares	NIC / Passport #
1.	Mian Muhammad Ahsan	71-A, Izmir (PECHS), Lahore	Pakistani	1	35202-2424092-3
2.	Mr. Javed Arshad Bhatti	55-A, Izmir Town, Lahore	Pakistani	1	35202-8469816-7
3.	Mr. Muhammad Umer	160-A, Izmir Town, Lahore	Pakistani	1	35202-2836136-9
4.	Mr. M. Siddique Bhatti	88-A, Izmir Town, Lahore	Pakistani	1	35202-2836138-3
5.	Mr. Usman Ahsan	76-A, Izmir Town, Lahore	Pakistani	1	35202-2808307-1
6.	Mr. Ali Ahsan	156-A, Izmir Town, Lahore	Pakistani	1	35202-2808300-5
7.	Mr. Muhammad Saqib	57/58-A, Izmir Town, Lahore	Pakistani	1	35202-3800578-3
8.	Mr. Sohaib Javed	55-A, Izmir Town, Lahore	Pakistani	1	35202-1179291-9
9.	Mian Salman Ahsan	71-A, Izmir Town, Lahore	Pakistani	1	35202-3045442-7
10.	Mst. Ayesha Haroon	55-60 Sultan Town, Al-Noor Garden Thoker Niaz baig, Lahore	Pakistani	1	35202-3195965-8
11.	A.J. Holdings (Private) Limited	3 – KM, Defence-Raiwind Road, Lahore	-	131,081	-

2.18

Transfer of shares (Debenture) since last Form A was made			
Name of Transferor	Name of Transferee	Number of shares Transferred	Date of Registration of Transfer

Company Registration Office Lahore * Securities and Exchange Commission of Pakistan *

PART-III

3.1 Declaration

I do hereby solemnly, and sincerely declare that the information provided in the form is:

(i) True and correct to the best of my knowledge, in consonance with the record as maintained by the company and nothing has been concealed; and

(ii) Hereby reported after complying with and fulfilling all requirements under the relevant provisions of law, rules, regulations, directives, circulars and notifications whichever is applicable,

3.2 Name of Authorized Officer with designation/Authorized Intermediary: (Director)

CERTIFIED TO BE TRUE COPY 17/3/2

ADDITIONAL JOINT REGISTRAR OF COMPANIES COMPANY REGISTRATION OFFICE, LAHORE

This Certified True Copy is not valid for purpose of bank account opening. The Banks may verify company's record through bank portal launched by the SECP

3.3 Signature

3.4 Registration No. of Authorized Intermediary, if applicable

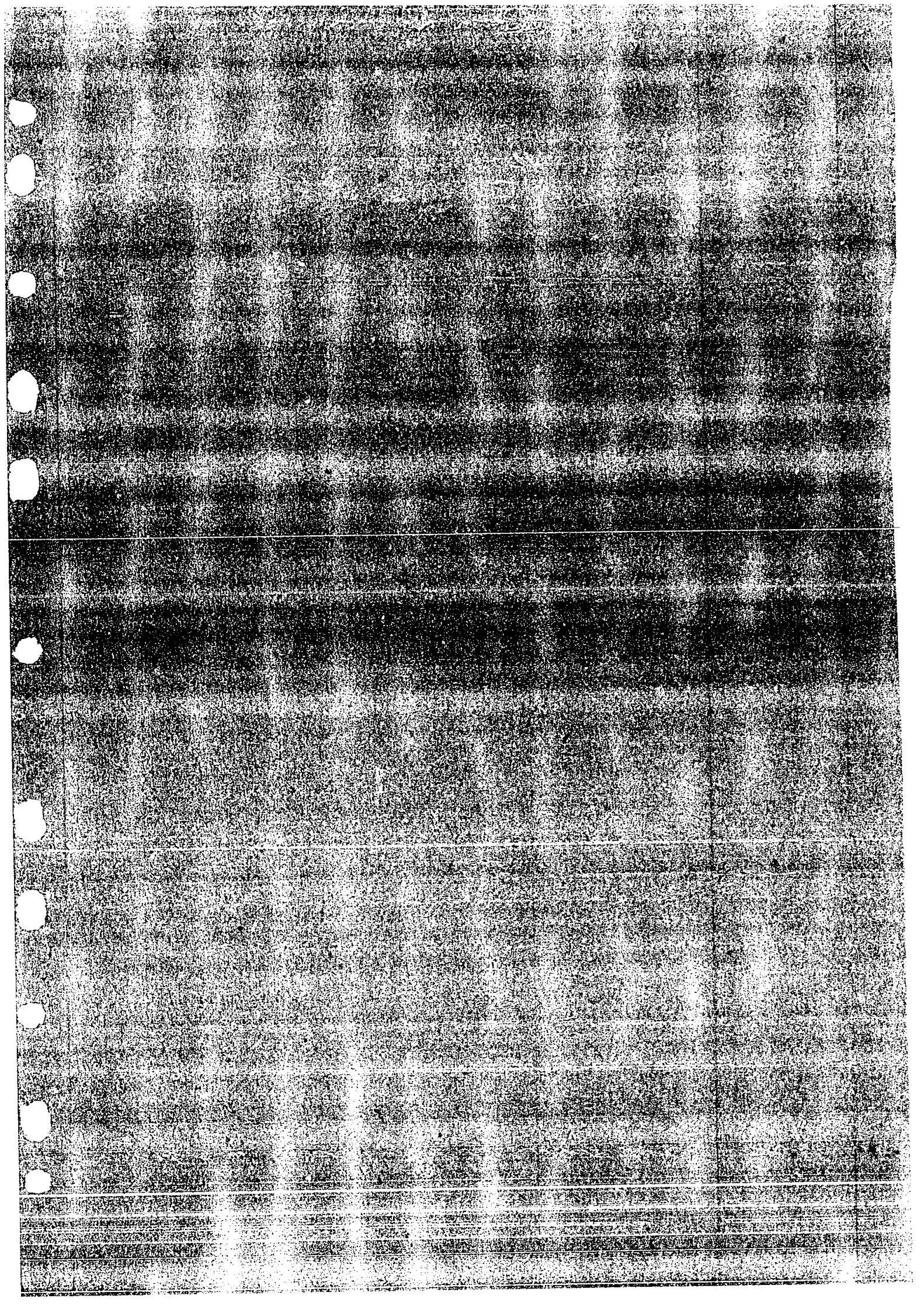
3.5 Date — Day: 28 Month: 10 Year: 2022

3(4)(d)(i)	**evidence of cash balances held in reserve by the applicant, along with bank certificates;**

Not Applicable

3(4)(d)(ii)	**details of charges or encumbrances attached to the applicant's assets, if any;**

Not Applicable

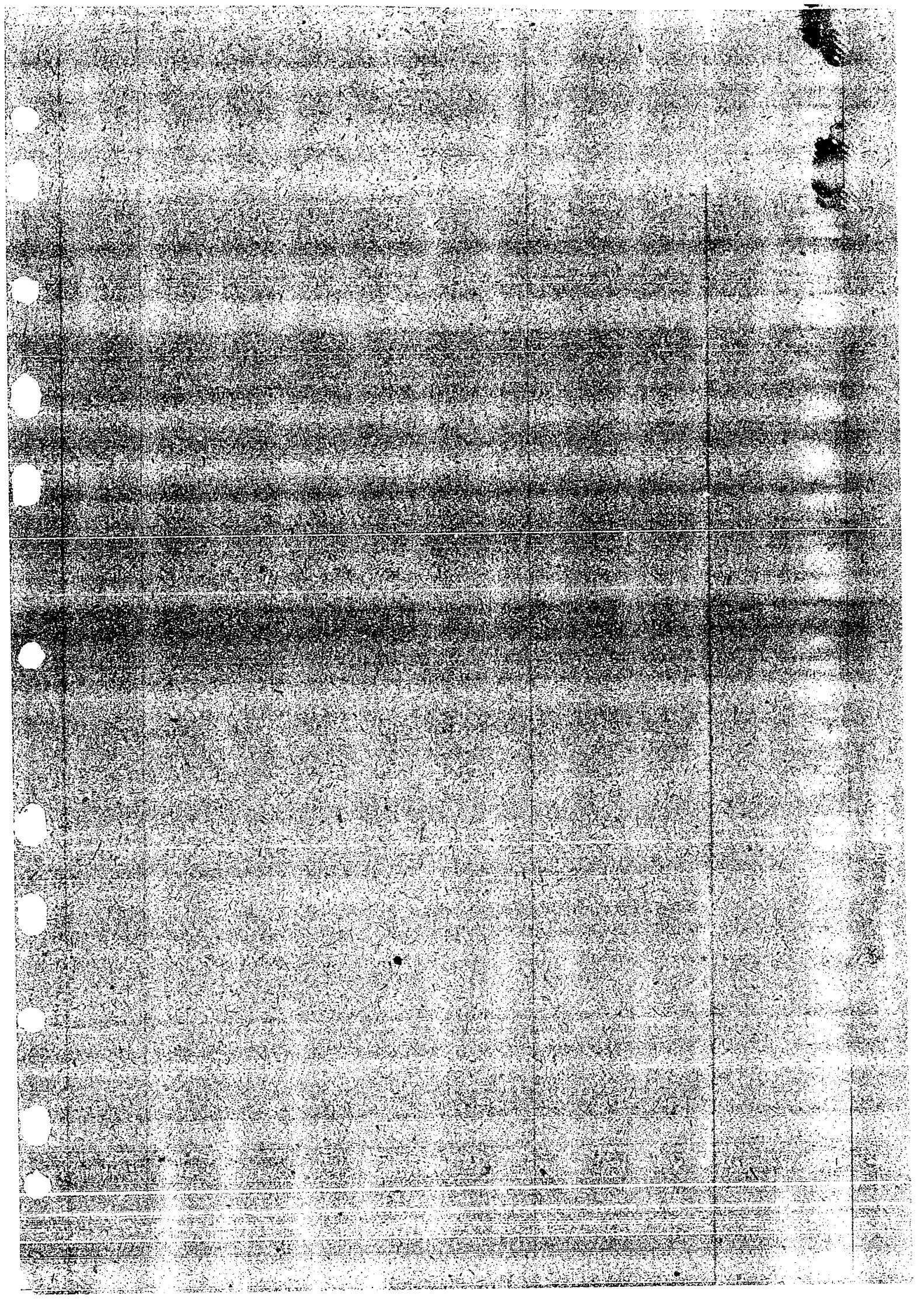


3(4)(d)(iii)	**latest audited financial statements of the applicant;**

The detailed report is attached in 3(4)(c)(i)(c)

3(4)(d)(iv)	**expressions of interest to provide credit or financing along with sources and details thereof;**

The detailed report is attached in 3(4)(c)(i)(c)

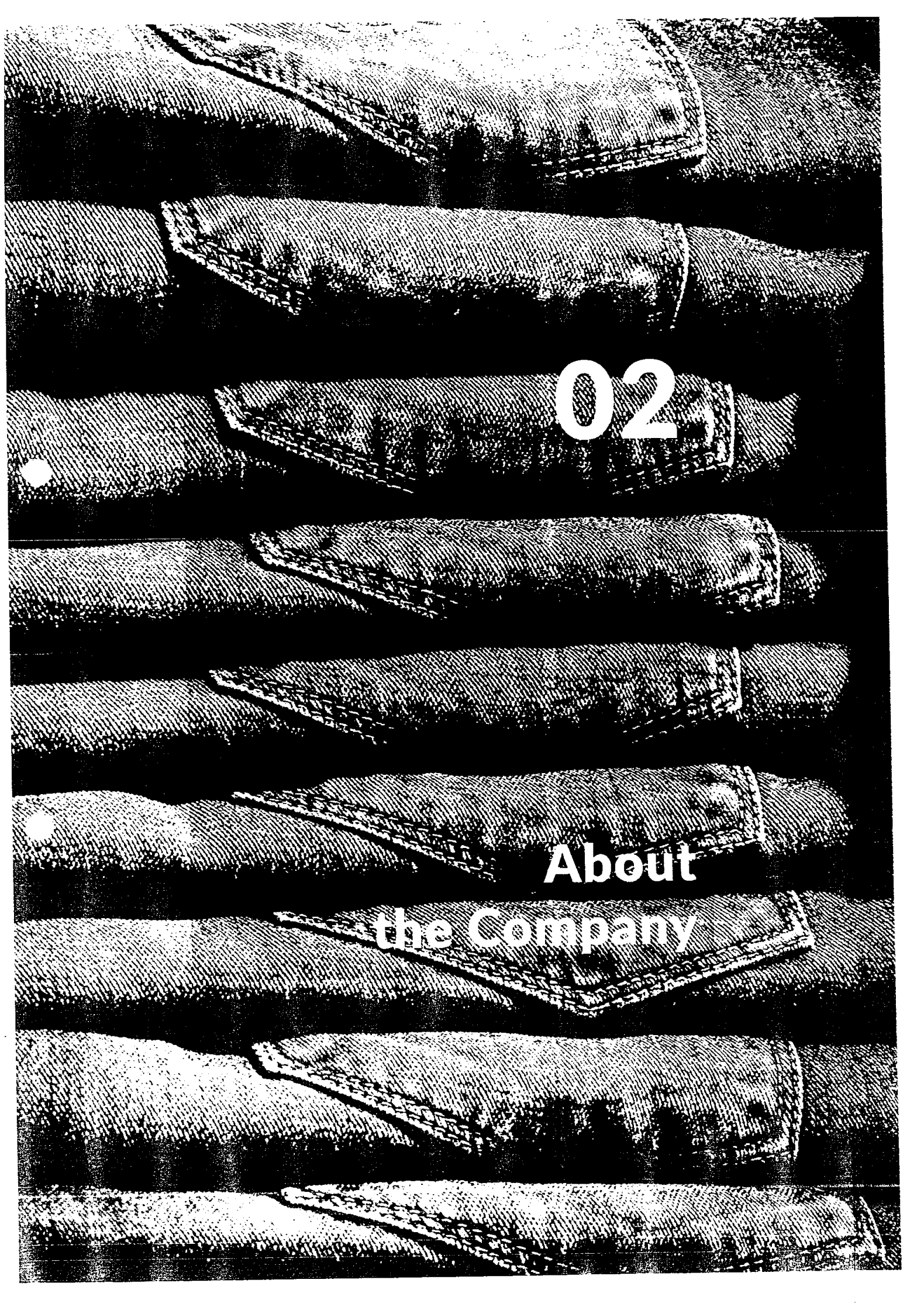


3(4)(d)(v)	documents describing the net worth and the equity and debt ratios of the applicant, as on the date of the audited balance sheet accompanying the application;

The detailed report is attached in 3(4)(c)(i)(c)

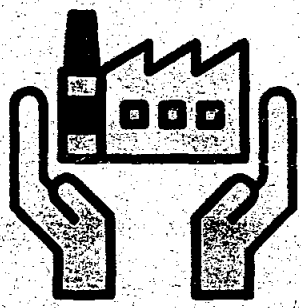
3(4)(d)(vi)

3(4)(d)(vi)	**a reasonably detailed profile of the applicant and the applicant's senior management, technical and professional staff;**

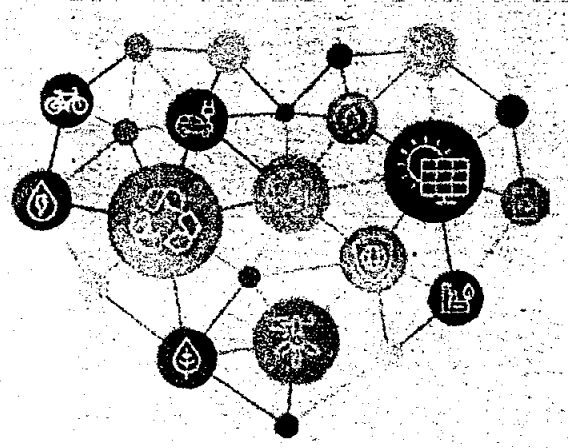

02
About
the Company

Established in 1975

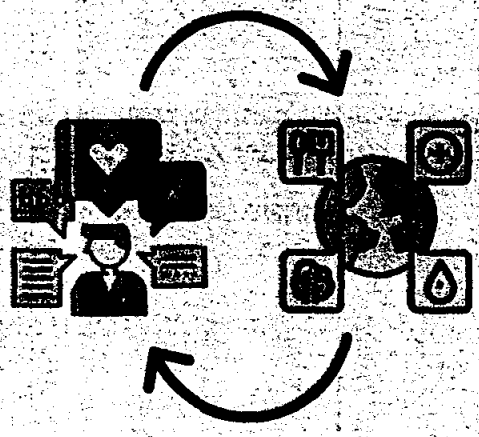
GRI 2-1



US Apparel & Textiles is a family-owned, professionally-managed, denim fabric and garment manufacturer, hailing from the heart of Pakistan, Lahore city. We are going through an evolution of being transformed from a profitable business to a sustainable institution. Our denim is the pinnacle of exquisite craftsmanship making us a preferred choice of the world's top denim connoisseurs. Our unparalleled customer-driven approach, premium & diverse product line, global footprint, sustainable practices, and adaptive business acumen are our competitive edge.



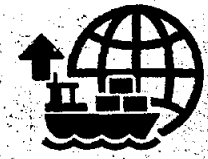
Integrate all the way from sturdy cotton to sustainable denim fashion.



Curate what our customers and end consumers want, and our environment needs.

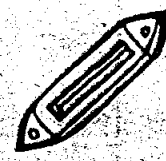
Nurture community and environment with sustainable practices and disrupting innovations.

Our Competitive Edge



Constantly among the top 13 exporters of Pakistan for over a decade

100% Equity



Old fashioned unique selvedge shuttle looms

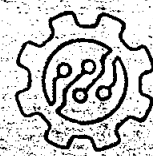
Transparent sustainability reporting on GRI standard

A diverse blend of team experts

Industry leaders in transparent & merit-based reward and recognition processes

Top notch services enduring high customer retention

A professionally managed company transitioning into a sustainable institution



Data based decision making and automated processes

1975
Established

1985
Integrated success

2008
Denim focused

2017
Handed over to Professional Management

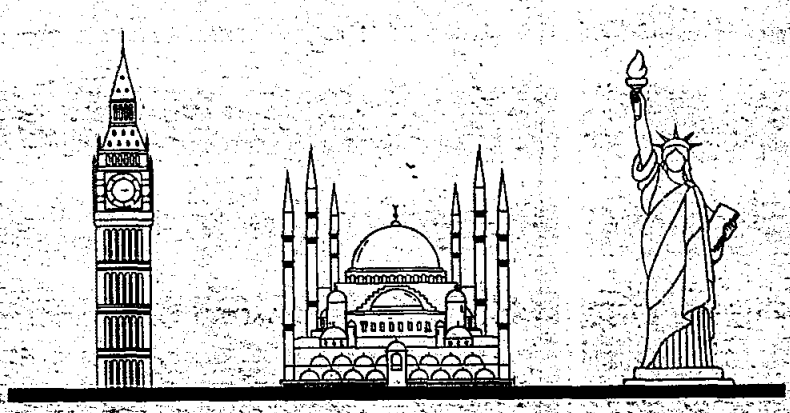
2020
Launched Sustainability Challenge 2022

2021
Business Diversification

2022
Gender Diversity increased from 2% in 2019 to 11%

Our Global Presence

US APPAREL & TEXTILES
USGROUP



US APPAREL
London
Sales & Design for Apparel

US FASHION
Istanbul
Sales & Design for Denim Fabric

AJ APPAREL INC.
New York
Sales & Design for Denim & Apparel

Facts

EST.
1975
Established in 1975. First plant built in 1985. Pakistan's leading denim and twill exporter since the '90s.

$342M
Sales

More than
20,000
Employees

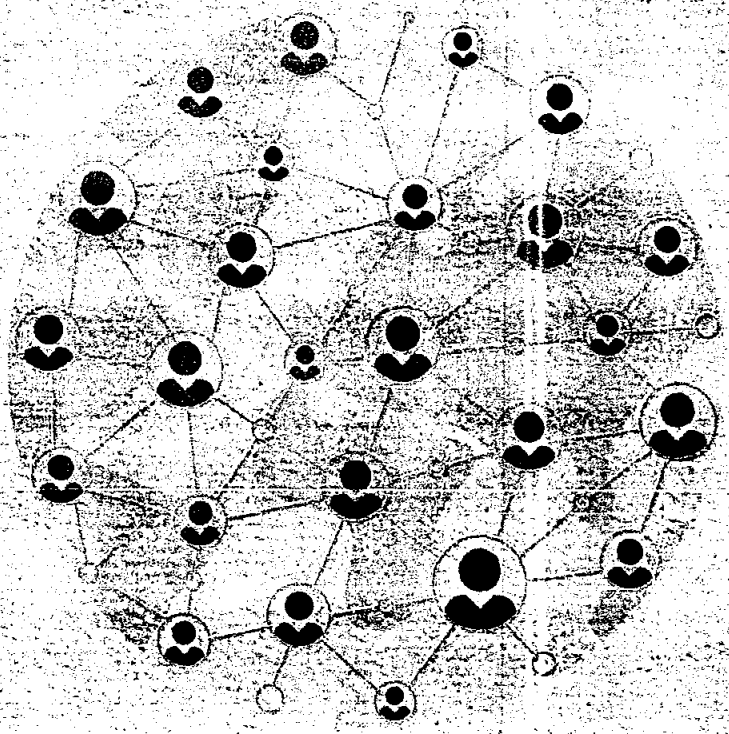
40
Million Meters Denim Fabric by US DENIM MILLS

30 Million Garments
At US Apparel & Textiles

2.4 MILLION SQ. F.T.
The best denim production facilities 2.4 million square feet over 98 acres.

Our Organizational Structure

GRI 2-9, 2-10, 2-11, 2-12, 2-13, 2-14, 2-15, 2-16, 2-17



The Governance structure at US Apparel & Textiles is overall directed by the industry best practices in Corporate Governance. In 2017 the family board decided to give the organization a corporate structure to drive all its operations and onboarded the now CEO, Asif Malik, and his team. This transformation resulted in helping US Apparel & Textiles ensure continued delivery of exceptional performance and meeting the expectations of our stakeholders. The Code of Conduct, is an important component of corporate governance at US Apparel & Textiles, guides on ethical business practices, relations with our business partners, and the conduct required from our people.

The **Board** (comprising of the owners' families) is the highest governing body. The Chief Executive Officer along with his team identified as the **Executive Committee,** is responsible for the day-to-day activities of the company, in line with the mandate vested in him by the Board. The Executive Committee consists of some of the most seasoned professionals across diverse industries like Engineering, Finance, Human Resources, Sustainability Governance, and other related fields.

At US Apparel & Textiles, several committees have been constituted at different levels, with proper delegation. The committees include the Executive Committee (Corporate) and sBU level Executive Committee. The committees have clear objectives and responsibilities to assist the hierarchy in effective decision-making.

The Board has delegated the responsibility of planning, execution, and monitoring of sustainability initiatives to the Chief Executive Officer. The CEO's team includes a Sustainability team for R&D, identifying areas of improvement and innovation while the sBU(s) sustainability councils headed by the MD(s) have been entrusted with the responsibility of completing the **Sustainability Challenge 2022.** The Sustainability team is responsible for reviewing customers' requirements on the sustainability front, developing new policies and actions, recommending the best course of action, defining targets, and monitoring the performance of sustainability that is reviewed by the CEO monthly.

Executive Committee

Asif Malik
CEO, US Apparel & Textiles

Irfan Nazir
MD (sBU Denim Mills)

Hafiz Mustanser Ahmed
MD (sBU UK/EU)

Imran Malik
MD (sBU USA)

Afnan Mansoor
CFO

Abdul Jabbar Athar
Director Projects & Sustainability

Hassan Aftab
Director Human Resources

Ch. Abdul Rehman
Director IR, Administration & Legal Affairs

Haroon A. Malik
GM Sourcing & Contracts

Sajjad Qureshi
Director Operations

Saad Noor
Director Marketing

Fawad Saeed
Director Marketing

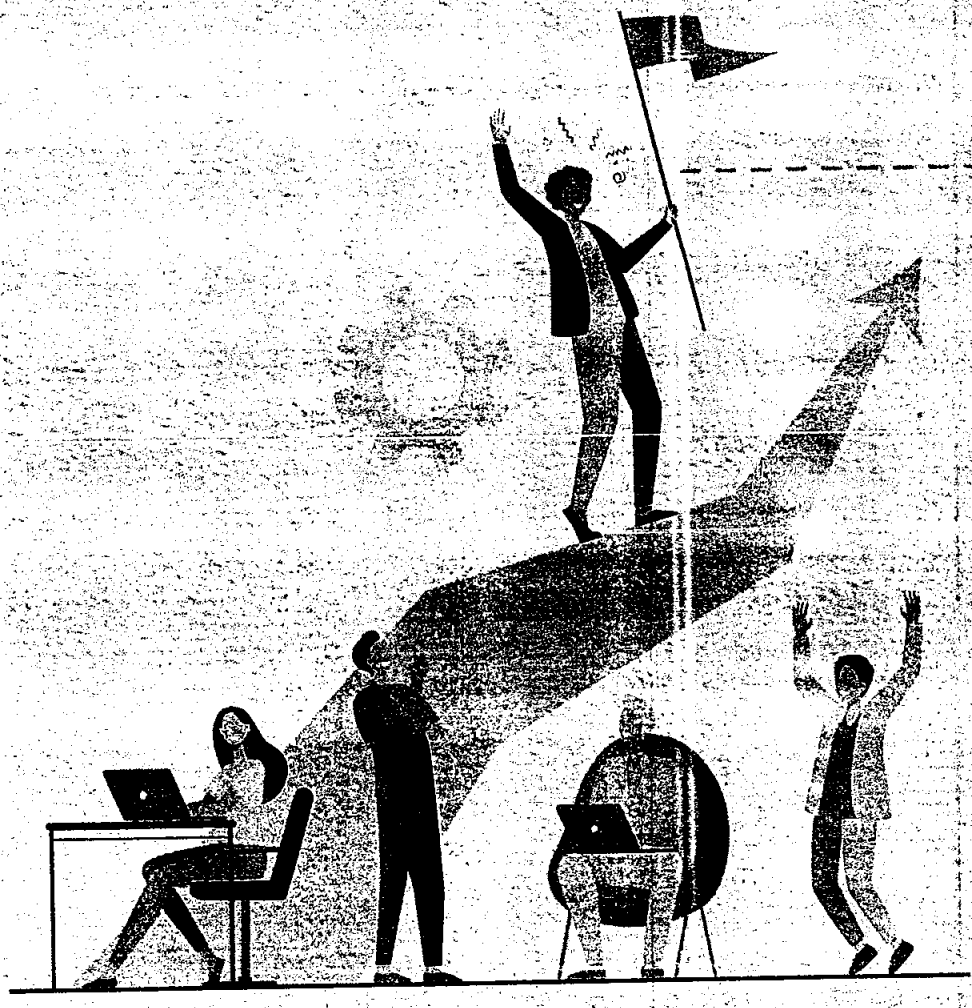
Yasir Hashmi
GM IT

Mehwish Tariq
DGM Corporate Communications

All areas including Operations, Sales, Marketing, R&D, Quality, HR, Admin, IR and Finance report to respective MDs who are responsible to deliver the bottom line and agreed goals & targets. However, people in the functions with central presence in the corporate functions will have a dotted line reporting to functional heads, e.g. Finanace, HR etc.

Central functions will be responsible for policies, compliance, governance, monitoring, reporting, guidance & support.

Leadership Statement

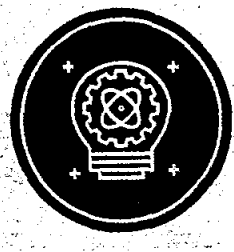


US Apparel & Textiles is going through an exciting time in which a profitable business is being transformed into a sustainable institution through close collaboration between the entrepreneurial abilities of the shareholders and managerial skills of the accomplished professionals. This is being achieved through change management involving renewed approach to performance management and focus on systems rather than individuals.

Corporate Objectives 2021

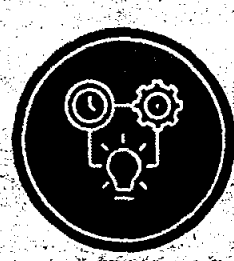
Our Sustainability Challenge 2022 is not an option!

Demonstrate our commitment in meeting our targets for three pillars of sustainability - economic, environment & social, and demonstrate our belief that "fashion shouldn't cost the earth".



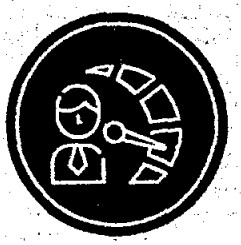
Managers accept the status quo; Leaders challenge it

Make a visible change in automating & modernizing our manual work and reducing paper by effective and responsible use of technology in every area of our influence.



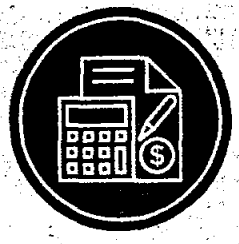
Sweat the assets – fully & effectively utilize capacities

Improve productivity by 10% in 2022.



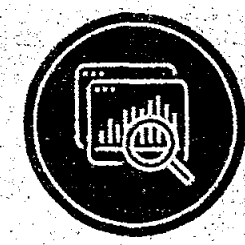
Fair & Transparent performance management system "pay for performance"

Reward & recognition to be linked to accountability in its true spirit. Improve quality of people through the concept of hire, train & retain promotable talent, with higher focus on people development effectively utilizing e learning concept.



Deliver our financial & non financial commitments to all stakeholders including our customers & shareholders

Deliver quality & innovative products according to customers specs & needs with improved service level at competitive prices. Meet or exceed agreed targets for sales revenues, variable costs of manufacturing, fixed & overhead costs, margins & profits, and working capital.



Mining the accurate data

System based data to be made precise & accurate, and converted to information, and used for decision making, full utilization of ERP without any parallel reports or reporting systems.

Our Business Strategy

GRI 2-22

Here at US Apparel & Textiles, we believe in constantly evolving and being adaptive. We carefully look and evaluate the future risks and develop solutions accordingly. Our thoughtful and well-defined business strategy not only offers an overview of how our business is performing internally, but also how we are performing against our competition, and what we need to do to stay relevant in the future. Our plan and efforts are focused on identifying trends and opportunities globally. We carefully examine the broader changes in the market such as political, social, or technological, as well as consumer changes, and develop tactics to suit these future needs.

We believe in doing well by giving back to nature and the community. **Making fashion sustainable** and minimizing the drastic impact of the textile industry on nature has been significantly important for us, and it remains a top priority under our business strategy as well.

The Executive Members of each sBU and Corporate Team led by the CEO, convene regularly to formalize and review the Business Strategy on quarterly (3 years) basis which is adjusted on the move. Focus areas and highlights from the last few sessions include:

- Develop Sustainability KPIs with authenticated data of baseline, aggressive plan to mitigate environmental impacts with transparent and verifiable records.
- Market and Customer Analysis with top-line growth and bottom-line improvement plans.
- Inculcate a culture of a high-performance organization including systems and processes aligned with pay for performance addressing issues of succession aimed at retention of quality human resources.
- Production planning and capacity expansions through debottlenecking and add-ons.
- Continued reinforcement of a culture of workplace ethics.
- Continued addition of Community Welfare Projects.
- Efficient and Eco Sourcing.
- Innovations in R&D.
- Business Continuity Planning.
- Improve ERP Utilization.
- Improve Gender Diversity aggressively with a clear slope up plan.
- Business Diversification.

SWOT Analysis, Risks and Opportunities Analysis is carried out in detail considering the implications for all stakeholders.

Our Customers and Regional Footprint

We proudly serve 37 customers across Asia, Australia, UK/Europe, and North America. We are continuously expanding our outreach to new markets.

US Apparel and Textiles (Pvt) Ltd, Power House Staff List

25-May-23

Sr.#	Code	Name	Designation	DOJ	Tenure(Years)
1	165137	Farhan Rafiq	Sr. Manager Engineering	31-Jul-17	5.8
2	272638	Awais Dildar	Dy. Manager Power House	26-Sep-22	0.7
3	163385	Umar Hayat	Shift Incharge	12-Jun-17	6.0
4	259025	Khalid Zubair	Shift Incharge	20-May-19	4.0
5	165139	Shafat Ali	Shift Incharge	1-Aug-17	5.8
6	157809	Ali Jaan	Shift Incharge	9-Jan-17	6.4
7	251908	Asad Bashir	Engine Room Operator	27-Sep-21	1.7
8	243559	Iqbal	Engine Room Operator	7-Apr-21	2.1
9	145037	Amir Nazeer	Engine Room Operator	8-Mar-16	7.2
10	167995	Saif	Engine Room Operator	26-Sep-17	5.7
11	246203	Syed Alley Ahmed	Control Room Operator	10-Jun-21	2.0
12	266139	Rehan Latif	Control Room Operator	1-Jun-22	1.0
13	135409	Hafiz Shahzad	Control Room Operator	11-Aug-15	7.8
14	217031	Shoukat Ali	Electrical Technician	21-Oct-19	3.6
15	262616	Mujahid Hussain	Mechanical Supervisor	16-Mar-22	1.2

11 KV over head line maintenance staff

Sr.#	Code	Name	Designation	DOJ	Tenure(Years)
1	116367	Badar ul Islam	Sr. Manager Engineering	12-Dec-14	8.5
2	217839	Bilal Qazi	Sr. Asst. Manager	11-Nov-19	3.5
3	50886	Nadeem Ahmad	Sr. Asst. Manager	11-Mar-09	7.5

Employee Bio-Data

Name: Farhan Rafiq

Designation: Sr. Manager Engineering

Emp. Code: 165137

Qualification: BSc Eng. Mechanical

Experience: 20 Years

From	To	Organization
Aug-2002	Mar-2007	Ibrahim Energy Pvt. Ltd
Mar-2007	Feb-2010	Chenab Textile Pvt. Ltd. Shahkot
Feb-2010	July-2015	Wartsila Pvt. Ltd
July-2015	July-2017	OMS Pvt. Ltd
July-2017	Till Date	US Apparel & Textile Pvt. Ltd. Lahore

Employee Bio-Data

Name: Badar-ul-Islam

Designation: Sr. Manager

Emp. Code: 116367

Qualification: BSc Eng. Mechanical

Experience: 9 Years

From	To	Organization
Dec-2014	Till Date	US Apparel & Textile Pvt. Ltd. Lahore

Employee Bio-Data

Name: Bilal Qazi

Designation: Sr. AM

Emp. Code: 217839

Qualification: BSc. Eng. Electrical

Experience: 7 years

From	To	Organization
Mar-2015	Nov-2019	Varow – International Lahore
Nov-2019	Till Date	US Apparel & Textile Pvt. Ltd. Lahore

Employee Bio-Data

Name: Nadeem Ahmad

Designation: Sr. AM

Emp. Code: 50886

Qualification: DAE Electrical

Experience: 21 Years

From	To	Organization
Sep-2002	Mar-2009	Anam weaving Mills Lahore
Mar-2009	Till Date	US Apparel & Textile Pvt. Ltd. Lahore

Employee Bio-Data

Name: Muhammad Awais Dildar

Designation: DM Power House

Emp. Code: 272638

Qualification: BSc. Electrical engineering

Experience: 7 years

From	To	Organization
2016	2022	Albario Pvt. Ltd Lahore
26-09-2022	Till Date	US Apparel & Textile Pvt. Ltd. Lahore

Employee Bio-Data

Name: Khalid Zubair Kaukab

Designation: Incharge Shift

Emp. Code: 259025

Qualification: B. Tech (Hons) Mechanical

Experience: 30 years

From	To	Organization
Nov-1991	Aug-1993	Muhammad Farooq Textile Mills Karachi
Aug-1993	Feb-1995	MAK Dying & Finishing Mills Karachi
Feb-1995	Sep-1995	Rupali Polyester Ltd. sheikhupura
Sep-1995	Dec-1995	Nishat Tek Sheikhupura
Dec-1995	Sep-2015	Packages Ltd. Lahore
Oct-2015	Jan-2019	OMS Pvt. Ltd. Pakistan
May-2019	Till Date	US Apparel & Textile Pvt. Ltd. Lahore

Employee Bio-Data

Name: Ali Jan

Designation: Shift Incharge

Emp. Code: 157809

Qualification: Matric

Experience: 26 Years

From	To	Organization
Jul-1996	Dec-2005	Dewan Salman Fibers Pvt. Ltd.
Jan-2006	Dec-2016	Crescent Bahuman Energy Pvt. Ltd
Jan-2017	Till Date	US Apparel & Textile Pvt. Ltd. Lahore

Employee Bio-Data

Name: Shafat Ali

Designation: Shift Incharge

Emp. Code: 165139

Qualification: BSc (Mechanical) Engg. Tech

Experience: 9.5 Years

From	To	Organization
01-Aug-2013	31-Jul-2017	Nishat Chunian Pvt. Ltd
01-Aug-2017	Till Date	US Apparel & Textile Pvt. Ltd. Lahore

Employee Bio-Data

Name: Umar Hayat

Designation: Incharge

Emp. Code: 163385

Qualification: FA

Experience: 28 Years

From	To	Organization
Jan-1995	Apr-2010	Crescent Bahuman Energy Pvt.
Jun-2012	May-2017	Nishat Chunian Power House Pvt.
Jun-2017	Till Date	US Apparel & Textile Pvt. Ltd. Lahore

Employee Bio-Data

Name: Mujahid Hussain

Designation: Supervisor

Emp. Code: 262616

Qualification: B. Tech (Hons) Mechanical

Experience: 9 Years

From	To	Organization
Jan-2013	Aug-2013	Interloop Textile Faisal Abad
Aug-2013	Aug-2015	Ibrahim Fiber Faisal Abad
Aug-2015	May-2016	Technovision Lahore
May-2016	Nov-2021	Dynamic Sportswear Lahore
Mar-2022	Till Date	US Apparel & Textile Pvt. Ltd. Lahore

Employee Bio-Data

Name: Asad Bashir

Designation: Engine Room Operator

Emp. Code: 251908

Qualification: DAE Mechanical

Experience: 6 Years

From	To	Organization
Jan-2017	Sep-2021	Crescent Bahuman Ltd.
Sep-2021	Till Date	US Apparel & Textile Pvt. Ltd. Lahore

Employee Bio-Data

Name: Muhammad Iqbal

Designation: Operator Engine Room

Emp. Code: 243559

Qualification: DAE Mechanical (Auto & Diesel)

Experience: 25 Years

From	To	Organization
Feb-1995	Sep-1996	Rupa Fab Textile Pvt. Ltd. Raiwind
Jun-1997	Jul-2017	Southern Electric Power Company Ltd. Raiwind
Aug-217	Aug-2019	Reshma Power Generation Ltd. Raiwind
Apr-2021	Till date	US Apparel & Textile Pvt. Ltd. Lahore

Employee Bio-Data

Name: Saif Ullah

Designation: Mechanic

Emp. Code: 167995

Qualification: DAE Mechanical

Experience: 8 Year

From	To	Organization
Jan-2014	Mar-2016	Hubco Power Plant Narowal
Apr-2016	Sep-2017	Nishat Chunian Power Plant
Sep-2017	Till Date	US Apparel & Textile Pvt. Ltd. Lahore

Employee Bio-Data

Name: Amir Nazeer

Designation: Engine Room Operator

Emp. Code: 145037

Qualification: DAE (MECHANICAL)

Experience: 10 Years

From	To	Organization
Jan 2012	Oct 2013	Mehmood Textile (pvt) ltd Multan
Oct 2013	Dec 2015	Bahria Town (pvt)ltd Lahore
March 2016	Till Continue	Us Apparel &Textile (pvt)ltd(3,4)

Employee Bio-Data

Name: Rehan Latif

Designation: Control Room operator

Emp. Code: 266139

Qualification: DAE Electrical

Experience: 3 Years

From	To	Organization
Jan-2020	Jun-2022	Ghazi Fabric Pvt. Ltd.
Jun-2022	Till date	US Apparel & Textile Pvt. Ltd. Lahore

Employee Bio-Data

Name: Syed AAle Ahmed

Designation: Operator control room

Emp. Code: 246203

Qualification: B. Tech (pass)

Experience: 09 years

From	To	Organization
june2021	To date	Us Apparel &Textile (pvt)ltd(3,4) Lahore
may2016	jan2021	Dynamic Sportswear (pvt)ltd Lahore
November t2014	March 2015	Dynamic spinning mils(pvt)ltd Lahore
June 2013	October 2014	Pak Asia feeds(pvt)ltd Depalpure

Employee Bio-Data

Name: M. Shahzad Akbar

Designation: Control Room Operator

Emp. Code: 135409

Qualification: B. Tech (Pass) Electrical

Experience: 10 Years

From	To	Organization
2011	2013	Orient Energy System Lahore
2015	Till Date	US Apparel & Textile Pvt. Ltd. Lahore

Employee Bio-Data

Name: Shaukat Ali

Designation: Electrical Technician

Emp. Code: 217031

Qualification: 02 Years Certificate course of Electrical

Experience: 22 Years

From	To	Organization
Jan 2000	Dec 2008	Pell Switchgear (pvt) ltd Lhore
Feb 2008	Oct 2015	Southern Power Generation (pvt)ltd Lahore
Oct 2019	Till Continue	Us Apparel &Textile (pvt)ltd(3,4)

3(4)(d)(vii)	**employment records of engineering and technical staff of the applicant proposed to be employed**

USGROUP

Employeement record of Power House Staff

25-May-23

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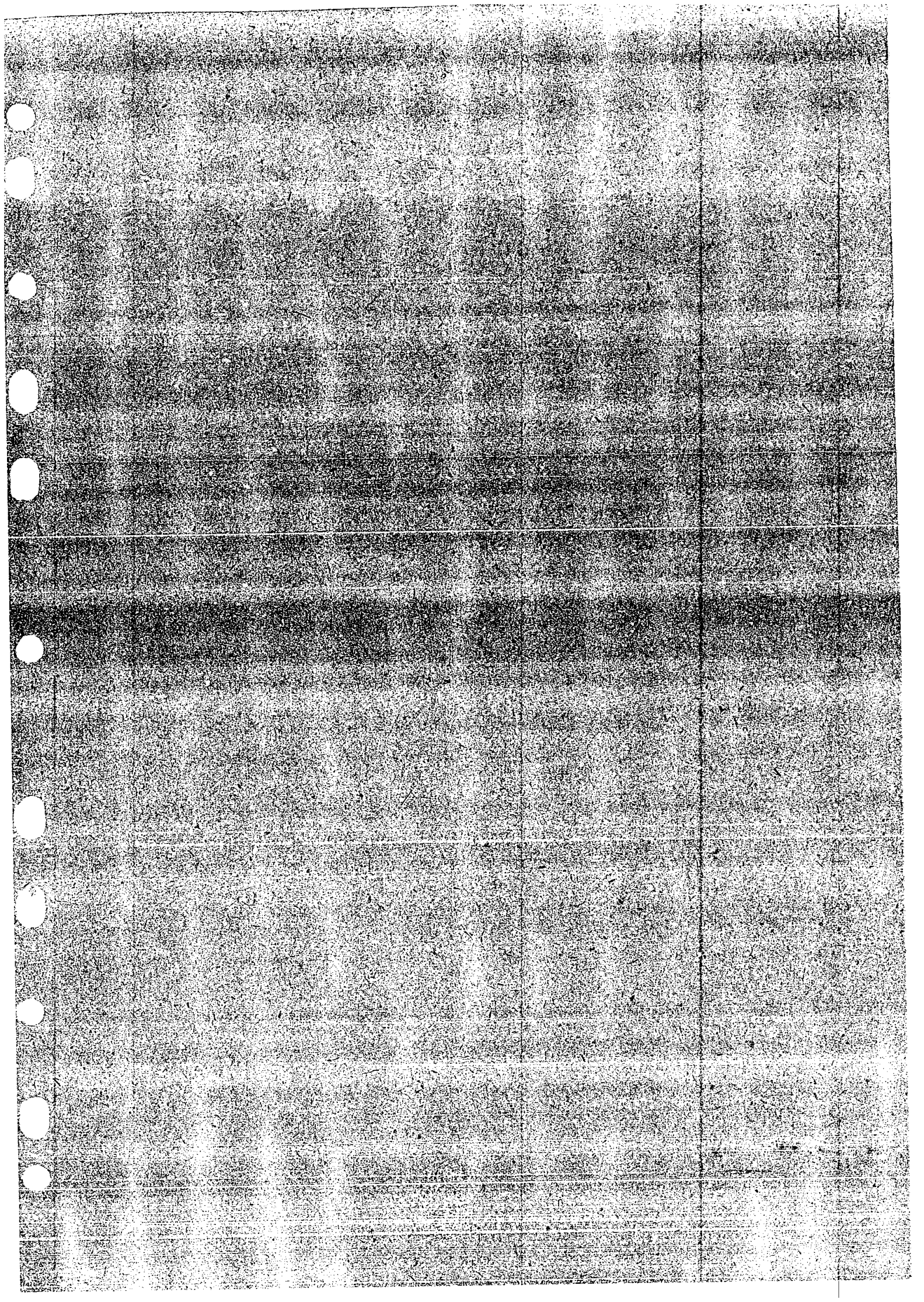
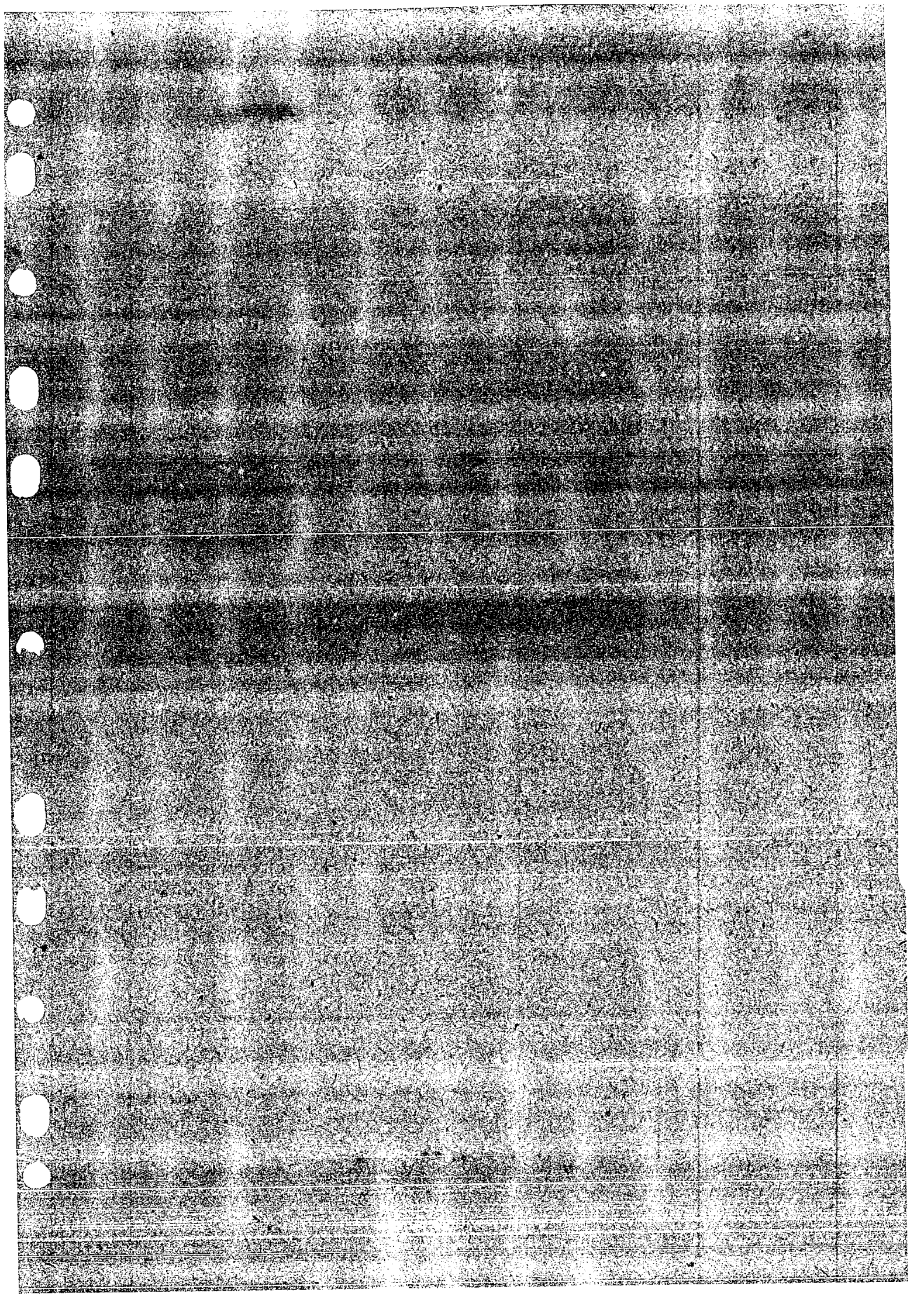
Managing Director



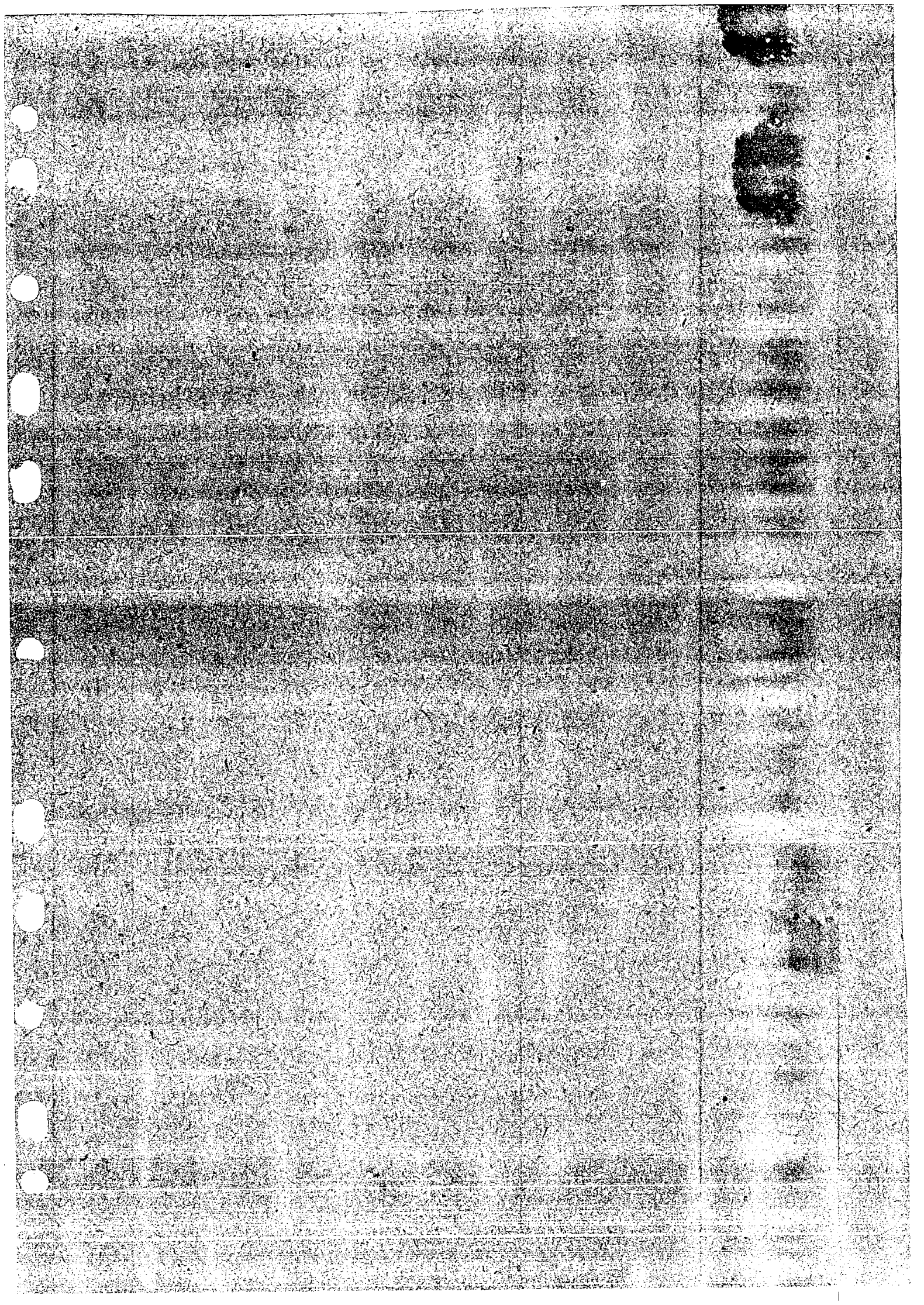
3(4)(d)(vii)	profile of sub-contractors, if any, along with expressions of interest of such sub-contractors	

Not Applicable



3(4)(d)(ix)	**verifiable references in respect of the experience of the applicant and its proposed sub-contractors**

Not Applicable



3(e)	**technical and financial proposals in reasonable detail for the operation, maintenance, planning and development of the facility or system in respect of which the license is being sought**

Operation & Maintenance

USA&TPL has in-house team for carrying out operation and maintenance of the Power House.

- The operation staff is present 24/7 in the Power House whereas the maintenance staff is also available for carrying out repair and maintenance activities on the plant.
- USA&TPL operation and maintenance teams follow the periodic inspection and monitoring plans for the engines as guided in O&M manuals of OEM, (Check list attached)
- For Major Overhauling and critical maintenance, MAN Energy solution team (OEM) is approached to carry out the necessary jobs in the plant.
- USA&TPL always purchases engine parts from engine manufacturer (MAN Energy Solutions).
- USA&TPL carries out monitoring and analysis of engine oil periodically from Caltex to ensure satisfactory health of engines (Report attached).

Managing Director

USGROUP

Schedule Maintenance Hours Eng# 02

28/02/2023

Sr.No	Description	Schedule	Present R.Hrs	Previous Maint R.Hrs	Previous Maint Date	R.Hrs after Maint	Remaining R.Hrs in Maint	Next Maint R.Hrs
1	Lube oil centrifugal filters	200	24286	24227	01-01-2023	59	141	24427
2	Dry Cleaning Turbine	200	24286	24179	09-09-2022	107	93	24379
3	Water Wash Comp Side	200	24286	24174	24/8/2022	112	88	24374
4	Charge Air Filter	500	24286	24147	26/6/2022	139	361	24647
5	Peak Pressure	1000	24286	23665	18/2/2021	621	379	24665
6	Cam Shaft Inspection	2000	24286	24263	28/1/2023	23	1977	26263
7	Valve Tappet Inspection	2000	24286	23446	31/1/2021	840	1160	25446
8	Lube oil cartridge filters	2000	24286	23446	31/1/2021	840	1160	25446
9	Valve Rotator	2000	24286	23795	06-06-2021	491	1509	25795
10	Fuel Oil Filter Replacement	2000	24286	23624	08-06-2022	662	1338	25624
11	Control mechanism Inspection	4000	24286	23268	11-01-2021	1018	2982	27268
12	Governor oil Replacement	4000	24286	21755	04-08-2020	2531	1469	25755
13	Charge Air Cooler Cleaning	6000	24286	24180	11-09-2022	106	5894	30180
14	Connecting rod,Main Bearing retightening	6000	24286	19412	14/5/2019	4874	1126	25412
15	Fuel Oil Injector nozzle Replacement	8000	24286	19412	14/5/2019	4874	3126	27412
16	Turbocharge Overhauling	12000	24286	19412	14/5/2019	4874	7126	31412
17	Crank Shaft Web Deflection	12000	24286	19412	14/5/2019	4874	7126	31412
18	Thrust Bearing Axial Clearance	12000	24286	19412	14/5/2019	4874	7126	31412
19	Over Speed Trip Device	12000	24286	19412	14/5/2019	4874	7126	31412

Managing Director

Schedule Maintenance Remaining Hours Eng# 01

28/02/2023

Sr.No	Description	Schedule	Present R.Hrs	Previous Maint R.Hrs	Previous Maint Date	R.Hrs after Maint	Remaining R.Hrs	Next Maint R.Hrs
1	Lube oil centrifugal filters	200	20245	20175	16/12/2022	70	130	20375
2	Dry Cleaning Turbine	200	20245	20183	26/12/2022	62	138	20383
3	Water Wash Comp Side	200	20245	20183	26/12/2022	62	138	20383
[illegible]	Charge Air Filter	500	20245	20063	30/4/2022	182	318	20563
5	Peak Pressure	1000	20245	20229	30/1/2023	16	984	21229
6	Cam Shaft Inspection	2000	20245	18428	08-10-2020	1817	183	20428
7	Valve Tappet Inspection	2000	20245	20061	25/3/2022	184	1816	22061
8	Lube oil cartridge filters	2000	20245	19749	21/2/2021	496	1504	21749
9	Valve Rotator	2000	20245	19845	30/5/2021	400	1600	21845
10	Fuel Oil Filter Replacement	2000	20245	19926	22/11/2021	319	1681	21926
11	Control mechanism Inspection	4000	20245	18267	29/9/2020	1978	2022	22267
12	Governor oil Replacement	4000	20245	20224	29/1/2023	21	3979	24224
13	Charge Air Cooler Cleaning	6000	20245	20136	18/9/2022	109	5891	26136
14	Connecting rod,Main Bearing retightening	6000	20245	14268	06-03-2019	5977	23	20268
[illegible]	Fuel Oil Injector nozzle Replacement	8000	20245	14268	06-03-2019	5977	2023	22268
16	Turbocharge Overhauling	12000	20245	14268	06-03-2019	5977	6023	26268
17	Crank Shaft Web Deflection	12000	20245	14268	06-03-2019	5977	6023	26268
18	Thrust Bearing Axial Clearance	12000	20245	14268	06-03-2019	5977	6023	26268
19	Over Speed Trip Device	12000	20245	14268	06-03-2019	5977	6023	26268

Managing Director

U.S. APPAREL & TEXTILES (PVT) LTD.

Engine room log of Engine No ....

Date..................

Time	Electrical KVOLT	AMP	MW MVAR	COSΦ	HZ	KVARH	KWH	Gover U/F.R	Temperature Cylinder Exhaust Gas/ Bearing Temperature 1	2	3	4	5	Temperature HT Press ure	HT Temp Jac. IN/OUT	HT Temp T/C B/O	LT CW Pr.	LT CACA In/Out	Fuel Oil Temp	Scav Air Temp 70	TEMP L.O Bef Eng	TEMP L.O Aft Eng	Lube Oil Cooler LO Te In/Out	LO Pr In/Out	LT Te In/Out	LT Pr In/Out	Heat Rec Exch HT T In/Out	HT P In/Out	Cent Cooler CT T In/Out	CT P In/Out	Filter LO AF	Pressure F.O	Pressure Scav Air Bar	Turbo Charger Temp.	Turbo Charger Speed	Eng. RPM	Consumption L.O Su. Sounding	LO Added	Booster	Air Filter	Air Filter	Running hours	Air Compressor 1	Air Compressor 2	Eng. Room T.C	AMB C D/W	Booster temp	Remarks and of shift incharge
MAX																																																
08:00																																																
10:00																																																
12:00																																																
14:00																																																
16:00																																																
18:00																																																
20:00																																																
22:00																																																
24:00																																																
02:00																																																
04:00																																																
06:00																																																

Eng No	Engine Running hours: Running Hrs For the Day	Total hrs Since Oil Changed	Total Running hrs Since Top OH	Tot Running hrs Since Maj.O.H	Tot Running Hrs Fuel Valve
E#01					
E#02					
E#03					
E#04					

Fu level		Back Flush Filter	
B1		Tot No of Fluches	
B2		No. OF Flu.sin.R.clean	
D1		No. of flashes 24 hrs	
D2		S.P.E. Consumption Gm	
S1			
S2		S.P.L.O Consumption Gm	
D.o level			
B			

Lub Oil Seperator			Fuel Oil Seperator		Turbocharger		
No	1	2	1	2	No	1	2
Tot R/H					T/c Bearing R/H		
R/h Last 24 Hrs					T/C Oil R/H		
R/Hr Sin. Oil					T/C Total R/H		
Change R/H Sin Overhauled					Tot Hrs Since T/C Overhauled		

Remarks By DM PGB	Remarks By HOD

U.S. APPAREL & TEXTILES (PVT) LTD.

ELECTRICAL LOG SHEET

Time	Bus Bar		Generator # 1											Generator # 2											Station Load	
	KV	HZ	V	MW	A	Running Hours	cosØ	KWH	Winding Temp.			Bearing Temp.		V	MW	A	Running Hours	cosØ	KWH	Winding Temp.			Bearing Temp.		KW	A
									L1	L2	L3	D	ND							L1	L2	L3	D	ND		
0600																										
0700																										
0800																										
0900																										
1000																										
1100																										
1200																										
1300																										
1400																										
1500																										
1600																										
1700																										
1800																										
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2100																										
2200																										
2300																										
0000																										
0100																										
0200																										
0300																										
0400																										
0500																										
0600																										

		GEN # 1	GEN # 2	GEN # 3
KWH PRESENT	0600			
KWH PREVIOUS	0600			
UNITS GENERATED				
TOTAL GENERATION			HFO GENERATION	LFO GENERATION

		TF # 1	TF # 2
KWH PRESENT	0600		
KWH PREVIOUS	0600		
UNITS (KWH)			
KWH PRESENT	0600		
KWH PREVIOUS	0600		
UNITS (KWH)			

DATE: ____________

Power Transformer # 1				Power Transformer # 2				FEDEER # 1						FEDEER # 2						FEDEER # 3						Remarks & Signature Incharge By Shift
HT A	HT V	VCS Counter	Oil Temp.	HT A	HT V	VCB Counter	Oil Temp.	V	A	KW	Cos Ø	KWH	VCB Counter	V	A	KW	Cos Ø	KWH	VCB Counter	V	A	KW	Cos Ø	KWH	VCB Counter	

F#1 ....

F#2 ....

F#3 ....

IN HOUSE ....

TOTAL DISTRIBUTION ....

DM (PGU)

AVP (Engg)

Lubricant Analysis Report

North America: +1-317-808-0948

0	1	2	3	4
NORMAL		ABNORMAL		CRITICAL

Overall report severity based on comments.

Account Information	Component Information	Sample Information
Account Number: CGMEPK-0117-0000	Component ID: ENGINE # 1 E	Testing Lab Number: ISL1894-22
Company Name: US APPERAL U#4	Secondary ID: 22214	Testing Lab Location: West Wharf Laboratory
Contact:	Component Type: DIESEL ENGINE - HEAVY FUEL OIL	Lab Number: C-561167
Address:	Manufacturer: MAN	Data Analyst: AC
LAHORE PK	Model: 5L 27/38	Sampled: 26-Nov-2022
Phone Number:	Application: PLANT/INDUSTRIAL	Submitted: 30-Nov-2022
	Sump Capacity: 1440 L	Received: 28-Nov-2022
		Completed: 30-Nov-2022
Filter Information	**Miscellaneous Information**	**Product Information**
Filter Type: Information Requested		Product Manufacturer: CALTEX
Micron Rating: 0		Product Name: TARO 40 XL
		Viscosity Grade: SAE 40

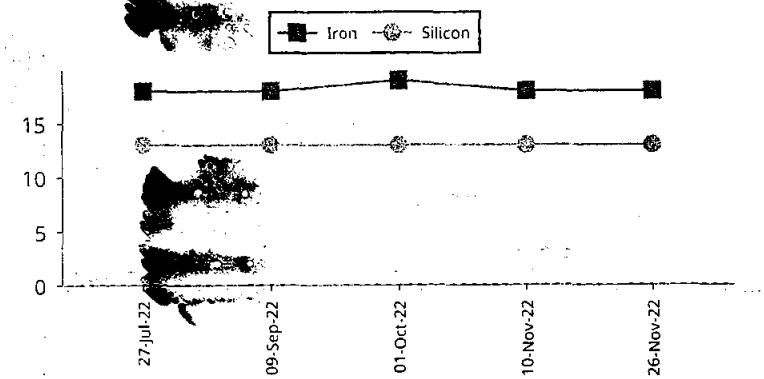
Comments Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Aluminum is at a MINOR LEVEL; ALUMINUM sources in ENGINES include pistons, block and components (intake manifold, head, bearing caps), thrust bearings, main/rod bearing overlay or backing, alumina silica, or contamination from grease. Copper is at a MINOR LEVEL; Bushing/thrust metal and/or most of the copper may be coming from lube cooler (as applicable);

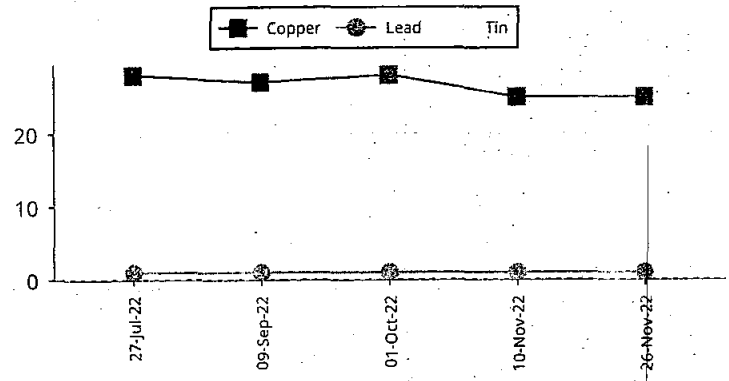
	Wear Metals (ppm)										Contaminant Metals (ppm)			Multi-Source Metals (ppm)						Additive Metals (ppm)				
Sample #	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
122	18	1	16	7	28	1					13													
123	18	1	15	7	27	1					13													
124	19	1	15	7	28	1					13													
125	18	1	15	7	25	1					13													
126	18	1	15	7	25	1					13													

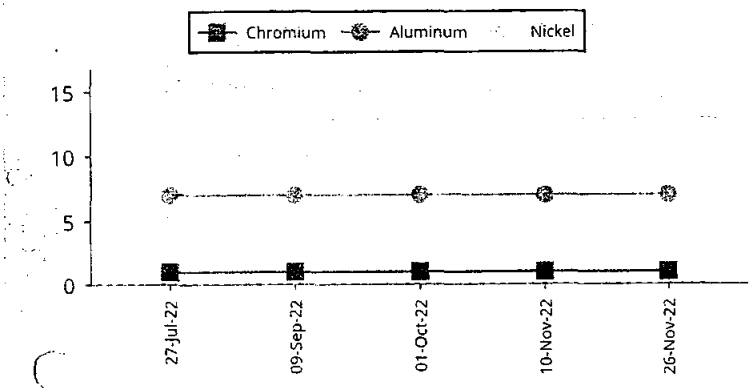
	Sample Information						Contaminants			Fluid Properties					
Sample #	Date Sampled	Date Received	Lube Time h	Unit Time h	Lube Change	Lube Added L	Filter Change	Fuel Dilution %	Soot %	Water %	Viscosity 40°C cSt	Viscosity 100 °C cSt	Acid Number mg KOH / g	Base Num. ASTM4739 mg KOH / g	Oxidation abs / cm	Nitration abs / 0.1mm
12	7-Jul-2022	30-Jul-2022	5746	20120	Unk	0	Unk			<.1 - Hotplate	168.	16.2				
123	09-Sep-2022	12-Sep-2022	5758	20132	Unk	0	Unk			<.1 - Hotplate	168	16.2				
124	01-Oct-2022	20-Oct-2022	5762	20136	Unk	0	Unk			<.1 - Hotplate	170.	16.3				
125	10-Nov-2022	17-Nov-2022	5775	20149	Unk	0	Unk			<.1 - Hotplate	161.	15.8				
126	26-Nov-2022	28-Nov-2022	5795	20166	Unk	0	Unk			<.1 - Hotplate	164.	16.2				

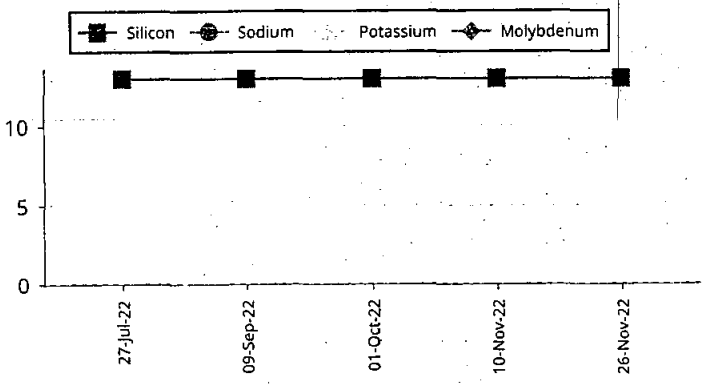
	Particle Count (particles/mL)										Additional Testing				
Sample #	ISO Code Based On 4/6/14	> 4 particles / mL	> 6 particles / mL	> 10 particles / mL	> 14 particles / mL	> 21 particles / mL	> 38 particles / mL	> 70 particles / mL	> 100 particles / mL	Test Method	Appearance	Base No. D2896 mg KOH / g	Water by Karl Fischer - mod. 6304C %	Setaflash °C	Viscosity Index Index Number
122	/ /										BLACK	27.54	0.082	>190	101
123	/ /										BLACK	27.74	0.081	>190	100
124	/ /										BLACK	27.17	0.081	>190	100
125	/ /										BLACK	27.52	0.078	>190	101
126	/ /										BLACK	27.79	0.081	>190	102

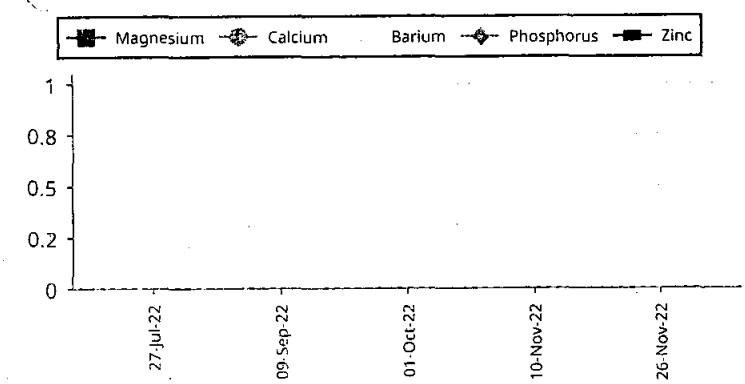
Historical Comments	122	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Copper is at a MODERATE LEVEL; Bushing/thrust metal and/or most of the copper may be coming from lube cooler (as applicable); Aluminum is at a MINOR LEVEL; ALUMINUM sources in ENGINES include pistons, block and components (intake manifold, head, bearing caps), thrust bearings, main/rod bearing overlay or backing, alumina silica, or contamination from grease.
	123	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Aluminum is at a MINOR LEVEL; ALUMINUM sources in ENGINES include pistons, block and components (intake manifold, head, bearing caps), thrust bearings, main/rod bearing overlay or backing, alumina silica, or contamination from grease. Copper is at a MINOR LEVEL; Bushing/thrust metal and/or most of the copper may be coming from lube cooler (as applicable);
	124	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Copper is at a MODERATE LEVEL; COPPER is most likely LEACHING into the oil via the OIL COOLER core tubing. This typically DOES NOT REQUIRE MAINTENANCE ACTION unless there is evidence of COOLANT in the oil. Aluminum is at a MINOR LEVEL; ALUMINUM sources in ENGINES include pistons, block and components (intake manifold, head, bearing caps), thrust bearings, main/rod bearing overlay or backing, alumina silica, or contamination from grease. Viscosity is SLIGHTLY HIGH. Causes include contamination, oxidation, incorrectly identified viscosity grade, or adding a different viscosity grade to the component.
	125	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Aluminum is at a MINOR LEVEL; ALUMINUM sources in ENGINES include pistons, block and components (intake manifold, head, bearing caps), thrust bearings, main/rod bearing overlay or backing, alumina silica, or contamination from grease. Copper is at a MINOR LEVEL; Bushing/thrust metal and/or most of the copper may be coming from lube cooler (as applicable);


Iron
Silicon
15
10
5
0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


Copper
Lead
Tin
20
10
0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


Chromium
Aluminum
Nickel
15
10
5
0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


Silicon
Sodium
Potassium
Molybdenum
10
5
0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


Magnesium
Calcium
Barium
Phosphorus
Zinc
1
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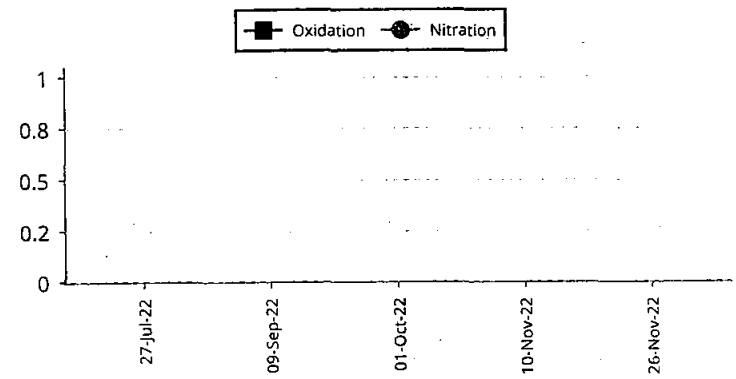
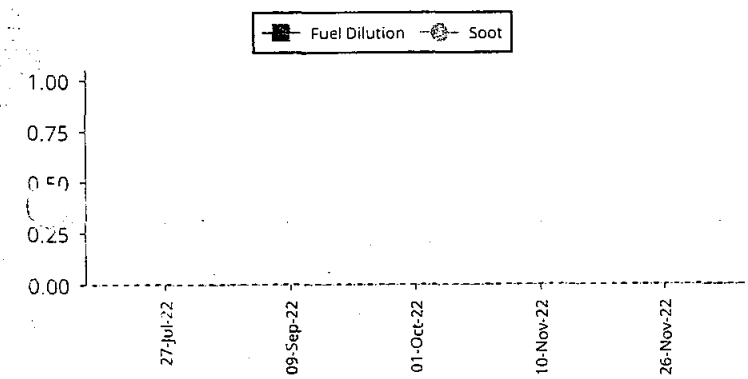
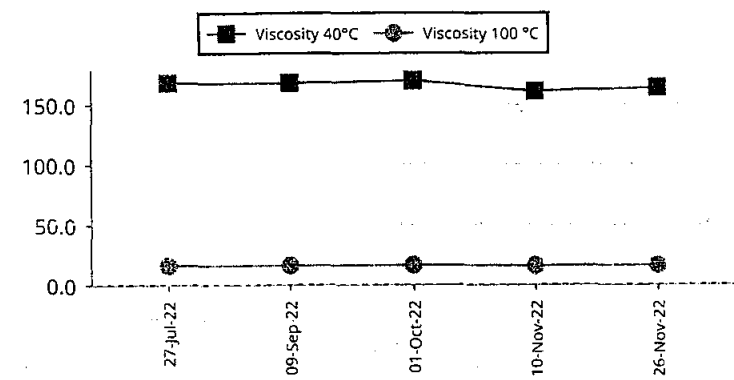
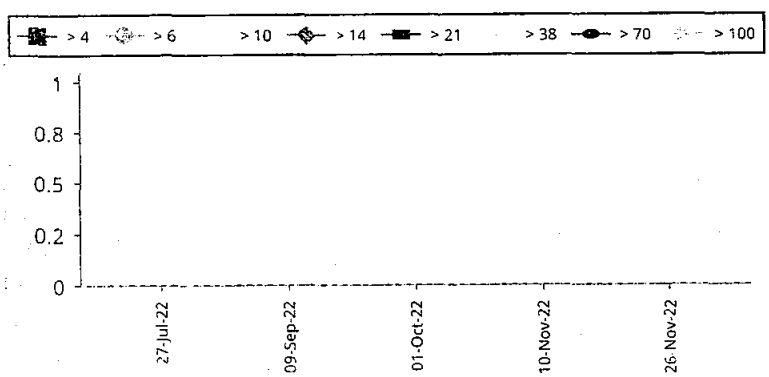
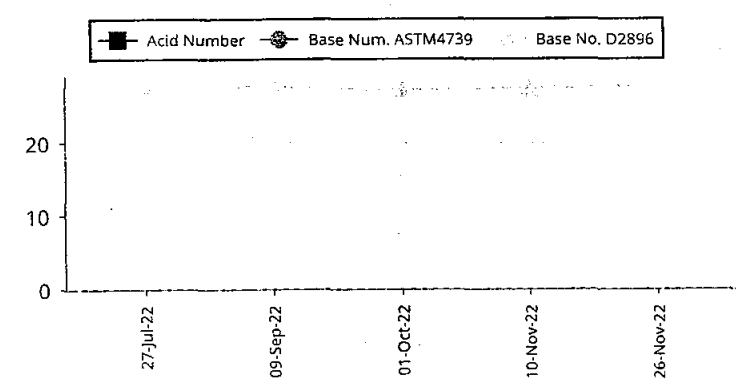
0.5
0.2
0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


Oxidation
Nitration
1
0.8
0.5
0.2
0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


Fuel Dilution
Soot
1.00
0.75
0.50
0.25
0.00
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


Viscosity 40°C
Viscosity 100 °C
150.0
100.0
50.0
0.0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


> 4
> 6
> 10
> 14
> 21
> 38
> 70
> 100
1
0.8
0.5
0.2
0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


Acid Number
Base Num. ASTM4739
Base No. D2896
20
10
0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22

Lubricant Analysis Report

North America: +1-317-808-0948

0	1	2	3	4
NORMAL		ABNORMAL		

Overall report severity based on comments.

Account Information	Component Information	Sample Information
Account Number: CGMEPK-0117-0000	Component ID: ENGINE # 2 E	Testing Lab Number: ISL1895-22
Company Name: US APPERAL U#4	Secondary ID: 22215	Testing Lab Location: West Wharf Laboratory
Contact:	Component Type: DIESEL ENGINE - HEAVY FUEL OIL	Lab Number: C-561168
Address:	Manufacturer: MAN	Data Analyst: AC
LAHORE PK	Model: 5L 27/38	Sampled: 26-Nov-2022
Phone Number:	Application: PLANT/INDUSTRIAL	Submitted: 30-Nov-2022
	Sump Capacity: 1440 L	Received: 28-Nov-2022
		Completed: 30-Nov-2022
Filter Information	**Miscellaneous Information**	**Product Information**
Filter Type: Information Requested		Product Manufacturer: CALTEX
Micron Rating: 0		Product Name: TARO 40 XL
		Viscosity Grade: SAE 40

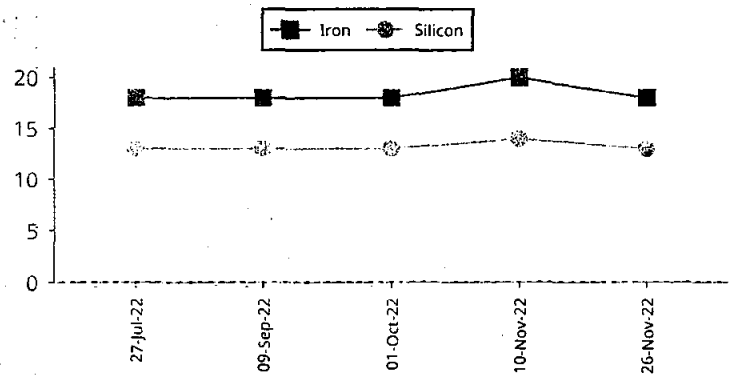
Comments	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Aluminum is at a MINOR LEVEL; ALUMINUM sources in ENGINES include pistons, block and components (intake manifold, head, bearing caps), thrust bearings, main/rod bearing overlay or backing, alumina silica, or contamination from grease. Copper is at a MINOR LEVEL; Bushing/thrust metal and/or most of the copper may be coming from lube cooler (as applicable);

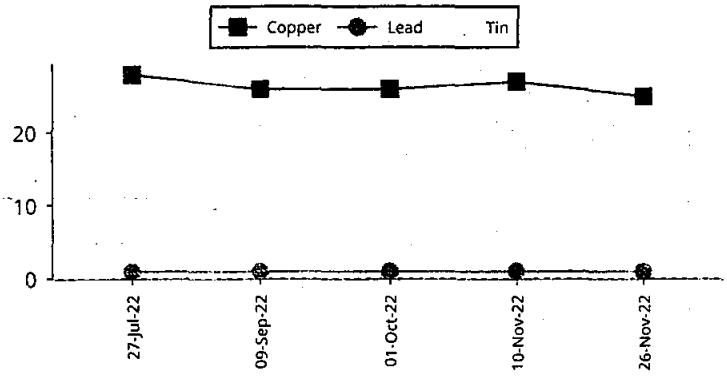
	Wear Metals (ppm)										Contaminant Metals (ppm)			Multi-Source Metals (ppm)						Additive Metals (ppm)				
Sample #	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
118	18	1	16	7	28	1					13													
119	18	1	16	7	26	1					13													
120	18	1	14	7	26	1					13													
121	20	1	15	7	27	1					14													
122	18	1	15	7	25	1					13													

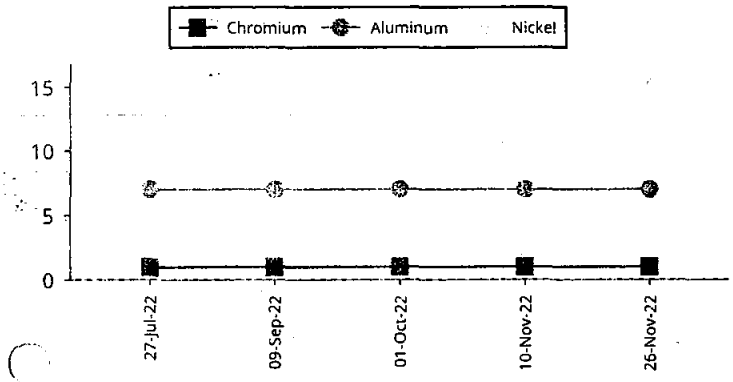
	Sample Information							Contaminants			Fluid Properties					
Sample #	Date Sampled	Date Received	Lube Time h	Unit Time h	Lube Change	Lube Added L	Filter Change	Fuel Dilution %	Soot %	Water %	Viscosity 40°C cSt	Viscosity 100 °C cSt	Acid Number mg KOH / g	Base Num. ASTM4739 mg KOH / g	Oxidation abs / cm	Nitration abs / 0.1mm
11	7-Jul-2022	30-Jul-2022	4757	24165	Unk	0	Unk			<.1 - Hotplate	169.	16.3				
119	09-Sep-2022	12-Sep-2022	4771	24179	Unk	0	Unk			<.1 - Hotplate	167.	16.3				
120	01-Oct-2022	20-Oct-2022	4778	24186	Unk	0	Unk			<.1 - Hotplate	168.	16.3				
121	10-Nov-2022	17-Nov-2022	4788	24196	Unk	0	Unk			<.1 - Hotplate	166.	15.9				
122	26-Nov-2022	28-Nov-2022	4805	24213	Unk	0	Unk			<.1 - Hotplate	166	16.0				

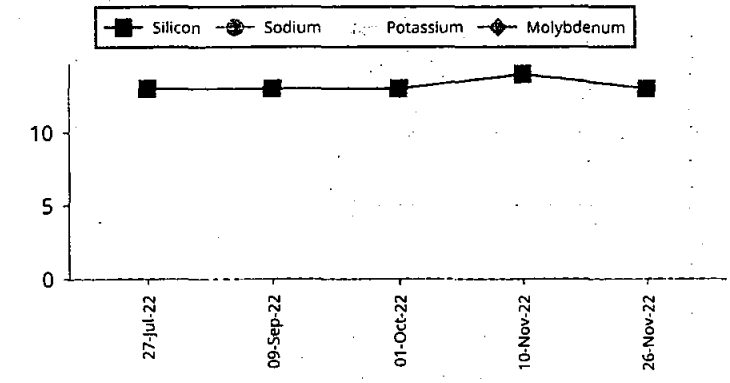
	Particle Count (particles/mL)										Additional Testing				
Sample #	ISO Code Based On 4/6/14	> 4 particles / mL	> 6 particles / mL	> 10 particles / mL	> 14 particles / mL	> 21 particles / mL	> 38 particles / mL	> 70 particles / mL	> 100 particles / mL	Test Method	Appearance	Base No. D2896 mg KOH / g	Water by Karl Fischer - mod. 6304C %	Setaflash °C	Viscosity Index Index Number
118	/ /										BLACK	27.58	0.074	>190	101
119	/ /										BLACK	27.77	0.076	>190	101
120	/ /										BLACK	27.62	0.078	>190	101
121	/ /										BLACK	27.53	0.077	>190	102
122	/ /										BLACK	27.27	0.078	>190	100

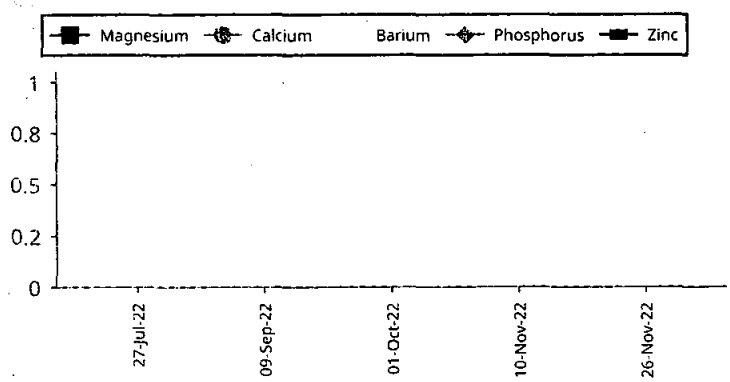
Historical Comments	118	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Copper is at a MODERATE LEVEL; Bushing/thrust metal and/or most of the copper may be coming from lube cooler (as applicable); Aluminum is at a MINOR LEVEL; ALUMINUM sources in ENGINES include pistons, block and components (intake manifold, head, bearing caps), thrust bearings, main/rod bearing overlay or backing, alumina silica, or contamination from grease. Viscosity is SLIGHTLY HIGH. Causes include contamination, oxidation, incorrectly identified viscosity grade, or adding a different viscosity grade to the component.
	119	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Aluminum is at a MINOR LEVEL; ALUMINUM sources in ENGINES include pistons, block and components (intake manifold, head, bearing caps), thrust bearings, main/rod bearing overlay or backing, alumina silica, or contamination from grease. Copper is at a MINOR LEVEL; Bushing/thrust metal and/or most of the copper may be coming from lube cooler (as applicable); Viscosity is SLIGHTLY HIGH. Causes include contamination, oxidation, incorrectly identified viscosity grade, or adding a different viscosity grade to the component.
	120	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Aluminum is at a MINOR LEVEL; ALUMINUM sources in ENGINES include pistons, block and components (intake manifold, head, bearing caps), thrust bearings, main/rod bearing overlay or backing, alumina silica, or contamination from grease. Copper is at a MINOR LEVEL; COPPER is most likely LEACHING into the oil via the OIL COOLER core tubing. This typically DOES NOT REQUIRE MAINTENANCE ACTION unless there is evidence of COOLANT in the oil. Viscosity is SLIGHTLY HIGH. Causes include contamination, oxidation, incorrectly identified viscosity grade, or adding a different viscosity grade to the component.
	121	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Aluminum is at a MINOR LEVEL; ALUMINUM sources in ENGINES include pistons, block and components (intake manifold, head, bearing caps), thrust bearings, main/rod bearing overlay or backing, alumina silica, or contamination from grease. Copper is at a MINOR LEVEL; Bushing/thrust metal and/or most of the copper may be coming from lube cooler (as applicable);


Iron
Silicon
20
15
10
5
0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


Copper
Lead
Tin
20
10
0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


Chromium
Aluminum
Nickel
15
10
5
0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


Silicon
Sodium
Potassium
Molybdenum
10
5
0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


Magnesium
Calcium
Barium
Phosphorus
Zinc
1
0.8
0.5
0.2
0
27-Jul-22
09-Sep-22
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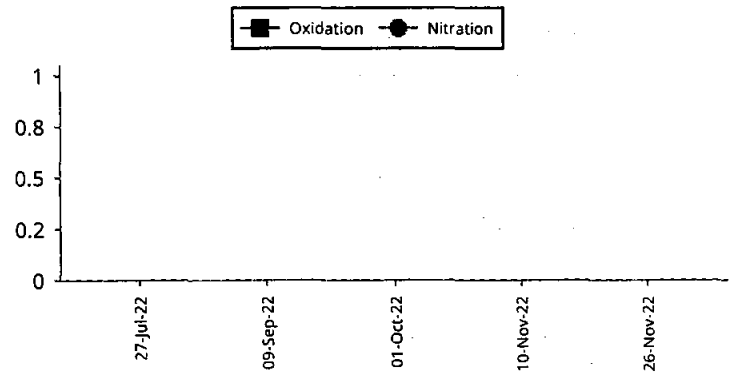
10-Nov-22
26-Nov-22


Oxidation
Nitration
1
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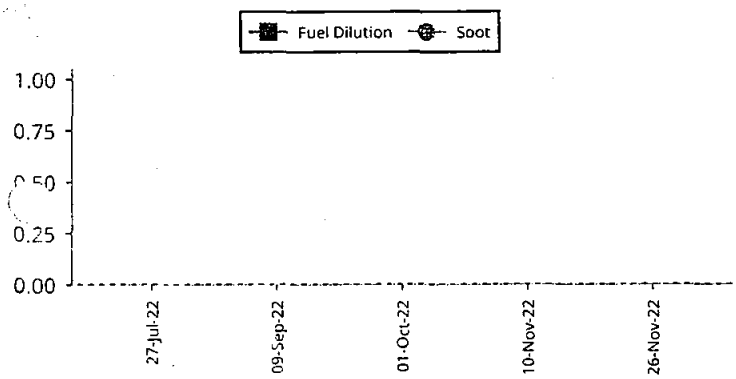
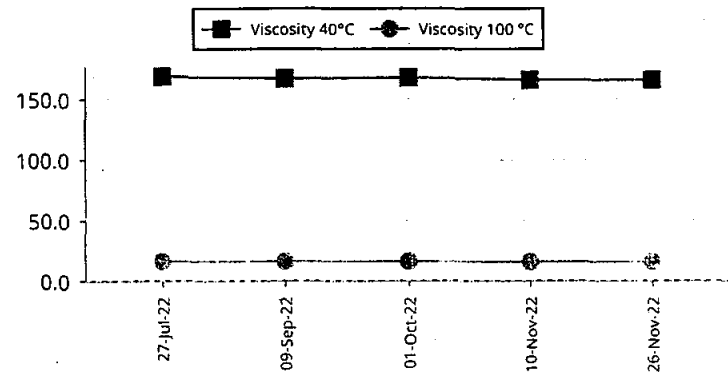
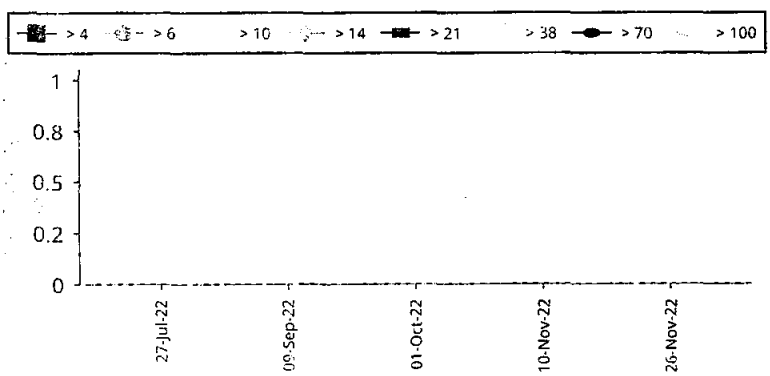
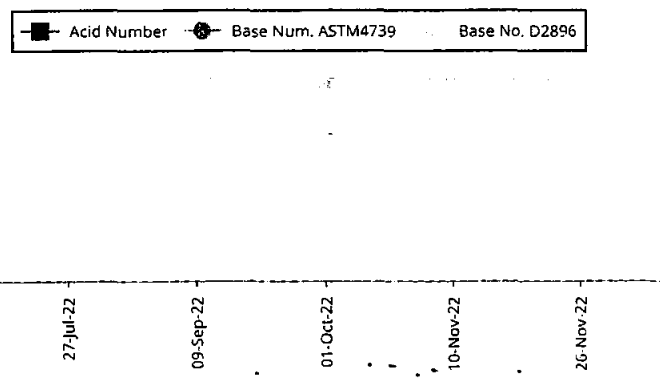
0.5
0.2
0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


Fuel Dilution
Soot
1.00
0.75
0.50
0.25
0.00
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


Viscosity 40°C
Viscosity 100 °C
150.0
100.0
50.0
0.0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


> 4
> 6
> 10
> 14
> 21
> 38
> 70
> 100
1
0.8
0.5
0.2
0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22


Acid Number
Base Num. ASTM4739
Base No. D2896
20
10
0
27-Jul-22
09-Sep-22
01-Oct-22
10-Nov-22
26-Nov-22

19 for its

Feasibility Study

g Director

3(g)	**an affidavit stating whether the applicant has been granted any other license under the Act**

E-STAMP

ID : PB-LHR-8BE6063021FE6816
Type : Low Denomination
Amount : Rs 100/-

Scan for online verification

Description : AFFIDAVIT - 4
Applicant : US APPERAL AND TEXTILES PVT LTD [00000-0000000-0]
Representative From : LAHORE
Agent : KHALID ZUBAIR KAUKAB [35202-2173804-5]
Address : LAHORE
Issue Date : 30-May-2023 2:58:06 PM
Delisted On/Validity : 6-Jun-2023
Amount in Words : One Hundred Rupees Only
Reason : AFFIDAVIT
Vendor Information : Muhammad Azeem | PB-LHR-887 | Nishter Colony

-3391= نرسٹمار

ATTESTED
Oath Commissioner
High Court Lahore

نوٹ: یہ ٹرانزیکشن تاریخ اجرا سے سات دنوں تک کے لیے قابل استعمال ہے۔ای اسٹامپ کی تصدیق بذریعہ ویب سائٹ،کیوآر کوڈ یا ایس ایم ایس سے کی جا سکتی ہے۔

Type "eStamp <16 digit eStamp Number>" send to 8100

Affidavit

I, Muhammad Saqib S/O Mr. Javed Arshad Bhatti Director of US Apparel & Textiles (Pvt.) Ltd, do hereby affirm & declare as under;

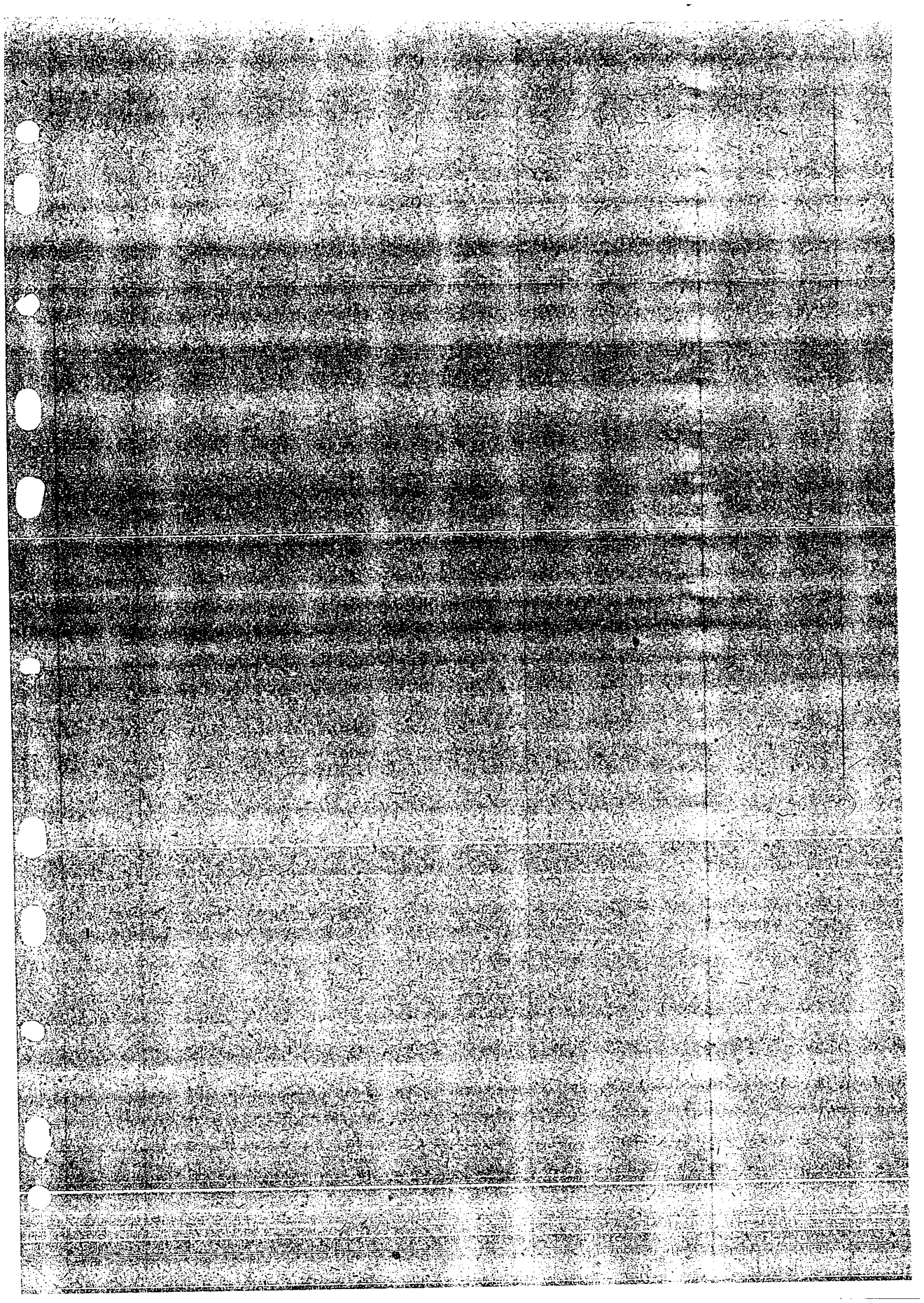
1. That the applicant has one Generation License No. SGC/131/2019 to its power generation granted by NEPRA.
2. That the applicant has no other license granted by any other authority under this Act.

Deponent

Verification on Oath

Verified at Lahore on 30th day of May 2023 that contents of above affidavit are true & correct to best of my knowledge & belief.

Deponent

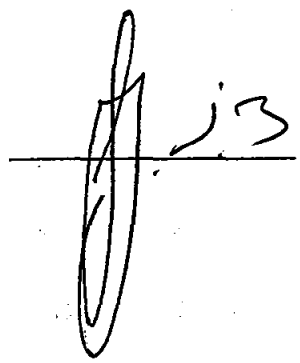


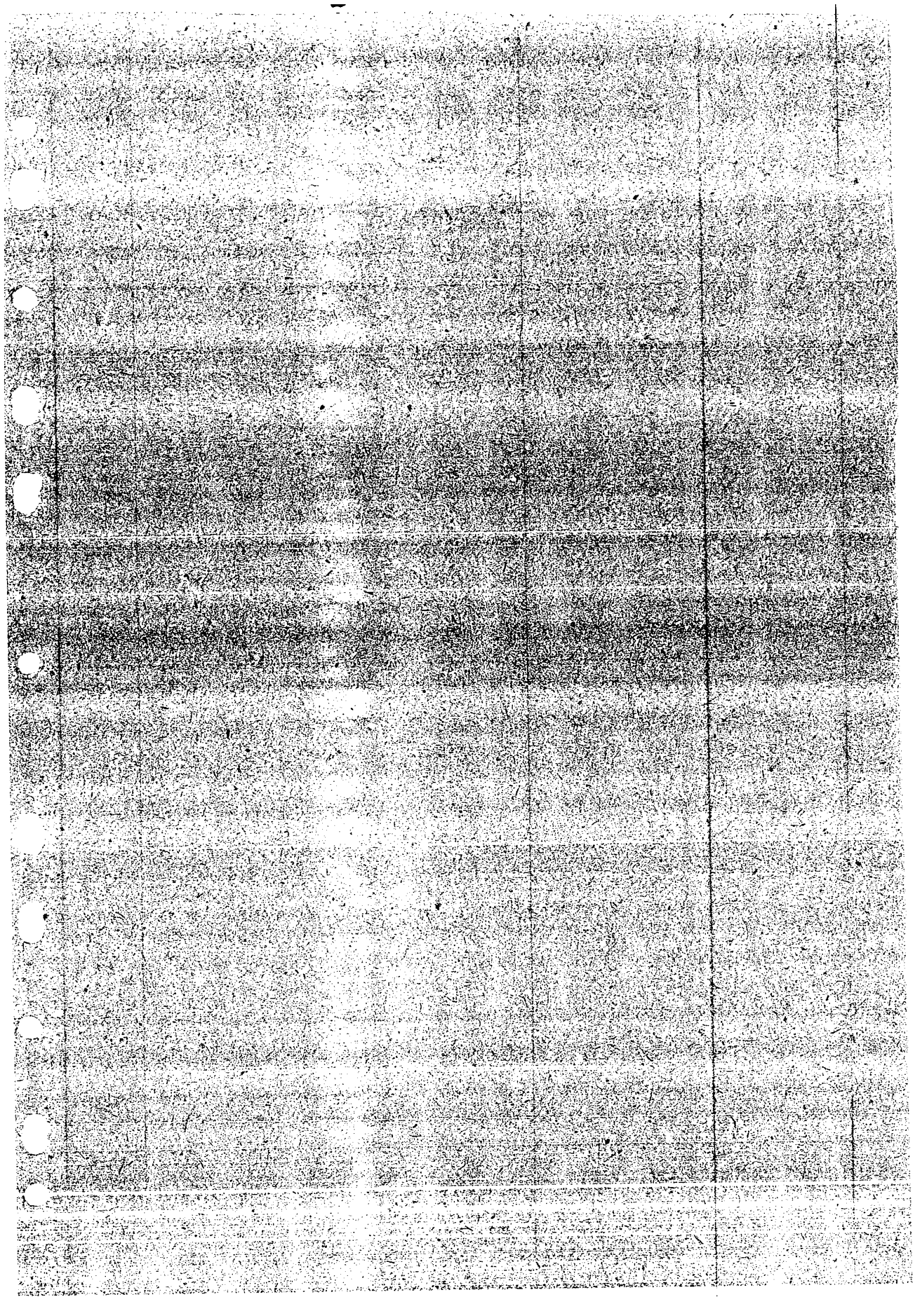
3(h)	**a duly authorised statement stating whether the applicant has been refused grant of license under the Act and, if so, the particulars of the refused application, including date of making the application and decision on the application**

Statement

In compliance with Regulation 3(h) of National Electric Power Regulatory Authority Licensing (Application, Modification, Extension and Cancellation) Procedure Regulation 2021 we state as follows;

It is stated that we have not applied for Electricity Power Supply License prior to this application and was not refused to grant of license under the act. It is further stated that this is first application for grant of Electric Power Supply License.





3(6)	**Authorization from Board Resolution / Power of Attorney**

TEXT OF RESOLUTION PASSED IN THE MEETING OF BOARD OF DIRECTORS OF US APPAREL & TEXTILES (PVT) LIMITED – HELD ON 30-05-2023 AT REGISTERED OFFICE OF THE COMPANY 3-KM, DEFENCE/RAIWIND ROAD, LAHORE.

RESOLVED THAT: -

The meeting of the Board of Directors of the Company was held on Tuesday, May 30, 2023 at 11:00AM at its registered Office situated at 3-KM, Defence/Raiwind Road, Lahore and following was discussed and unanimously approved.

"**Resolved that** Company USAT obtained Generation license from NEPRA to supply electricity to our sister concern Stylers International Pvt Limited and now we intend to obtain & apply for Electricity Power Supply License from NEPRA to comply with legal & codal requirements.

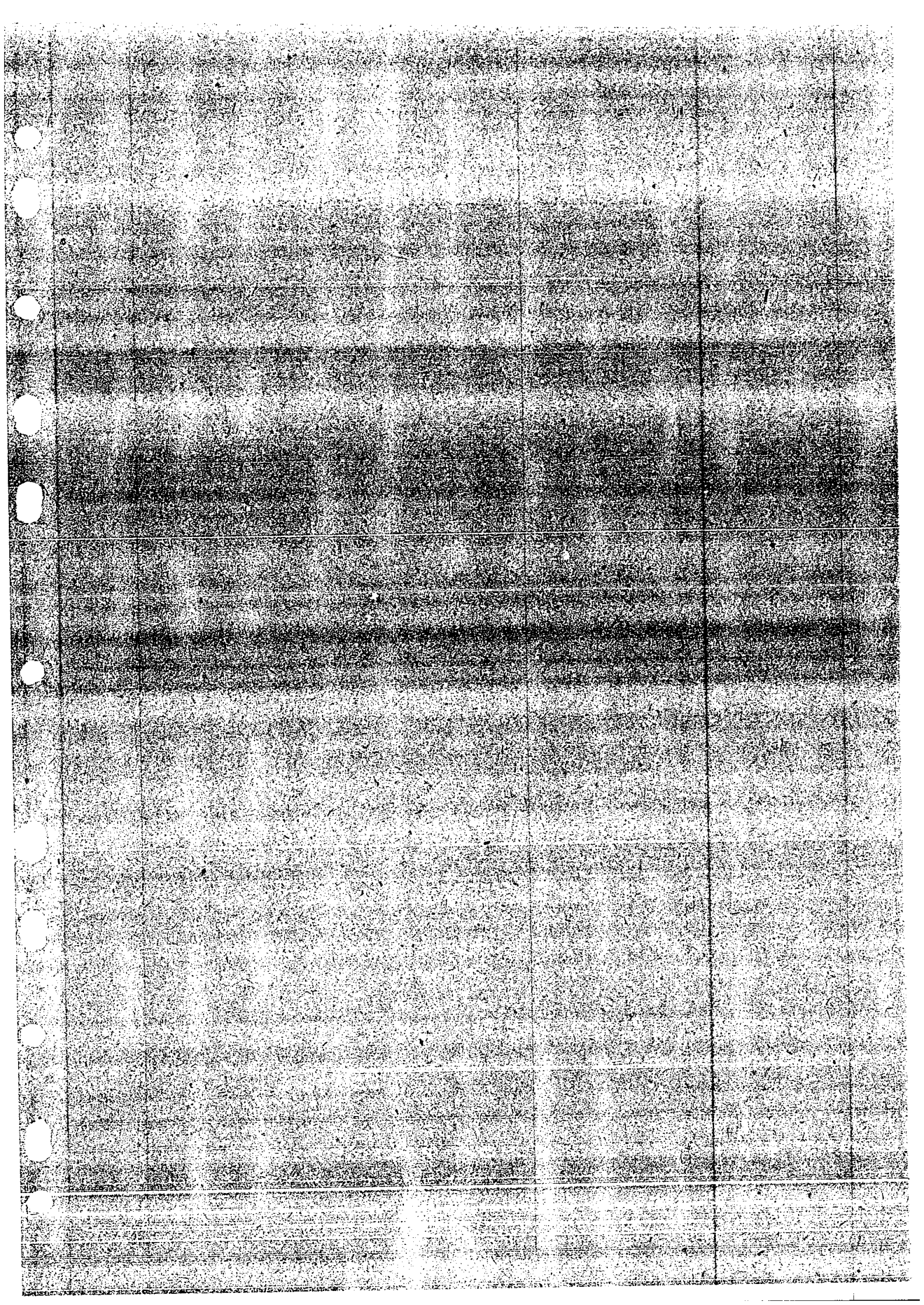
"**Resolved further that** Mr. Muhammad Saqib S/O Mr. Javed Arshad Bhatti, bearing CNIC No. 35202-3800578-3, Director of the Company who is fully conversant with the facts of matter is hereby authorized to apply for license and to sign all the documents and to correspond with NEPRA in this respect and to take other necessary actions deemed appropriate for fulfillment of the said purpose.

"**Resolved further that** Mr. Mian Saad Noor, Managing Director having CNIC No.35202-1877518-1 is authorized to assist Mr. Muhmmad Saqib to sign all technical documents forming part of this application to obtain Electric Power Supply License.

There being no other business the meeting ended with a vote of thank to and from the chair.

Mian Muhammad Ahsan

CEO



3(7)	**An affidavit as to the correctness, authenticity and accuracy of the application**

E-STAMP

ID : PB-LHR-CAE72C4FC1B7622F
Type : Low Denomination
Amount : Rs 100/-

Scan for online verification

Description : AFFIDAVIT - 4
Applicant : US APPERAL AND TEXTILES PVT LTD [00000-0000000-0]
Representative From : LAHORE
Agent : KHALID ZUBAIR KAUKAB [35202-2173804-5]
Address : LAHORE
Issue Date : 30-May-2023 2:55:36 PM
Delisted On/Validity : 6-Jun-2023
Amount in Words : One Hundred Rupees Only
Reason : AFFIDAVIT
Vendor Information : Muhammad Azeem | PB-LHR-887 | Nishter Colony

=3390= نمبر شمار

ATTESTED
Oath Commissioner
High Court Lahore

نوٹ :یہ ٹرانزیکشن تاریخ اجرا سے سات دنوں تک کے لیے قابل استعمال ہے۔ای اسٹامپ کی تصدیق بذریعہ ویب سائٹ،کیوآر کوڈ یا ایس ایم ایس سے کی جا سکتی ہے۔

Type "eStamp <16 digit eStamp Number>" send to 8100

Affidavit

I, Muhammad Saqib S/O Mr. Javed Arshad Bhatti Director of US Apparel & Textiles (Pvt.) Ltd, do hereby affirm & declare as under;

1. That the documents attached with the application of Electric Power Supply License to NEPRA have been prepared and submitted in conformity with the provision of the National Electric Power Regulatory Authority Licensing Application Procedure Regulations, 2021 and to undertake to abide by the terms and provisions of the above said regulations.
2. That I further affirm that the information provided in the attached documents is true and correct to the best of my knowledge and no material fact has been concealed.

Deponent

Verification on Oath

Verified at Lahore on 30th day of May 2023 that contents of above affidavit are true & correct to best of my knowledge & belief.

Deponent

3(8)	**The applicant shall also furnish a bank guarantee equivalent to applicable annual license fee for two year**

Not Applicable

Schedule III (Regulation 3(4)(a)(D)	
1	Relevant feeder maps Number of consumers and expected load

Relevant Feeder maps, Number of consumers and expected load

Schedule III (Regulation 3(4)(a)(D) (1)

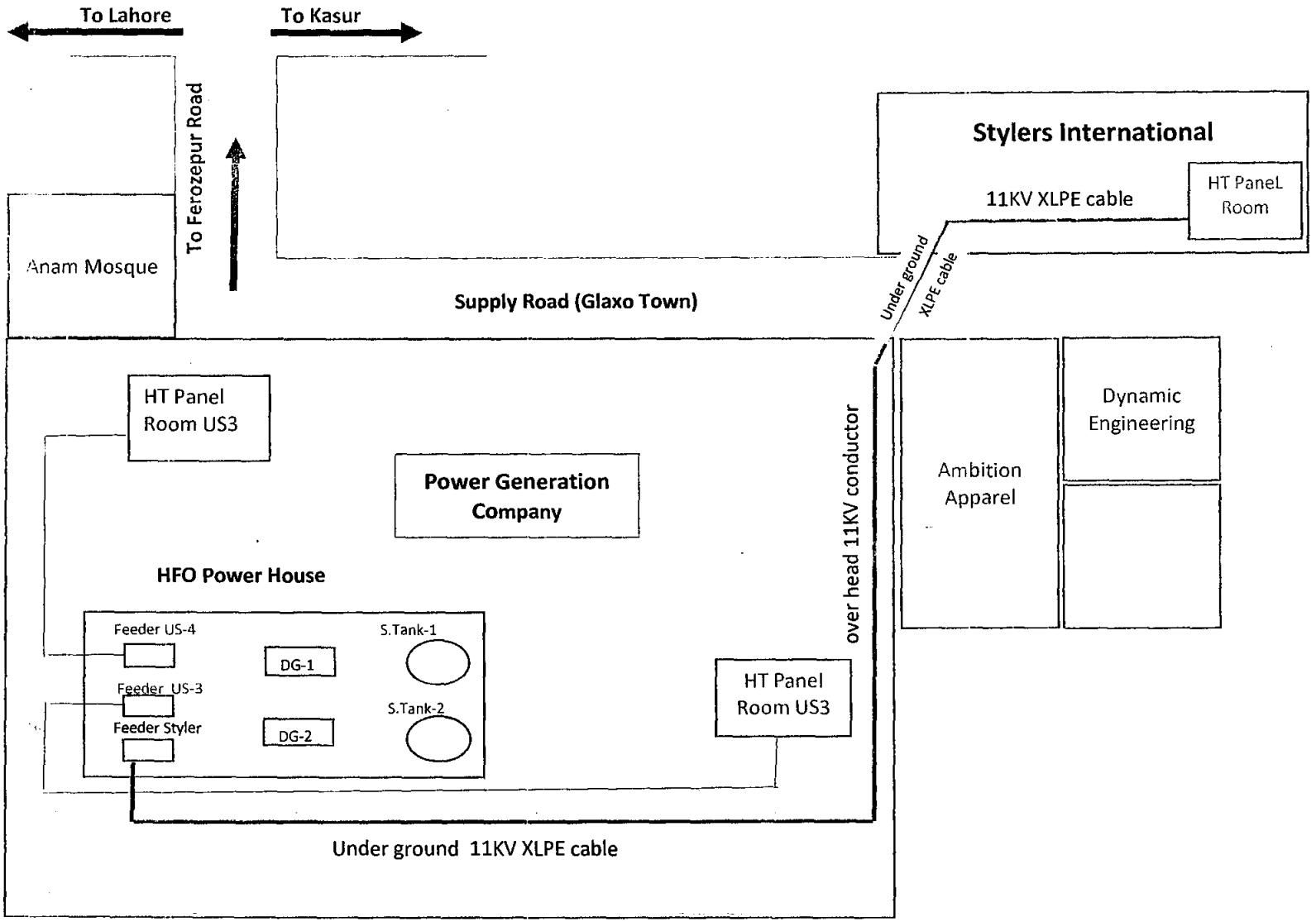
With reference to the requirement as per clause, following is the detail

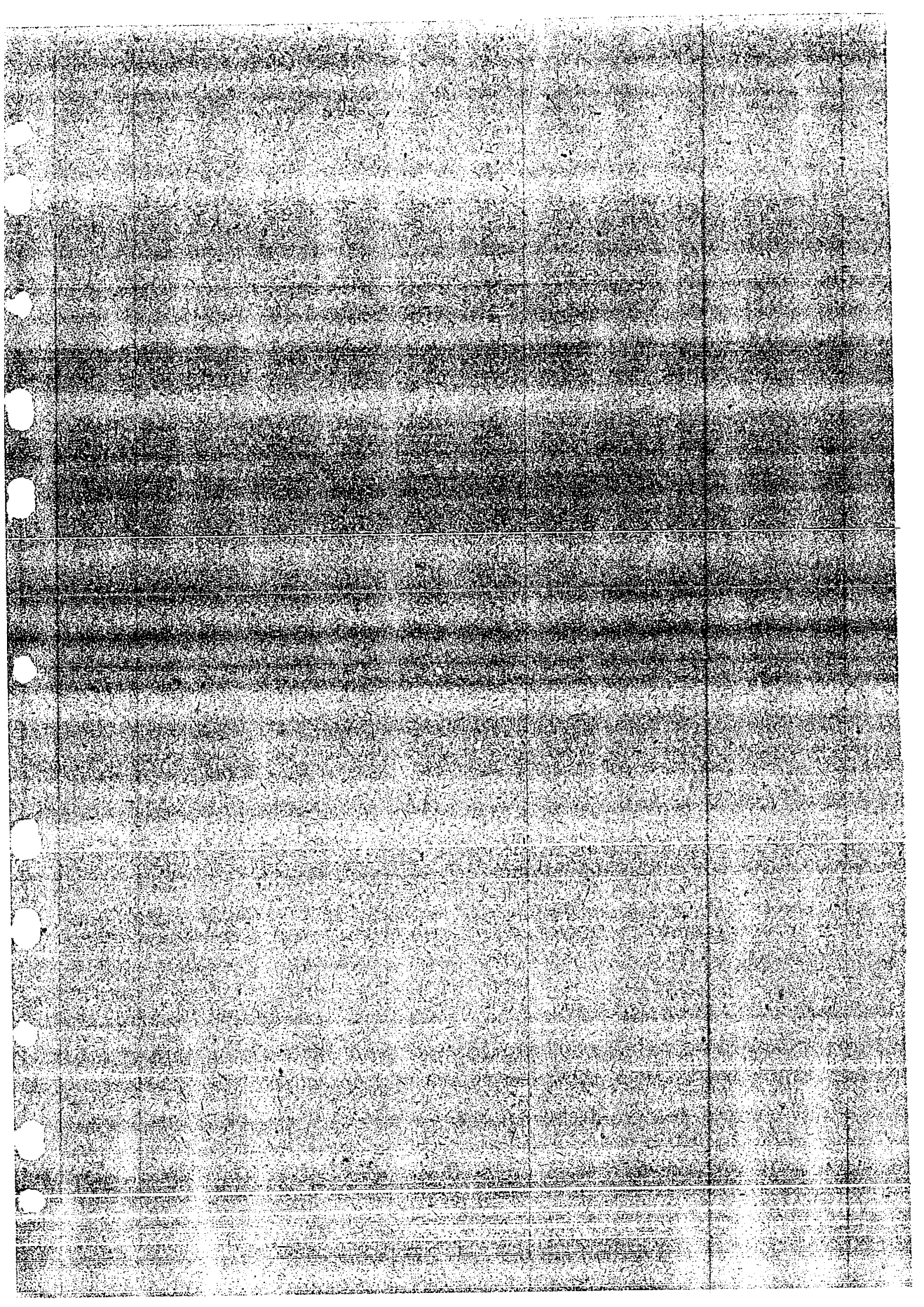
- Stylers International (A private Limited Company) is the sole Bulk Power Consumer (BPC) of US APPAREL and Textiles Pvt Ltd.
- Relevant Feeder map is attached.
- Expected Average Load is 1,000 KW per hour.

Managing Director

Scematic Diagram

For Supply to Bulk Power Consumer from Generation Facility/Thermal Power Plant of the Licensee





Schedule III (Regulation 3(4)(a)(D)	
2	Consumer class/category, sub-category on the basis of sanctioned load and voltage level

USGROUP

Consumer class/category, sub-category on the basis of sanctioned load and voltage level"

Schedule III (Regulation 3(4)(a)(D) (2)

With reference to the requirement as per clause, it is to be informed that

- Consumer class of BPC (Stylers International Pvt Ltd) is B3(14)T
- Sanctioned load is 1,900KW
- Voltage level is 11000 Volt.

Managing Director

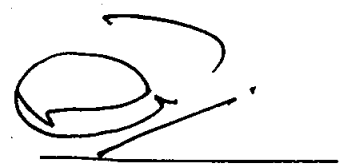
Schedule III (Regulation 3(4)(a)(D)	
3	Tariff categories of consumer classes to be served

Tariff categories of consumer classes to be served

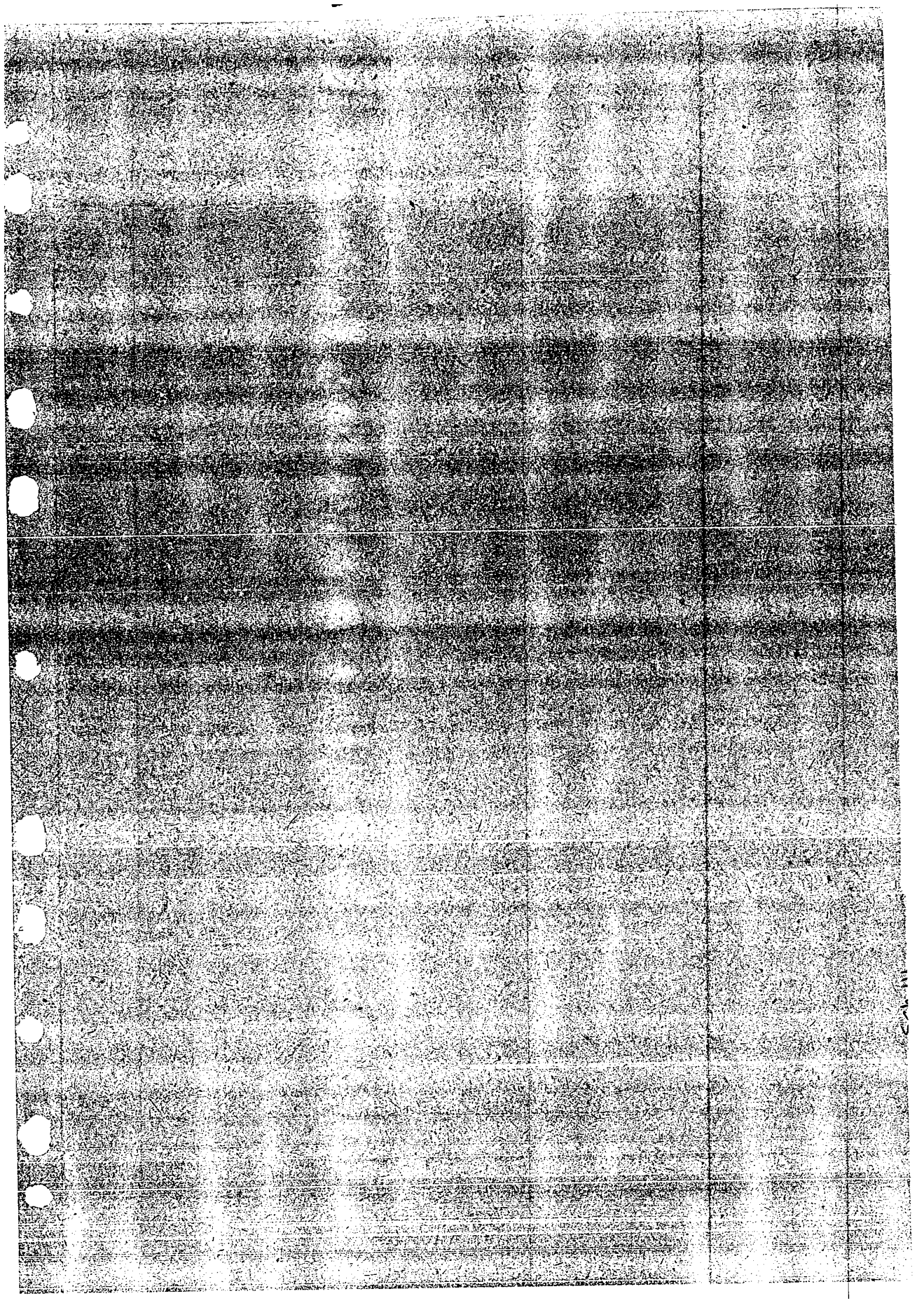
Schedule III (Regulation 3(4)(a)(D) (3)

With reference to the requirement as per clause, it is to be informed that:

- The Tariff for electricity billing is mutually agreed between USA&TPL and BPC (Stylers International Pvt Ltd) as mentioned in Electricity Sale Agreement.



Managing Director



Schedule III (Regulation 3(4)(a)(D)	
4	Demand and consumption pattern on different time periods

Demand and Consumption Pattern

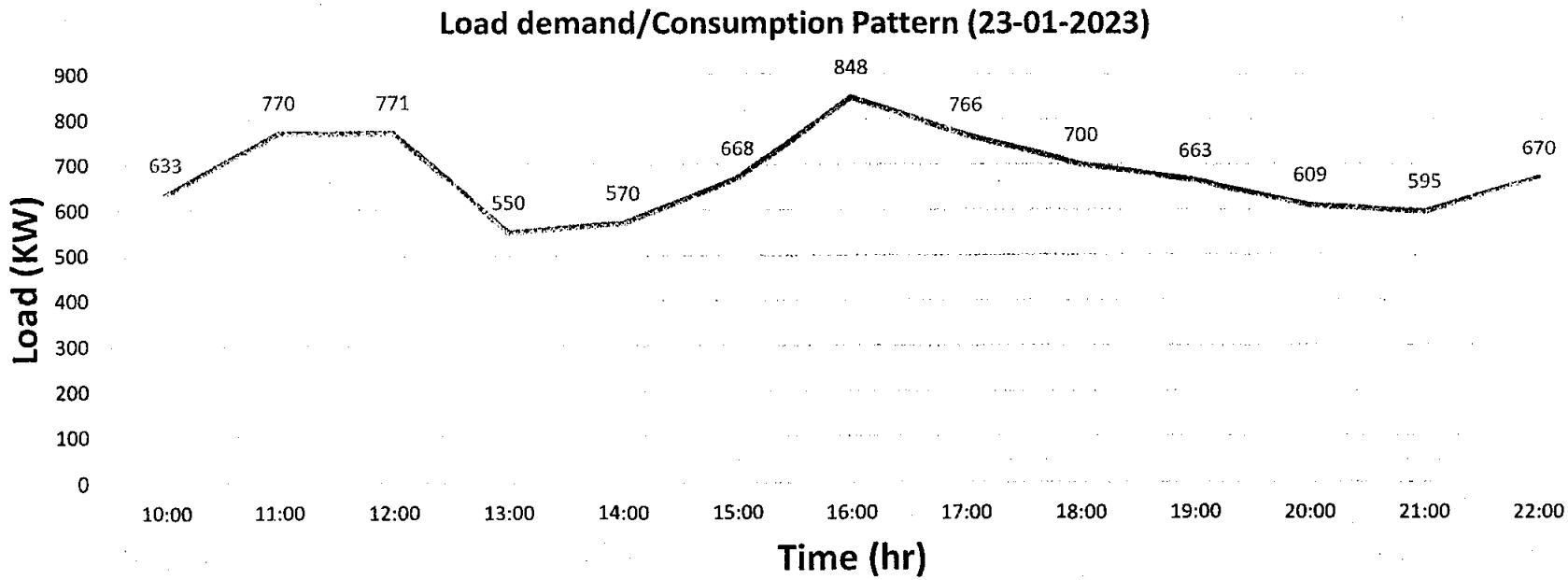
Schedule III (Regulation 3(4)(a)(D) (4)

With reference to the requirement as per clause, the detail of Demand and Consumption Pattern at different time periods is appended. (Sheets of Jan 2023)

Managing Director

US Apparel & Textiles (Pvt.) Limited
20 KM Off Ferozpur Road · Glaxo Town
Lahore 54000 · Pakistan

23-01-2023													
Time (hr)	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00
Load (KW)	633	770	771	550	570	668	848	766	700	663	609	595	670

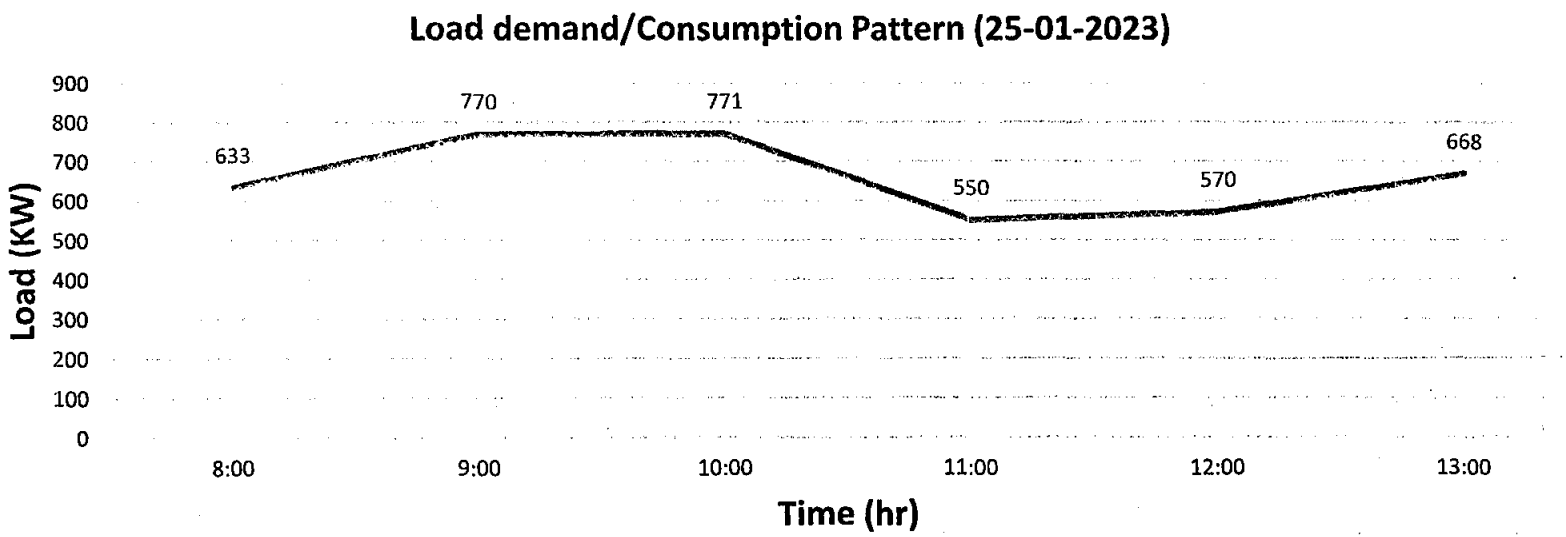


Managing Director

New York
London
Istanbul
usgroup.org
USGROUP

US Apparel & Textiles (Pvt.) Limited
20 KM Off Ferozpur Road · Gaxo Town
Lahore 54000 · Pakistan
+ 92 42 359 50 591 - 94
New York
London
Istanbul
usgroup.org

25-01-2023						
Time (hr)	8:00	9:00	10:00	11:00	12:00	13:00
Load (KW)	633	770	771	550	570	668



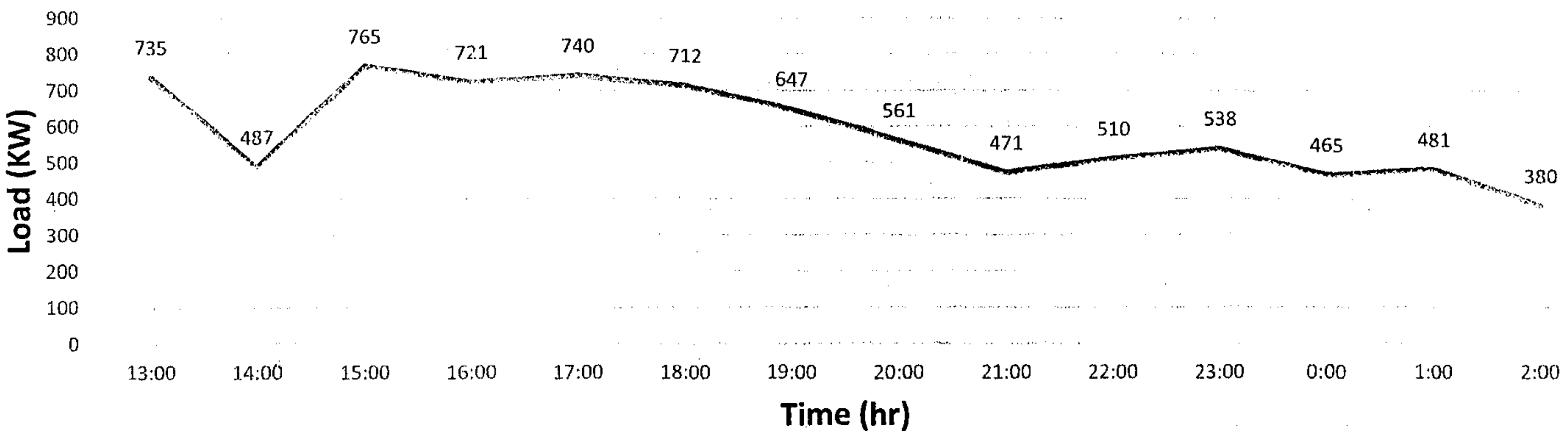
Managing Director

USGROUP

US Apparel & Textiles (Pvt.) Limited
20 KM Off Ferozpur Road, Ghazi Town
Lahore 54000 · Pakistan

30-01-2023													
Time (hr)	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	1:00
Load (KW)	735	487	765	721	740	712	647	561	471	510	538	465	481

Load demand/Consumption Pattern (30-01-2023)



Managing Director

New York Sales Office
London Sales Office
Istanbul
usgroup.org
USGROUP

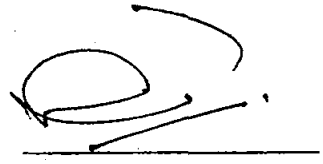
Schedule III (Regulation 3(4)(a)(D)	
5	**Procurement Plan for meeting expected loads (including own generation and/or long-term and short-term PPAs, as the case may be)**

Procurement plan for meeting expected loads (including own generation / long term and short term PPAs, as the case may be)"

Schedule III (Regulation 3(4)(a)(D) (5)

With reference to the requirement as per clause, it is to be informed that

US Apparel and Textiles Pvt Limited (USA&TPL) is an **Existing Facility** and is the Supplier for the sister concern Bulk Power Consumer (BPC). The present generation capacity of USA&TPL is enough to cater own and the BPC load demand on the as and when required basis (to cater both for prime and emergency requirement).



Managing Director

Schedule III (Regulation 3(4)(a)(D)	
6	12-month projections on expected load, number of consumers and expected sale of units for each consumer category

12-month Projection and Expected sale of units

Schedule III (Regulation 3(4)(a)(D) (6)

With reference to the requirement as per clause, As the electric power is supplied to BPC during LESCO shutdown only. LESCO load shedding is different in each year, therefore it is not possible to project the sale of units of whole year. However, the detail of units sold during previous years is attached for better understanding.

Sale of units (KWH)				
	2020	**2021**	**2022**	**2023**
January	-	20,412	810	27,470
February	16,398	8,160	49,660	3,140
March	20,344	4,750	9,100	
April	-	1,900	-	4,820
May	-	4,280	830	31,240
June	-	2,840	-	
July	1,951	-	3,600	
August	1,676	380	900	
September	3,302	480	-	
October	12,461	5,180	850	
November	9,667	860	13,850	
December	16,400	7,840	3,770	
Total	**82,199**	**57,082**	**83,370**	**66,670**

Managing Director

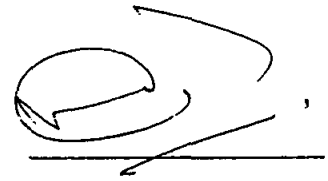
Schedule III (Regulation 3(4)(a)(D)	
7	**5-year Investment Plan indicating schemes/models/framework for undertaking supply of electric power (including frameworks for providing non-discriminatory services and acquisition/sale of assets in relevant service territories)**

5-year Investment Plan indicating schemes/models/framework for undertaking supply of electric power (including frameworks for providing non-discriminatory services and acquisition/sale of assets in relevant service territories)"

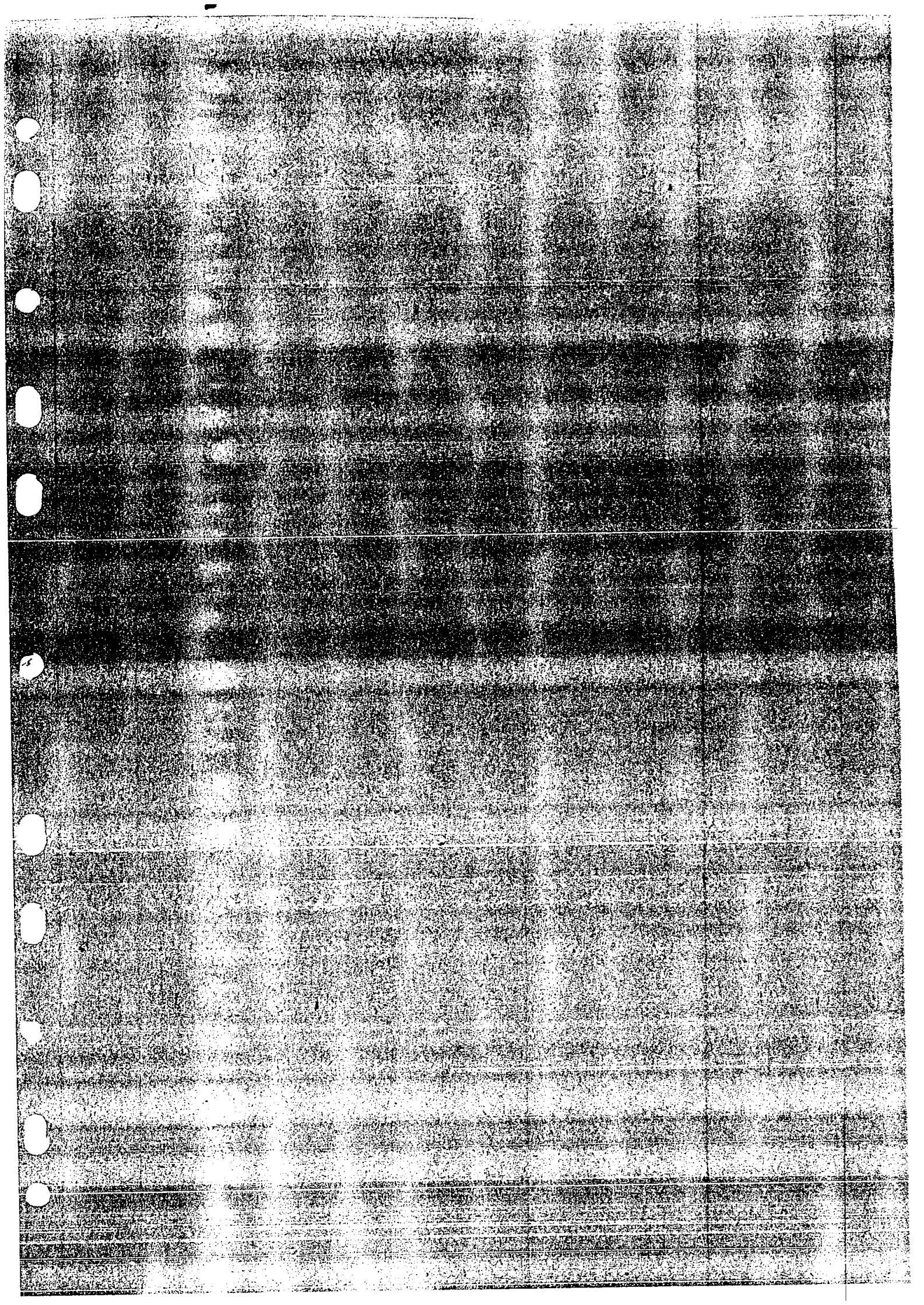
Schedule III (Regulation 3(4)(a)(D) (7)

With reference to the requirement as per clause, it is to be informed that

US Apparel and Textiles Pvt Limited (USA&TPL) is an **Existing Facility** which is already in operation and is the Supplier for the sister concern Bulk Power Consumer (BPC). The present generation capacity of USA & TPL is enough for own and the BPC load demand on the as and when required basis (to cater both for prime and emergency requirement).



Managing Director



Schedule III (Regulation 3(4)(a)(D)		
8	Training and development procedures and manuals	

Tanning/Instruction Manual

Main Particulars

L27/38

Cycle	:	**4-stroke**
Configuration	:	**In-line**
Cyl. nos available	:	**5-6-7-8-9**
Power range	:	**1500-2970 kW (HFO/MDO)**
Speed	:	**720/750 rpm**
Bore	:	**270 mm**
Stroke	:	**380 mm**
Stroke/bore ratio	:	**1.4:1**
Piston area per cyl.	:	**572.6 cm²**
Swept volume per cyl.	:	**21.8 ltr.**
Compression ratio	:	**15.9:1**
Turbocharging principle	:	**Constant pressure system and intercooling**
Fuel quality acceptance	:	**HFO (up to 700 cSt/50° C, RMK700) MDO (DMB) - MGO (DMA, DMZ) according ISO8217-2010**

Power lay-out		MCR version	
Speed	rpm	720	750
Mean piston speed	m/sec.	9.1	9.5
Mean effective pressure:			
5 cylinder engine (HFO/MDO)	bar	23.0	23.5
6, 7, 8, 9 cylinder engine (HFO/MDO)	bar	25.3	24.3
Max. combustion pressure:			
5 cylinder engine (HFO/MDO)	bar	190	190
6, 7, 8, 9 cylinder engine (HFO/MDO)	bar	200	200
Power per cylinder:			
5 cylinder engine (HFO/MDO)	kW/cyl.	300	320
6, 7, 8, 9 cylinder engine (HFO/MDO)	kW/cyl.	330	330

General

Proper maintenance, which is the aim of this book, is a crucial aspect of achieving optimum safety in the engine room. The general measures mentioned here should, therefore, be a natural routine for the entire engine room staff.

Cleanliness

The engine room should be kept clean above and below the floor plates. If grit or sand blows into the engine room while the ship is in port, the ventilation should be stopped and ventilating ducts, skylights, and doors in the engine room should be closed.

In particular, welding or work which causes the spreading of grit and chips must be avoided near the engine, unless this is closed or covered, and the turbocharger air intake filters are covered.

The exterior of the engine should be kept clean and the paintwork maintained, so that leakages can easily be detected.

Fire

If the crankcase is opened before the engine is cold, welding and the use of naked light will involve the risk of explosions and fire. The same applies to inspection of oil tanks and the space below the cooler. Attention should furthermore be paid to the danger of fire when using paint and solvents with a low flash point. Porous insulating material drenched with oil from leakages is easily inflammable and should be renewed. See also: "Ignition in Crankcase" in section 503.

Order

Hand tools should be placed to be easily accessible on tool boards. Special tools should be fastened to tool panels (if supplied) in the engine room close to the area of use. No major objects may be left unfastened, and the floor and passages should be kept clear.

Spares

Large spare parts should, as far as possible, be placed well strapped near the area of use and should be accessible by crane. The spare parts should be wellpreserved against corrosion and protected against mechanical damage. Stock should be checked at intervals and replenished in time.

Light

Ample working light should be permanently installed at appropriate places in the engine room, and portable working light in explosion-proof fittings should be available everywhere.

Freezing

If there is a risk of damage due to freezing when the plant is out of service, engines, pumps, coolers and pipe systems should be emptied of cooling water.

Warning

Opening of cocks may cause discharge of hot liquids or gases. Dismantling of parts may cause springs to be released.

The removal of fuel valves (or other valves in the cylinder head) may cause oil to run down to the piston crown, and if the piston is hot an explosion may then blow out the valve.

When testing fuel valves with the hand pump do not touch the spray holes, as the jet may pierce the skin. Consider beforehand which way the liquids, gases or flames will move, and keep clear.

Crankcase Work

Check beforehand that the starting air supply to the engine is shut off.

Feeling Over

Whenever repairs or alterations have been made to the running gear, apply the "feel-over sequence" until it is ensured that there is no undue heating, oil-mist formation, blow-by, or failure of cooling water or lubricating oil systems.

Feel-over Sequence

Feel over after 5-15 and 30 minutes' idle running and finally when the engine is running at full load. See also "Operation" in the section 501.

Safety Precautions

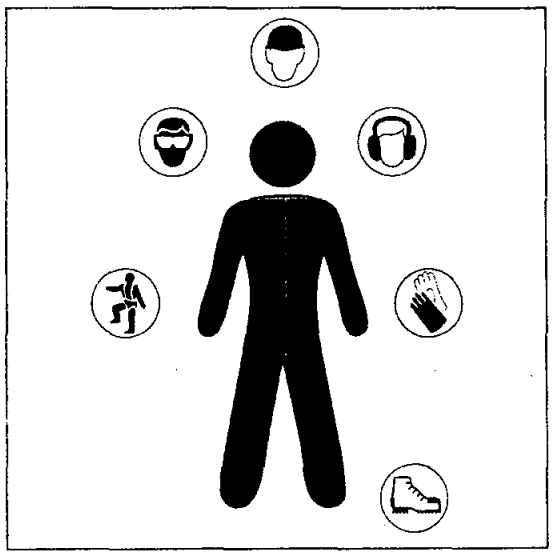
L16/24, L23/30H, V28/32S, L21/31, L27/38, L28/32DF, V28/32DF, L18/28, L23/30DF

General

Correct operation and maintenance, which is the aim of this book, are crucial points for obtaining optimum safety in the engine room. The general measures mentioned here should therefore be routine practice for the entire engine crew.

Engine room staff

Operation & Maintenance of MAN Engines is to be carried out by qualified professional personal.



Minimum safety equipment requirements:

1. Safety shoes
2. Hearing protection
3. Boiler suit ore other protective wear

Signs / Nameplates

Signs and nameplates mounted on the engine are not to be removed, painted over, or in any other way be made unreadable. This includes safety signs, signs with serial numbers, signs with instructions, etc.

Special dangers

Warning!
Keep clear of the space below a crane with load.
Opening of cocks may cause discharge of hot liquids or gases.
Observe which way liquids, gases or flames will move, and keep clear.
Dismantling of parts may cause the release of springs.
Do not stand near turbochargers in case of any abnormal running.
Do not stand near crankcase doors or relief valves - nor in corridors near doors to the engine room casing - when alarms for oil mist, high lube oil temperature.

Turning gear

Before engaging the turning gear, ensure that the starting air supply is shut off, the main starting - and that the indicator cocks are open.

When the turning gear is engaged, check that the indicator lamp "Turning gear engaged" has switched on.

The turning gear remote control is a critical devise and should always be kept in optimal working condition. Any fault in the devise or cable must be rectified before use.

When operation the turning gear it is important to note the following:

The turning gear to be operated by the remote control and only by the person working on engine.

Warnings must be given before each turning.

Cleanliness

The engine and engine room should be kept clean and tidy.

Oily rags must never be left around the engine room spaces as they are highly flamable and slippery.

Remove any oil spil at once.

If there is a risk of grit or sand blowing into the engine room, stop the ventilation and close the ventilating ducts, skylights and engine room doors.

L16/24, L23/30H, V28/32S, L21/31, L27/38, L28/32DF, V28/32DF, L18/28, L23/30DF

Welding, or other work which causes spreading of grit and/or swarf, must not be carried out near the engine unless it is closed or protected, and the turbocharger air intake filters covered.

The exterior of the engine should be kept clean, and the paintwork maintained, so that leakages can be easily detected.

Fire

Warning!
Keep the areas around the relief valves free of oil, grease, etc. to prevent the risk of fire caused by the emitted hot air/gas in the event that the relief valves open.

Do not weld or use naked lights in the engine room, until it has been ascertained that no explosive gases, vapour or liquids are present.

If the crankcase is opened before the engine has cooled down, welding and the use of naked flames will involve the risk of explosions and fire. The same applies to inspection of oil tanks and of the spaces below the floor.

Attention is furthermore drawn to the danger of fire when using paint and solvents having a low flash point. Porous insulating material, soaked with oil from leakages, is easily inflammable and should be renewed.

Order / Tidiness

Hand tools should be securely fastened and placed on easily accessible tool panels. Special tools should be fastened in the engine room, close to the area to be used.

No major objects must be left unfastened, and the floor and passages should be kept clear.

Spares

All spares should be protected against corrosion and mechanical damage. The stock should be checked at intervals and replenished in good time.

Lighting

Ample working light should be permanently installed at appropriate places in the engine room spaces, and portable working light should be obtainable everywhere. 24v safety lamps must be available for use inside the engine.

Harmful materials

Always follow the manufactures specific instructions, i.e. the material safety data sheet.

Use protective gloves, goggles, breathing mask and any other recommended protective gear, as stated in the material safety data sheet.

While handling harmful materials is it important to secure proper ventilation and shielding if needed.

In the event of leaks or spillage, spread binding agents immediately and disposal according to the material safety data sheet.

Lifting precautions

Lift of engine components needs to be planned through all steps of the lifting procedure.

When lifting loads below 500 kg the use of a tackle is required.

Lifting attachments are to be tightened into full contact with the component to be lifted.

Only use designated lifting points, see Instruction Manual for guidance.

Make sure the lowest Safe Working Load (SWL) of the lifting equipment in the lifting chain is never exceeded.

Keep lifting equipment clear of sharp edges.

Make sure to attach the load correctly on the crane hook.

Always keep clear of the space below a crane with load.

Working air

Use of working air requires safety goggles and gloves.

Avoid blowing pressurised air directly at skin.

Sealing materials

Use gloves made of neopren or PVC when removing O-rings and other rubber/plastic-based sealing materials which have been subjected to abnormally high temperatures.

First aid measures: In the event of skin contact - rinse with plenty of water - remove all contaminated clothing - consult a doctor - dispose of all material and gloves in accordance with laws and regulations.

L16/24, L23/30H, V28/32S, L21/31, L27/38, L28/32DF, V28/32DF, L18/28, L23/30DF

Hot surfaces

Beware of hot surfaces and use gloves.

Alarms

It is important that all alarms lead to prompt investigation and remedy of the error. No alarm is insignificant. The most serious alarms are equipped with slow-down and/or shut-down functions. It is therefore important that all engine operation personel are familiar with and well trained in the use and importance of the alarm system.

Safety notes

Danger!
This warning is used when an operation, procedure, or use may cause personal injury or loss of life.

Warning!
This warning is used when an operation, procedure, or use may cause a latently dangerous state of personal injury or loss of life.

Caution!
This warning is used when an operation, procedure, or use may cause damage to or destruction of equipment and a slight or serious injury.

Note!
This warning is used when an operation, procedure or use may cause damage to or destruction of equipment.

Subsuppliers and external equipment

Please check the special instructions concerning subsupplier delivery and external equipment for specific warnings!

Special notes

Health Risk!

Warning!
Health Risk! Due to vibrations during engine operation, especially in awkward positions!

The area around the engine

Warning!
The area around the engine must be clean and tidy!

Tool

Warning!
Use original tool!

Tool and wire

Warning!
Use original tool! Use original wire for lifting!

Safety precautions at maintenance

Before maintenance work is carried out, the engine must be stopped and blocked according to the safety precautions given on the specific data page, page 1 of each Working Card.

The necessary items to be stopped and / or blocked are marked as shown in below examples.

- ☒ Engine stopped
- ☒ Shut-off starting air
- ☐ Shut-off cooling water
- ☐ Shut-off fuel oil
- ☐ Shut-off cooling oil
- ☐ Stop lub. oil circulation
- ☐ Press Blocking - Reset

Figure 1: .

L16/24, L23/30H, V28/32S, L21/31, L27/38, L28/32DF, V28/32DF, L18/28, L23/30DF

- Select local control
- Stop lub. oil circulation
- Shut-off starting air
- Engine stopped
- Shut off cooling water
- Shut off fuel oil

Figure 2: .

Data sheet signs

Data sheets may include warning signs for special dangers that could arrise in connection with the maintenance procedures.

Warning signs		Mandatory action signs	
General warning sign		General mandatory action sign	
Explosive material		Wear ear protection	
Drop (fall)		Wear eye protection	
Slippery surface		Wear safety footwear	
Electricity		Wear protective gloves	
Overhead load		Wear face shield	
Hot surface		Wear head protection	
Crushing		Wear mask	
Overhead obstacle		Wear respitory protection	

L16/24, L23/30H, V28/32S, L21/31, L27/38, L28/32DF, V28/32DF, L18/28, L23/30DF

Warning signs		Mandatory action signs	
Flammable		Wear safety harness	
Crushing of hands		Disconnect before carrying out maintenance	
Pressurized cylinder			
Pressurized device			

Operation of Engine

L16/24 L27/38
V28/32S L21/31

Preparations for Starting

The following describes what to do before starting when the engine has been out of service for a period of time.

Lubricating Oil System

1) Check the oil level in the base frame with the dipstick.

2) Check the oil level in the governor, see Fig 2, with the level indicator on the governor.

3) Start up the prelubricating pump.

V28/32S

Note: *The engine must be prelubricated for at least 5 minutes prior to start-up*
or
check that there is oil coming out at bearings, pistons and rocker arms.

L16/24, L27/38, L21/31

Note: *The engine must be prelubricated for at least 30 minutes prior to start-up (at the first starting-up, or if the engine is cold, the engine must be prelubricated for at least 60 minutes)*
or
check that there is oil coming out at bearings, pistons and rocker arms.

4) Check prelubricating oil pressure at inlet to filter, inlet of the engine and inlet turbocharger on the monitoring box display according to the data and setpoints sheet.

Cooling Water System

5) Open the cooling water supply.

6) Check the cooling water pressure.

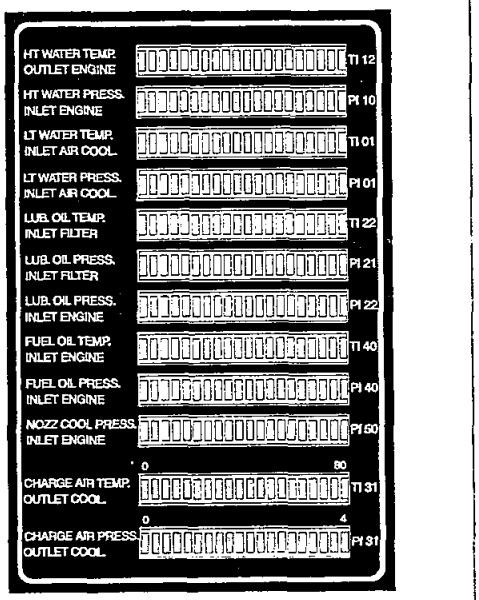


Fig 1 Monitoring of temperature/pressure (MTP).

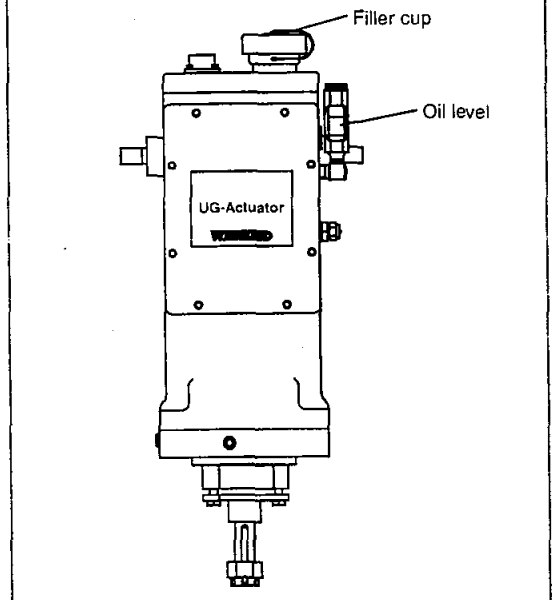


Fig 2 Governor.

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L16/24 L27/38 V28/32S L21/31

Note: To avoid shock effects owing to large temperature fluctuations just after start, it is recommended:

a) to preheat the engine. Cooling water at least 60°C should be circulated through the frame and cylinder head for at least 2 hours before start:

- by means of cooling water from engines which are running or by means of a preheater (if installed).

b) When starting without preheated cooling water, the engine may only be started on MDO (Marine Diesel Oil).

***Note:** When starting on HFO (Heavy Fuel Oil), only item a) applies.*

HFO System

7) Open the fuel oil supply.

Starting on HFO: circulate preheated fuel through the pumps until correct working temperatures have been achieved. This normally takes 30-60 minutes.

8) Regulating gear - please check:

- that all fuel injection pumps are set at index "0" when the regulating shaft is in STOP position.

- that each fuel injection pump can be pressed by hand to full index when the regulating shaft are in STOP position, and that the pumps return automatically to the "0" index when the hand is removed.

Starting Air System

9) Check the pressure in the starting air receiver(s).

10) Drain the starting air system.

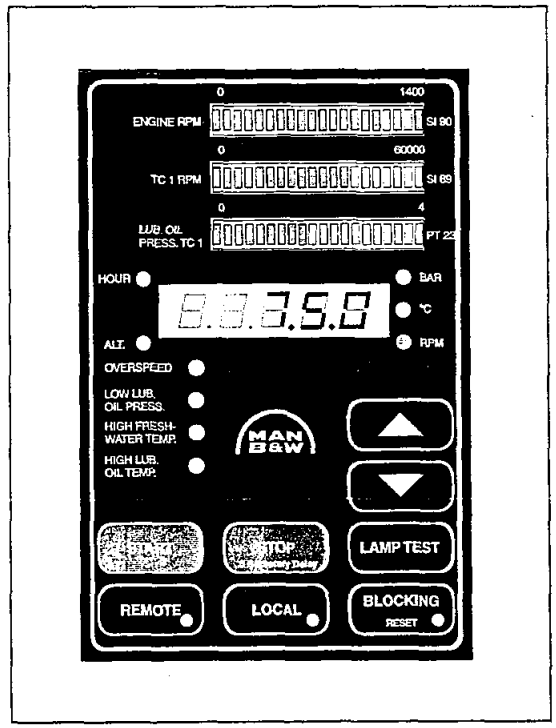

Fig 3 Operation box (OB).

11) Open the starting air supply.

12) Check the air pressure on the operating box according to the data and setpoints sheet.

Turning of Engine

13) Open the indicator valves and turn the engine some few revolutions, check that no liquid is flowing out from any indicator valves during the turning.

14) Slow turning must always be carried out, before the engine is started after prolonged out of-service-periods and after overhauls, which may involve a risk of liquid having collected in the cylinders.

15) Close the indicator valves.

08028-0D/H5250/94.08.12

Starting

16) Start the engine by activating the start button on the operation box; push the button until the engine ignites, see Fig.3.

Note: *If the engine have been without prelubrication for more than 20 min. it will not be possible to start the engine (either remote or local). The only possibility in this case is to activate the emergency start, located directly on the starter.*

Testing during Running

See Description 509.05 before operating the control panel.

Check the following on the monitoring box according to the data and setpoints sheet.

17) Check the lubricating oil pressure.

18) Check the cooling water pressure.

19) Check the fuel oil feed pressure.

20) Check that the turbocharger is running.

21) Check that the prelubricating oil pump stops automatically.

22) Check that all cylinders are firing, see exhaust gas temperatures.

Note: Check the stop cylinder (Lambda controller) for regulating the shaft works properly, both when stopping normally and at overspeed and shut down.

Check that all shutdowns are connected and function satisfactory.

23) Test the overspeed, see Working Card 509-01.05.

24) Check that all alarms are connected.

Operation

The engine should not be run up to more than 50% load to begin with, and the increase to 100% should take place gradually over 5 to 10 minutes.

Note: *When the engine is running the planned maintenance programme and the following should be checked:*

25) The lubricating oil pressure must be within the stated limits and may not fall below the stated minimum pressure. The paper filter cartridges must be replaced before the pressure drop across the filter reaches the stated maximum value, or the pressure after the filter has fallen below the stated minimum value. Dirty filter cartridges cannot be cleaned for re-use.

26) The lubricating oil temperature must be kept within the stated limits indicated on the data and setpoints sheet.

27) The fuel oil pressure must be kept at the stated value.

28) The cylinder cooling water temperature must be kept within the limits indicated on the data and setpoints sheet.

29) The exhaust gases should be free of visible smoke at all loads. For normal exhaust temperatures, see the test report from shop and sea trials.

30) Keep the charging air pressure and temperature under control. For normal values, see the test report from shop and sea trials.

31) Recharge the starting air receivers to the described value.

32) To ensure full operational reliability, the condition of the engine should be continuously observed so that order for preventive maintenance work can be carried out before serious breakdowns occur, *see also section 502.*

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L16/24 L27/38
V28/32S L21/31

Stopping

33) Before stopping, it is recommended to run the engine at reduced load, max. 2 min.

34) The engine is stopped by activating the stop button on the operating box. *Please note that the push button must be activated at least 3 sec. before stop will be activated.*

Starting and Stopping on HFO

Starting and stopping of the engine should take place on HFO in order to prevent any incompatibility problems on changeover to MDO.

MDO should only be used in connection with maintenance work on the engine or before a longer period of engine standstill.

Before starting on HFO the engine must be properly preheated as described in "Preparations for Starting" and as described below.

Stopping the engine on HFO is no problem, but it should be ensured that the temperature of fuel pipes is not reduced to a level below the pour point of the fuel. Otherwise reestablishing the circulation might cause problems.

Starting on MDO

For starting on MDO there are no restrictions except that lubricating oil viscosity may not be higher than 1500 cSt (10°C SAE 40).

Initial ignition may be difficult if the engine and ambient temperatures are lower than 5°C and 15°C cooling water temperature.

08028-0D/H5250/94.08.12

Preparations for Starting

The following describes what to do before starting when the engine has been out of service for a period of time.

Lubricating Oil System

1) Check the oil level in the base frame with the dipstick.

2) Check the oil level in the governor, see Fig 2, with the level indicator on the governor.

3) Start up the prelubricating pump.

V28/32S

Note: *The engine must be prelubricated for at least 5 minutes prior to start-up*
or
check that there is oil coming out at bearings, pistons and rocker arms.

L16/24, L27/38, L21/31

Note: *It is recommended that the engine is prelubricated for at least 30 minutes prior to start-up (at the first starting-up, or if the engine is cold, the engine must be prelubricated for at least 60 minutes)*
or
check that there is oil coming out at bearings, pistons and rocker arms.

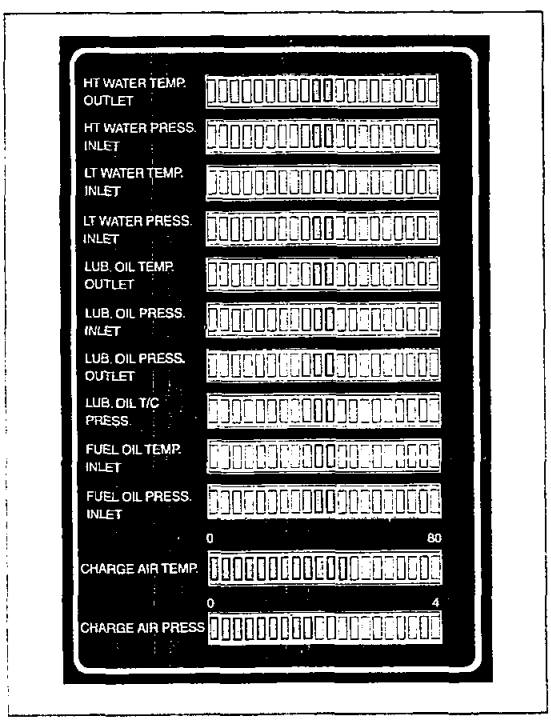


Fig 1 Monitoring of temperature/pressure (MTP).

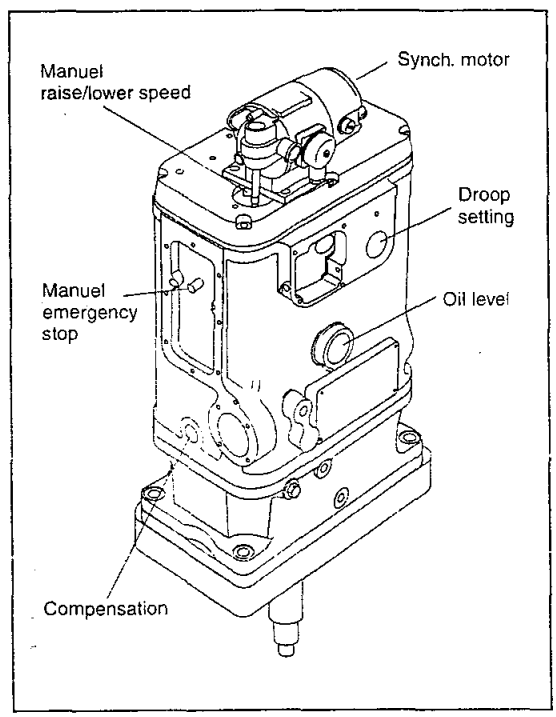


Fig 2 Governor.

4) Check prelubricating oil pressure at inlet to filter, inlet of the engine and inlet turbocharger on the monitoring box display according to the data and setpoints sheet.

Cooling Water System

5) Open the cooling water supply.

6) Check the cooling water pressure.

Note: To avoid shock effects owing to large temperature fluctuations just after start, it is recommended:

a) to preheat the engine. Cooling water at least 60°C should be circulated through the frame and cylinder head for at least 2 hours before start:

- by means of cooling water from engines which are running or by means of a preheater (if installed).

b) When starting without preheated cooling water, the engine may only be started on MDO (Marine Diesel Oil).

Note: *When starting on HFO (Heavy Fuel Oil), only item a) applies.*

HFO System

7) Open the fuel oil supply.

Starting on HFO: circulate preheated fuel through the pumps until correct working temperatures have been achieved. This normally takes 30-60 minutes.

8) Regulating gear - please check:

- that all fuel injection pumps are set at index "0" when the regulating shaft is in STOP position.

- that each fuel injection pump can be pressed by hand to full index when the regulating shaft are in STOP position, and that the pumps return automatically to the "0" index when the hand is removed.

Fig 3 Operation box (OB).

Starting Air System

9) Check the pressure in the starting air receiver(s).

10) Drain the starting air system.

11) Open the starting air supply.

12) Check the air pressure on the operating box according to the data and setpoints sheet.

Turning of Engine *(not valid for L16/24 engine)*

13) Open the indicator valves and turn the engine some few revolutions, check that no liquid is flowing out from any indicator valves during the turning.

14) Slow turning must always be carried out. before the engine is started after prolonged out of-service-periods and after overhauls, which may involve a risk of liquid having collected in the cylinders.

15) Close the indicator valves.

Starting

The engine may be started according to the following procedure:

A: Normal start without preheated cooling water. Only on MDO.

B: Normal start with preheated cooling water. MDO or HFO.

C: Stand-by engine. Emergency start, with preheated cooling water, intermediate prelubricating or continuos prelubricating. MDO or HFO.

Starting and Stopping on HFO

Starting and stopping of the engine should take place on HFO in order to prevent any incompatibility problems on changeover to MDO.

MDO should only be used in connection with maintenance work on the engine or before a longer period of engine standstill.

Before starting on HFO the engine must be properly preheated as described in "Preparations for Starting" and as described below.

Stopping the engine on HFO is no problem, but it should be ensured that the temperature of fuel pipes is not reduced to a level below the pour point of the fuel. Otherwise reestablishing the circulation might cause problems.

Starting on MDO

For starting on MDO there are no restrictions except that lubricating oil viscosity may not be higher than 1500 cSt (10°C SAE 40).

Initial ignition may be difficult if the engine and ambient temperatures are lower than 5°C and 15°C cooling water temperature.

Normal Starting procedure

16) Start the engine by activating the start button on the operation box; push the button until the engine ignites, see Fig 3.

Note: *If the engine have been without prelubrication for more than 20 min. it will not be possible to start the engine (either remote or local). The only possibility in this case is to activate the emergency start, located directly on the starter.*

Cold Start procedure

17) Set back the syncronizers (screw counter clockwise against the stop).

18) Adjust the speed drop according to the test diagram.

19) Start the engine either by local start or emergency start button on air starter. **Run for 5 minutes.**

Turn the speed knob if applied at governor to minimum and hold a adjustable spanner at linkage between fuel rack and governor in order to have total control over the speed.

When the engine ignites on all cylinders, turn back the load limit knob if applied (counter clockwise), but not more than the engine can just keep running.

At first start up the engine speed must not exceed 50 % of nominal speed.

20) Check pressure difference on lubricating oil manometers before and after filter. The differencial pressure must be shortly above 1,5 bar with cold engine and it is acceptable if it is below after 10 minutes.

21) Check that all cylinder ignites.

22) Check the lubrication at the rocker arms and check all fuel oil pipes for leakages.

23) During the 15 minutes the speed will slowly be increased to nominal speed, if no abnormal noise or leakages.

24) Check that pressure difference on lubrication oil manometers before and after filer is ok. Ascertain the running is normal.

Testing during Running

See Description 509.05 before operating the control panel.

Check the following on the monitoring box according to the data and setpoints sheet.

25) Check the lubricating oil pressure.

26) Check the cooling water pressure.

27) Check the fuel oil feed pressure.

28) Check that the turbocharger is running.

29) Check that the prelubricating oil pump stops automatically.

30) Check that all cylinders are firing, see exhaust gas temperatures.

Note: Check the stop cylinder (Lambda controller) for regulating the shaft works properly, both when stopping normally and at overspeed and shut down.

Check that all shutdowns are connected and function satisfactory.

31) Test the overspeed, see Working Card 509-01.05.

32) Check that all alarms are connected.

Operation

The engine may be loaded according to the following procedure:

A: Normal start without preheated cooling water. Only on MDO.

B: Normal start with preheated cooling water. MDO or HFO.

C: Stand-by engine. Emergency start, with preheated cooling water, intermediate prelubricating or continuos prelubricating. MDO or HFO.

See loading chart fig 4 on next page.

***Note:** When the engine is running the planned maintenance programme and the following should be checked:*

33) The lubricating oil pressure must be within the stated limits and may not fall below the stated minimum pressure. The paper filter cartridges must be replaced before the pressure drop across the filter reaches the stated maximum value, or the pressure after the filter has fallen below the stated minimum value. Dirty filter cartridges cannot be cleaned for re-use.

34) The lubricating oil temperature must be kept within the stated limits indicated on the data and setpoints sheet.

35) The fuel oil pressure must be kept at the stated value.

36) The cylinder cooling water temperature must be kept within the limits indicated on the data and setpoints sheet.

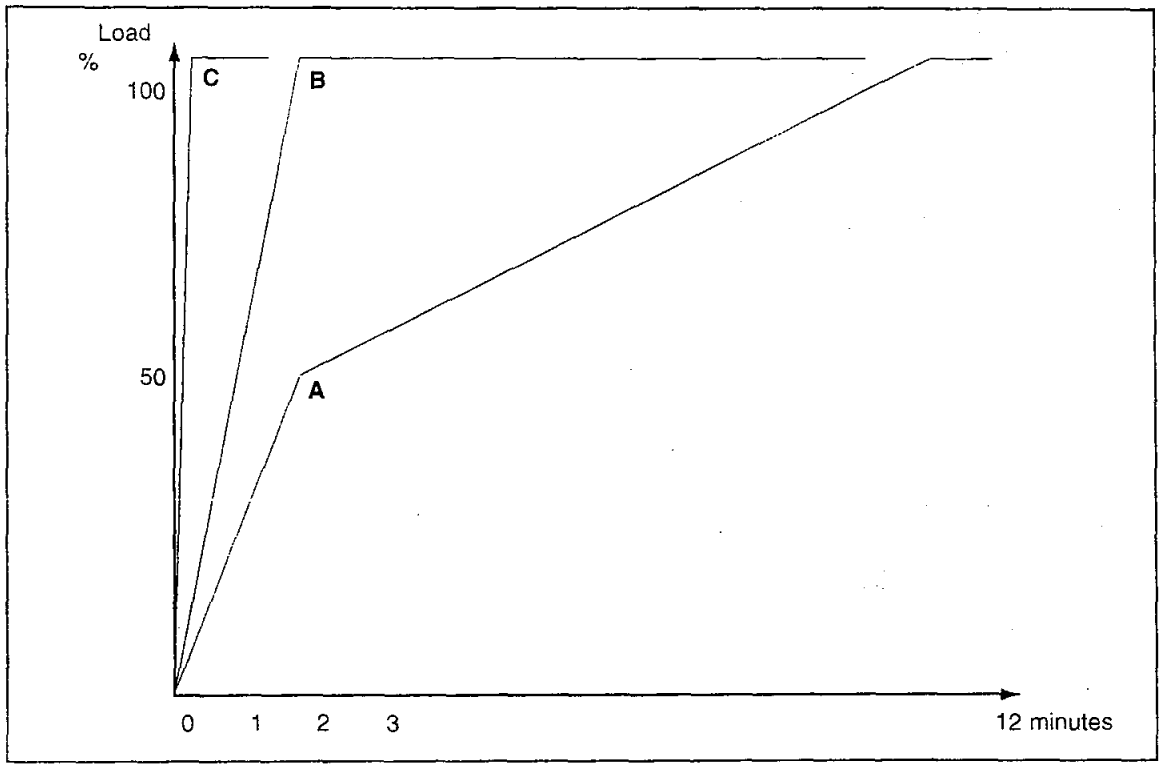


Fig 4 Loading chart

37) The exhaust gases should be free of visible smoke at all loads. For normal exhaust temperatures, see the test report from shop and sea trials.

38) Keep the charging air pressure and temperature under control. For normal values, see the test report from shop and sea trials.

39) Recharge the starting air receivers to the described value.

40) To ensure full operational reliability, the condition of the engine should be continuously observed so that order for preventive maintenance work can be carried out before serious breakdowns occur, *see also section 502.*

Stopping

41) Before stopping, it is recommended to run the engine at approx 5 min.

42) The engine is stopped by activating the stop button on the operating box. *Please note that the push button must be activated at least 3 sec. before stop will be activated.*

43) On the governor can be found a manuel emergency stop botton. This can be used in case of no pilot voltage supply.

Stand-by Mode

During engine standstill in stand-by position the media cooling water and fuel oil should be continuously circulated at temperatures similar to the operating conditions.

The prelubricating pump must always run in stand-by mode.

Maintenance during Standstill

In periods during standstill of the engine (not in stand-by position) it is recommended to start the prelubricating oil pump for minimum 20 minutes once every week and to turn the engine during the prelubricating period by 2-3 revolutions.

Laid-up Vessels

During the lay-up period we recommend that our special instructions for preservation of the engines are followed.

Work before Major Repairs

Follow all Working Cards carefully. Carry out all the measuring and inspection stated on these Working Cards.

1) After stopping the engine, while the oil is still warm, start the el-driven prelub. pump, open up the crankcase and camshaft housings and check that the oil is flowing freely from all bearings.

After overhaul of pistons, bearings, etc. this check should be repeated before starting the engine.

2) Open up all filters to check that filter elements are intact. Filter cartridges in the lub. oil filter are to be replaced before start, after repair, or after excessive differential pressure. After removal, dirty elements can be examined for particles of bearing metal at the bottom of the paper lamella (the elements cannot be used again).

3) A lubricating oil sample should be sent to a laboratory for immediate analysis.

4) The installed drain fasilities in the exhaust gas system must be open.

Work during Repairs

The following should be carried out during major repairs.

5) Retighten all bolts and nuts in the crankcase.

6) Check the various gearwheel drives for the camshafts.

7) Remedy leakages of water and oil in the engine, and blow through blocked-up drain pipes.

8) Drain starting air pipes of water.

9) Empty the oil sump of lubricating oil and check the bottom of the oil sump for fragments of babbitt from bearings. Remove the sludge, if not done within a period of one year. Clean the sump very thoroughly and subsequently coat with clean lubricating oil.

Work after Repairs

Cleaning of Lubricating Oil System

10) If opening-up the engine or lubricating oil system has caused the ingress of impurities, cleaning should be carried out very carefully before starting the engine.

The differential pressure across the lubricating oil filter must be watched very carefully after cleaning and starting-up the engine. Be sure to replace filter cartridges in due time.

11) After restoring normal prelubricating oil circulation, turn the engine at least two revolutions by means of the turning device to check the movability of the relevant parts of the engine.

12) Close drain cocks in the exhaust gas system if mounted.

03028-0D/H5250/04.08.12

Lubrication of Manoeuvering Gear

13) Lubricate the bearings and rod connections in the manoeuvering gear. Move the rod connections by hand to check that the friction in bearings and fuel injection pumps is sufficiently low.

14) Checks to be made just before starting the engine are described under 501.01.

Check of Governor

Note: At starting-up after an overhaul the overspeed shutdown **must** be testet at correct setpoint after the following has been done:

a) Start the engine and keep it at no load.

b) Turn the speed setting on governor until the overspeed is released. Check that it is released at correct rpm according to "Operation data & set points", 500.30 and working card 509-01.05.

Note: If both overspeed shutdown (SSH 81) are activated, nuts and bolts have to be retightened before the engine is started, (Nuts and bolts according to the colomn "Check new/overhauled parts after - hours" in the planned maintenance program).

15) Check the governor as follows: start up the engine and run it at the synchronous number of revolutions.

a) Speed-setting: before switching-in the alternator on the switchboard please check that the servomotor adjusts the rpm with a suitable quickness after actualion of the synchronizer knob on the switchboard. The range from - 5% to + 5% from the synchronous rpm should be tested.

b) Adjustment speed: switch in the alternator on the switchboard and set the load to about 40%. On reaching normal oil temperatures in governor and engine increase the load instantly to about 80% (by starting a major pump or compressor). This must not cause the frequency to fall by more than some 8%, and the engine must return to a constant no. rpm after about 3 seconds (although this rpm will be a little lower than before owing to the speed drop of the governor). If the engine is operated in parallel with other engines, an even sharing of the load must be established within about 3 seconds. If the governor reacts too slowly, compensating adjustment is effected as indicated in the governor's instruction manual (Compensating Adjustment).

Note: It is a condition for this test that the engine and turbocharger are in perfect operating condition, so that possible sources of error can be eliminated immediately.

c) Hunting: run the engine at synchronous rpm, and without load. Provided that the governor oil is warm, the regulating lever must not perform any major periodical movements, and neither must there be any variation in the engine speed. If that is the case, repeat the compensating adjustment according to the governor's instruction manual.

d) Speed drop: in case of unsatisfactory load sharing between two or more engines this can be rectified by increasing the speed drop of the engine that is subject to the greatest load (or by reducing the setting of the other engines).

The setting should normally not be increased beyond the "max" value (stated below) on the scale, and satisfactory parallel operation can generally be obtained at settings "normal range" (stated below). Setting "Default" stated below can be used in most cases.

	Woodward	Europa
Max.	70	100
Normal range	45-60	70-90
Default	52	80

08028-0D/H5250/94.08.12

General

The following enumerated checks are to be made immediately after starting and during load increase.

Note: *In the following it is assumed that the engine has been out of service for some time due to repairs and that checks during out of service periods have been carried out as described in the previous chapter.*

When starting up after repair, the following checks must be made, in the order stated in addition to normal surveillance and recording.

To be Checked Immediately after Starting

1) Check that the turbocharger is running.

2) Check that the lubricating oil pressure is in order.

3) Check that all cylinders are firing (see exhaust temperatures).

4) Check that everyting is normal for the engine speed, fuel oil, cooling water and system oil.

5) Check by simulation of the overspeed shutdown device that the engine stops, see working card 509-01.05.

Note: The overspeed setting should be according to "Operation data & set points", 500.30.

To be Checked during Starting-up, but only if Required after Repairs or Alterations

6) If the condition of the machinery is not well-known, especially after repairs or alterations, the "feel-over sequence" should always be followed, i.e.:

After 5-15 and 30 minutes' idle running, open the crankcase and the camshaft housing and perform feel-over on the surfaces of all moving parts where friction may arise and cause undue heating.

Feel: main bearings, big-end bearings, alternator bearings, and camshaft bearings, cylinder liners, roller guides and gear wheels.

After the last feel-over, repeat check 1) on page 501.05, see also "**Ignition in Crankcase**" on page 503.04 in section 503.

After repair or renewal of cylinder liners, piston rings or bearings, allowance must be made for a running-in period, i.e. the engine load should be increased gradually as indicated in the tables below. The engine output is determined on the basis of the fuel index and the load on the electric switchboard. The turbocharger speed gives some indication of the engine output, but is not directly proportional to the output throughout the service period.

Begin the starting-up sequence at a reduced engine speed, e.g. 400 rpm, until it can be known for certain that there are no hot spots in the engine. Then increase the speed to the normal rpm and connect to the switchboard and put on load.

The load increase during the starting-up sequence may, for instance, be:

25 % load for 2 hours
50 % load for 2 hours
75 % load for 2 hours
100 % load may be put on

For loads: see the fuel pump index on the testbed figures in section 502.

After completing the starting-up sequence, make sure that all fuel injection pumps are set at the same index and that the governor can cause all fuel pumps to move to "0" index.

Operating Data & Set Points

L27/38

	Normal Value at Full load		Acceptable value at shop test or after repair	Alarm Set point		Autostop of engine	
Lubricating Oil System							
Temp. after cooler (inlet filter) SAE 40	TI 21	68-73° C	<73° C	TAH 21	80° C		
Pressure after filter(inlet engine)	PI 22	4.2-5.0 bar	>4.5 bar	PAL 22	3.5 bar	PSL 22 (PSL 22) (D)	3.0 bar (2.5 bar)
Pressure drop across filter	PDAH 21-22	0.1-1 bar	<0.5 bar	PDAH 21-22	1.5 bar		
Prelubricating pressure	(PI 22)	0.14-1.4 bar	<1.0 bar	PAL 25	0.12 bar (H)		
Pressure inlet turbocharger	PI 23	1.5 ± 0.2 bar (C)	>1.5 bar	PAL 23	0.9 bar		
Lub. oil level in base frame				LAL 28/ LAH 28	low/high level		
Pressure before filter	PI 21	4.5-5.5 bar					
Temp. main bearing	TI 29	80-95° C		TAH 29	100	TSH 29	105
Fuel Oil System							
Pressure after filter MDO	PI 40	3-6 bar		PAL 40	2 bar		
HFO	PI 40	5-16 bar (A)		PAL 40	4-6 bar (E)		
Leaking oil				LAH 42	High leakage level		
Temperature inlet engine MDO	TI 40	30-40°C					
HFO	TI 40	110-140°C					
Cooling Water System							
Press. LT system, inlet engine	PI 01	2.5-4.5 bar	>1.8 bar	PAL 01	0.4 + (B) bar		
Press. HT system, inlet engine	PI 10	2.0-4.0 bar	>1.8-<6 bar	PAL 10	0.4 + (B) bar		
Temp. HT system, outlet engine	TI 12	75-85°C	<85° C	TAH 12 TAH 12-2	90° C 93° C	TSH 12 (TSH 12) (D)	95° C (100° C)
Temp. LT system, inlet engine	TI 01	30-40°C					
Exhaust Gas and Charge Air							
Exh. gas temp. before TC	TI 62	480-530° C		TAH 62 TAH 62-2	570° C 620° C		
Exh. gas temp. outlet cyl.	TI 60	350-450° C		TAH 60	465° C		
Diff. between individual cyl.		average ± 30° C	average ±25° C	TAD 60	average ± 50° C		
Exh. gas temp. after TC 330 kW	TI 61	275-400° C		TAH 61	450° C		
300-320 kW	TI 61	275-375° C		TAH 61	450° C		
Ch. air press. after cooler	PI 31	2.8-3.1 bar					
Ch. air temp. after cooler	TI 31	40-55° C	<55° C				
Compressed Air System							
Press. inlet engine	PI 70	8- 10 bar	>7.5-<10 bar	PAL 70	7.5 bar		
Speed Control System							
Engine speed elec.	SI 90	750 rpm		SAH 81	862 rpm	SSH 81 (SSH 81) (D)	850 rpm (862 rpm)
	SI 90	720 rpm		SAH 81	828 rpm	SSH 81 (SSH 81) (D)	815 rpm (828 rpm)

980123-0D/H5250/94.08.12

L27/38

	Normal Value at Full load		Acceptable value at shop test or after repair	Alarm Set point		Autostop of engine	
Turbocharger speed	SI 89	41000-54000 rpm		SAH 89	(J)		
Alternator							
Winding temperature	TI 98	100° C		TAH 98	130° C		
Bearing temperature	TI 27	40-60° C		TAH 27	85° C		
Miscellaneous							
Jet system failure				SX32	switch		
Monitoring system failure		24 VDC ± 15%		UX 95-1	switch		
Safety system failure		24 VDC ± 15%		UX 95-2	switch		
Turning engaged				ZS75	Engaged (F)		
Local indication				ZS 96	switch		
Remote indication				ZS 97	switch		
Common shutdown				SS 86	switch (F)		
Monitoring sensor cable failure				SX 86-1	switch		
Safety sensor cable failure				SX 86-2	switch		
Start failure				SX 83	switch (G)		
Stop signal				SS 84	switch (F)		
Stop failure	SI 90			SX 84	switch		
Engine run		720/750 rpm		SS 90	710 rpm (I)		
Ready to start				SS 87	switch		

Remarks to Individual Parameters

A. Fuel Oil Pressure, HFO-operation.

When operating on HFO, the system pressure must be sufficient to depress any tendency to gasification of the hot fuel.

The system pressure has to be adjusted according to the fuel oil preheating temperature.

B. Cooling Water Pressure, Alarm Set Points.

As the system pressure in case of pump failure will depend on the height of the expansion tank above the engine, the alarm set point has to be adjusted to 0.4 bar plus the static pressure. The static pressure set point can be adjusted on the base module SW3.

C. Lub. Oil Pressure, Offset Adjustment.

The read outs of lub. oil pressure has an offset adjustment because of the transmitter placement. This has to be taken into account in case of test and calibration of the transmitter.

D. Software Created Signal.

Software created signal from PI 22, TI 12, SI 90.

08028-0D/H5250/94.08.12

E. Set Points depending on Fuel Temperature.

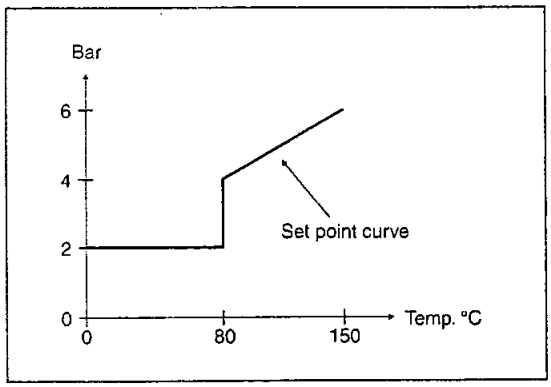


Fig 1 Set point curve.

F. Start Interlock.

The following signals are used for start interlock/ blocking:

1) Turning must not be engaged
2) Engine must not be running
3) "Remote" must be activated
4) No shutdowns must be activated.
5) The prelub. oil pressure must be OK, 20 min. after stop.
6) "Stop" signal must not be activated

G. Start Failure.

If remote start is activated and the engine is in blocking or local mode or turning is engaged the alarm time delay is 2 sec.
Start failure will be activated if revulutions are below 50 rpm within 5 sec. from start or revulutions are below 210 rpm 10 sec. from start.
Start failure alarm will automatically be released after 30 sec. of activation.

H. Alarm Hysterese.

On all alarm points (except prelub. oil pressure) a hysterese of 0.5% of full scale are present. On prelub. oil pressure alarm the hysterese is 0.2%.

I. Engine Run Signal.

The engine run signal is activated when engine rpm >710 or lube oil pressure >3.0 bar or TC rpm >5000 rpm.
If engine rpm is above 210 rpm but below 710 rpm within 30 sec. the engine run signal will be activated.

J. Limits for Turbocharger Overspeed Alarm (SAH 89)

Engine type	720 rpm	750 rpm
5L27/38	44,700	44,700
6L27/38	44,700	37,300
7L27/38	37,300	37,300
8L27/38	37,300	37,300
9L27/38	31,300	31,300

08028-01/M15250-94.08.12

Engine Performance & Condition

Performance data and engine condition

During operation small changes in the engine condition take place continuously as a result of combustion, including fouling of airways and gasways, formation of deposits, wear, corrosion, etc. If continuously recorded, these changes in the condition can give valuable information about the operational and maintenance condition of the engine. Continuous observation can contribute to forming a precise and valuable basis for evaluation of the optimum operation and maintenance programmes for the individual plant.

Engine performance data

If abnormal or incomprehensible deviations in operation are recorded, expert assistance in the evaluation thereof should be obtained.

We recommend taking weekly records of the most important performance data of the engine plant. During recording (*working card 502-01.00 can be used*) the observations are to be compared continuously in order to ascertain alterations at an early stage and before these exert any appreciable influence on the operation of the plant.

As a reference condition for the performance data, the testbed measurements of the engine or possibly the measurements taken during the sea trial on the delivery of the ship can be used. If considerable deviations from the normal conditions are observed, it will be possible, in a majority of cases, to diagnose the cause of such deviations by means of a total evaluation and a set of measurements, after which possible adjustment/overhauls can be decided on and planned.

Evaluation of performance data

Air cooler

Fouling of the air side of the air cooler will manifest itself as an increasing pressure drop, lower charge air pressure and an increased exhaust/charge air temperature level (with consequential influence on the overhaul intervals for the exhaust valves).

An increase in charge air temperature involves a corresponding increase in the exhaust gas temperature level by a ratio of about 1:1.5, i.e. 1°C higher charge air temperature causes about 1.5°C higher exhaust gas temperature.

Reduction of the charge air pressure results in a corresponding reduction of the compression pressure and max. combustion pressure.

When checking the max. pressure adjustment of the engine, it is therefore to be ensured that the existing charge air pressure is correct. Is not avaiable for L16/24.

Fuel injection pump

The amount of fuel injected is equivalent to the supplied energy and is thus an expression of the load and mean effective pressure of the engine. The fuel pump index can therefore be assumed to be proportional to the mean pressure. Consequently, it can be assumed that the connected values of the pump index are proportional to the load.

The specific fuel consumption, SFOC (measured by weight) will, on the whole, remain unchanged whether the engine is operating on HFO or on MDO, when considering the difference in calorimetric heat value. However, when operating on HFO, the combination of density and calorific value may result in a change of up to 6% in the volumetric consumption at a given load. This will result in a corresponding change in the fuel pump index, and attention should be paid to this when adjusting the overload preventive device of the engine.

To avoid overloading of the engine the charge air pressure and turbine speed recorded at the shop test should not be exceeded.

At the Power Control Synchronizing (PCS) panel in the engine control room it is possible to reduce the load by adjusting the setting for maximum MCR load limit.

Abrasive particles in the fuel oil result in wear of fuel injection pumps and fuel valve nozzles. Effective treatment of the fuel oil in the purifier can keep the content of abrasive particles to a minimum. Worn fuel injection pumps will result in an increase of the index on account of an increased loss in the pumps due to leakage.

When evaluating operational results, a distinction is to be made between changes which affect the whole engine (all cylinder units) and changes which occur in only one or a few cylinders.

Deviations occuring for a few cylinders are, as a rule, caused by malfunctioning of individual components, for example a fuel valve with a too low open-

ing pressure, blocked nozzle holes, wear or other defects, an inlet or exhaust valve with wrongly adjusted clearance, burned valve seat, etc.

Turbochargers

Fouling of the turbine side of the turbocharger will, in its first phase, manifest itself in increasing turbocharger revolutions on account of increased gas velocity through the narrowed nozzle ring area. In the long run, the charging air quantity will decrease on account of the greater flow resistance through the nozzle ring, resulting in higher wall temperatures in the combustion chambers.

Service experience has shown that the turbine side is exposed to increased fouling when operating on HFO.

The rate of fouling and thereby the influence on the operation of the engine is greatest for small turbochargers where the flow openings between the guide vanes of the nozzle ring are relatively small. Deposits occur especially on the guide vanes of the nozzle ring and on the rotor blades. In the long run, fouling will reduce the efficiency of the turbocharger and thereby also the quantity of air supplied for the combustion of the engine. A reduced quantity of air will result in higher wall temperatures in the combustion spaces of the engine.

Detailed information and instructions regarding water washing of the turbocharger are given in the instruction manual.

Fuel valves

Assuming that the fuel oil is purified effectively and that the engine is well-maintained, the operational conditions for the fuel valves and the overhaul intervals will not normally be altered essentially when operating on HFO.

If, for any reason, the surface temperature of the fuel valve nozzle is lower than the condensation temperature of sulphuric acid, sulphuric acid condensate can form and corrosion take place (cold corrosion). The formation of sulphuric acid also depends on the sulphur content in the fuel oil.

Normally, the fuel nozzle temperature will be higher than the approx. 180°C at which cold corrosion starts to occur.

Abrasive particles in the fuel oil involve heavier wear of the fuel valve needle, seat, and fuel nozzle holes. Therefore, abrasive particles are to the greatest possible extent to be removed at the purification.

Exhaust valves

The overhaul intervals for exhaust valves is one of the key parameters when the reliability of the entire engine is to be judged. The performance of the exhaust valves is therefore extremely informative.

Especially under unfavourable conditions, fuel qualities with a high vanadium and sodium content will promote burning of the valve seats. Combinations of vanadium and sodium oxides with a corrosive effect will be formed during combustion. This adhesive ash may, especially in the event of increased valve tem-peratures, form deposits on the seats. An increasing sodium content will reduce the melting point and thereby the adhesive temperature of the ash, which will involve a greater risk of deposits. This condition will be especially unfavourable when the na/va weight ratio increases beyond 1:3.

The exhaust valve temperature depends on the actual maintenance condition and the load of the engine. With correct maintenance, the valve temperature is kept at a satisfactory low level at all loads. The air supply to the engine (turbocharger/air cooler) and the maximum pressure adjustment are key parameters in this connection.

It is important for the functioning of the valves that the valve seats are overhauled correctly in accordance with our instructions.

The use of rotocaps ensures a uniform distribution of temperature on the valves.

Air inlet valves

The operational conditions of the air inlet valves are not altered substantially when using residual fuel.

Fuel injection pumps

Assuming effective purification of the fuel oil, the operation of the fuel injection pumps will not be very much affected.

The occurrence of increasing abrasive wear of plunger and barrel can be a consequence of insufficient purification of the fuel oil, especially if a fuel which contains residues from catalytic cracking is used. Water in the fuel oil increases the risk of cavi-

tation in connection with pressure impulses occurring at the fuel injection pump cut-off. A fuel with a high asphalt content has deteriorating lubricating properties and can, in extreme cases, result in sticking of the fuel injection pump plungers.

Engine room ventilation, exhaust system

Good ventilation of the engine room and suitable location of the fresh air intake on the deck are important. Sea water in the intake air might involve corrosive attack and influence the overhaul intervals for the exhaust valves.

The fresh air supply (ventilation) to the engine room should correspond to approximately 1.5 times the air consumption of the engines and possible boilers in operation. Under-pressure in the engine room will involve an increased exhaust temperature level.

The exhaust back-pressure measured after the turbochargers at full load must not exceed 300 mm water column. An increase in the exhaust back-pressure will also cause an increased exhaust valve temperature level, and increased fuel consumption.

Trouble Shooting

General

Trouble	Possible cause	Troubleshooting
Engine turns as soon as shut-off valve is opened, without start button being activated.	Faults in electrical system.	Check electrical parts.
Engine does not turn when start button is activated.	Air pressure in starting air receiver too low.	Start compressors, re-charge air receiver.
	Main valve(s) closed.	Open valve at receiver and stop valve interposed in line between receiver and engine.
	Pinion does not engage with the flywheel.	Check the air starter.
	Air motor runs, pinion engages but does not rotate.	Check the air motor for broken shafting, bearing or clutch jaws, see Working Card 513-01.30.
	Faults in electrical system.	Check electrical parts.
Engine turns too slowly or irregularly when start button is activated.	Worn air motor parts.	Remove and disassemble the air motor. Examine all parts and replace any that are worn or damaged. Use the guidelines for determining unserviceable parts, see Working Card 513-01.30.
	Start valve is sticking in closed position.	Check start valve.
	Low air pressure.	Raise the air receiver pressure.
Air starter works, but the drive shaft does not rotate.	Clutch or drive shaft broken.	Dismantle the air starter and repair it.

Trouble	Possible cause	Troubleshooting
Engine turns, but ignition fails. Fuel pumps are not actuated.	Sluggish movement of manoeuvering gear.	Lubricate and mobilize rod connections in manoeuvering gear.
	Incorrect adjustment of manoeuvering gear.	Check rod connec. Check that fuel pump index corresponds to "Adjustments after trials" in testbed chart.
	Safety system stop activated.	Reset safety system stop.
	Piston in Lambda controller is actuated.	Check that piston is not sticking. Check that pressure in cylinder is relieved. Check that the shutdown trip is not actuated.
	Piston in Lambda controller cylinder is actuated due to stop function or fuel limitation.	Check pressures and temperatures. Check for faults in shut-down devices: Check for faults in fuel limitation devices. Check adjustment according to Working Card 509-10.00.
	Incorrect adjustment of Lambda controller's adjustment screw.	Adjust setting of adjustment screw, see Working card 509-10.00.
	Governor setting incorrect.	Adjust governor, see special instruction manual.
	Failures in governor.	Check that governor is working properly. For further fault location, see special instruction manual in section 509.
	Sticking fuel pumps.	Dismantle and clean.
Engine turns, but no fuel is injected owing to failure in fuel system.	Fuel oil service tank empty.	Pump oil into the tank.
		If: Air in fuel pumps. Then: Loosen hexagon socket screw on fuel pumps until air disappears.
Engine runs, but does not ignite on all cylinders.	Air in fuel valves.	If: Ignition fails on one or more cylinders due to air in the fuel valves. Then: Vent the respective fuel valves.
		If: Ignition fails on one or more cylinders and no air bubbles appear. Then: Change the fuel valves and check them for sticking spindle or broken spring. Check for collecting oil on piston top.
		If: Air appears in the entire system. Then: Check stuffing box and sealing in the fuel system.

Cont.

L16/24 L27/38
V28/32S L21/31

Trouble	Possible cause	Troubleshooting
	Worn-out fuel pump.	Change fuel pumps. **If** / **Then** Pressure before pumps is too low. — Clean fuel filter. Check that by-pass valve for feed pump is not open. Pressure is still too low. — Increase the fuel oil feed pump pressure.
Engine turns, fuel is injected, but ignition fails.	Water in the fuel. Fuel valves or nozzles defective.	Drain off water and repeat venting of fuel pumps by loosening the hexagonal socket screw until air disappears. Change defective fuel valves, see working card 514-01.10. **If** / **Then** Compression during start too low. — Check intake and exhaust valve for tight closing. Check piston rings. Timing of fuel camshaft is incorrrect. — Check fuel camshaft adjustment, see Working card 507-01.20. Major alteration of the fuel demand adjustment of the fuel pump timing. — Adjust camshaft, see Working card 507-01.20. Oil has collected on piston crown. — Slow turning to remove oil. Locate and change defective fuel valve.
First ignitions are too violent. Engine runs erratically.	Sluggish movement of manoeuvering gear. Fuel pump index to high.	Lubricate and mobilize rod connections and bearings in manoeuvring gear. Check rod connection in manoeuvring gear. Check that governor is working properly.

L21/31
L27/38
V28/32S

Trouble	Possible cause	Troubleshooting
Exhaust gas temperatures increased on all cylinders.	Increased charging air temperature due to ineffective air coolers.	Clean air coolers, see working card 512-01.00.
	Fouling of air and gas passages.	Clean air and gas passages, see working cards in section 512.
	Insufficient cleaning of fuel oil or changed combustion characteristics.	Check separator and fuel filters.
	Wrong maximum combustion pressure /fuel injection timing	Check camshaft adjustment, see working card 507-01.20.
	Poor fuel quality.	Change fuel.
Exhaust gas temperature increased on one cylinder.	Fuel valve or valve nozzle defective.	Overhaul fuel valve, see working card 514-01.10.
	Leaky exhaust valves. **Note:** This manifests itself by a rise in the exhaust temperature and failing of the compression and maximum combustion pressure of the respective cylinder.	Check the valve clearance, see working card 514-01.10 or change the leaky valve and recondition the exhaust valve, see working card 505-01.05. **If** Stopping of the engine is not possible or convenient. **Then** The fuel pump of the cylinder concerned should be put out of operation by moving the index to stop and locking it in this position.
	Blow-by = leaky combustion chamber.	Check piston rings, see working card 506-01.35. Blow-by means a serious danger of piston seizure, and the engine must if possible be stopped and the piston in question pulled. Leaky piston rings will normally result in heavy excess pressure in the crankcase. **If** Stopping of the engine is not possible or convenient. **Then** The fuel pump of the cylinder concerned should be put out of operation by moving the index to stop and locking it in this position.
	Damaged fuel pump cam.	Replace camshaft section, working card 507-01.05.
Exhaust gas temperature decreases on all cylinders.	Decreased charging air temperature.	Check the thermostatic valve in the cooling water system, see working card 516-04.00.
Exhaust gas temperature decrease on one cylinder.	Spindle in fuel valve is sticking.	Change and overhaul defective fuel valve, see working card 514-10.00.
	Fuel pump plunger is sticking or leaking.	Change fuel pump plunger/barrel assembly, see working card 514-10.00.

Cont.

L21/31
L27/38
V28/32S

Trouble	Possible cause	Troubleshooting
Engine speed decreases.	Pressure before fuel pumps too low.	Raise fuel oil feed pump pressure to normal. or check filter, see working card 514-01.15.
	Fuel valve defective.	Change defective valve, see working card 514-01.10.
	Fuel injection pump defective.	Change or overhaul.
	Water in the fuel.	Drain off water from service and setting tanks. Check fuel oil centrifuge.
	Governor defective. Linkage adjustment wrong	See governor manual.
Engine stops.	Shut-down for overspeed.	Check fuel pumps, see working card 514-10.00. Check governor, see governor manual. Check movement of regulating mechanism.
	Shut-down for low lubricating oil pressure.	Check pressostat, see working card 509-05.00. Check lubricating oil filter, see working card 515-01.10. Check lubricating oil pump, see working card 515-01.00.
	Shut-down for high lubricating oil pressure.	Check lub. oil flow and pressure, see working card 515-01.20. Clean lubricating oil cooler, see working card 515-06.00.
	Shut-down for high HT cooling water temperature.	Check HT system and pumps.
Smoky exhaust.	Turbine speed lagging behind engine speed.	Clean turbine(s), see turbocharger manual
	Air supply too low.	Clean air cooler, see working card 512-01.00. Clean air filter, see working card 512-35.00. Clean compressor, see turbocharger manual Clean turbine, see turbocharger manual
	Fuel valves or nozzles defective.	Check fuel valves, see working card 514-01.10.
Exhaust valve knocking.	Adjusting screw for valve setting clearance loose. Push rod thrust disc damaged.	Inspect and replace defective parts, see working card 508-01.00.
Rising cooling water temperature.	Thermostatic function	Check thermostat.
	Pump defective	Stop the engine and repair the pump.
	Decreased flow	Check valves. **If** — **Then** The cooling water temperature for the entire engine has risen to **90-100°C.** — Open the test cocks (if fitted on the discharge from cylinders).

Cont.

L21/31
L27/38
V28/32S

Trouble	Possible cause	Troubleshooting
		Check whether steam has developed. Steam has developed. Stop the engine. Leave the engine to cool while the discharge valve is closed. After 15 minutes open the discharge valve a little to allow the water to rise slowly in the cooling jackets. Check filling at test cocks.
Lubricating oil pressure fails.	Lubricating oil pump defective. Filters fouled. Cooler fouled.	Check lubricating oil pump, see *working card* 515-01.00. *Clean filter, see working card 515-01.10.* *Clean cooler, see working card 515-06.00.* **If** The lubricating oil pressure drops below the minimum stated before in the Data sheet. **Then** Stop the engine: find the cause of the pressure drop and remedy the defect restarting the engine. **Note:** Feel over 5-15-30 minutes after starting, and again when full load is achieved. *See section 502.*
Alternator (GenSet only)	Short circuit	Flywheel must be dismounted and guide pin replaced

Planned Maintenance Programme

Major overhaul/inspection

Description ● = Overhaul to be carried out ■ = Check the condition	Check new/ overhauled parts after - hours	Time Between Overhauls: 50	200	2000	6000	12000	24000	Daily	Weekly	Monthly	3rd month	Observations	Working Card No
Cylinder Unit:													
Dismantling of cylinder unit						●							505-01.55
Dismantling of cylinder head, water jacket and cyl. liner.													
Cylinder Head and Water Jacket													
Inspection of inlet, exhaust valves and valve guide						●							505-01.05
Valve rotator						■							505-01.15
Safety valve - overhaul and adjustment of opening pressure						■							505-01.25
Indicator valve						■							505-01.26
Cylinder head cooling water space - Inspection						■							505-01.45
Cylinder head nut - Retightening	200												505-01.55
Piston, Connecting Rod and Cylinder Liner													
Inspection of piston						■							506-01.10
Piston ring, scraper ring and flame ring						●							506-01.10
Piston pin and bush for connecting rod - Check of clearance						■							506-01.15
Connecting rod - Measuring of big-end bore						■							506-01.15
Inspection of big-end bearing shells						■							506-01.16
Connecting rod - Retightening	200				■								506-01.25
Cylinder liner - Cleaning, honing and measuring						●							506-01.35
Camshaft and Camshaft Drive													
Camshaft - Inspection of gear wheels, bolt, connections etc.	200					■							507-01.00
Camshaft bearing - Inspection of clearance						■							507-01.05
Camshaft adjustment - check the condition						■							507-01.20
Lubrication of camshaft bearing - Check						■							507-01.00

L27/38

Major overhaul/inspection

Description (● = Overhaul to be carried out, ■ = Check the condition)	Check new/ overhauled parts after - hours	Time Between Overhauls: 50	200	2000	6000	12000	24000	Daily	Weekly	Monthly	3rd month	Observations	Working Card No
Operating Gear for Inlet Valves and Exhaust Valves													
Roller guide for valve gear						■							508-01.00
Valve gear - Valve bridge, spring, push rod, etc						■							508-01.10
Lubricating of operating gear - Check						■							508-01.00
Crankshaft and Main Bearing													
Inspection of main bearing							■						510-01.05
Inspection of guide bearing							■						510-01.05
Vibration viscodamper, see working card													510-04.00
Counterweight - Retightening, see page 500.40	200				■								
Main and guide bearing cap - Retightening	200				■								510-01.05
Engine Frame and Base Frame													
Bolts between engine frame and base frame - Retightening, see page 500.40	200				■								
Turbocharger System													
Charging air cooler - Cleaning and inspection												■	512-01.00
Retightening of all bolts and connections	200				■								
For turbocharger, see special instruction book													
Compressed Air System													
Air starter motor - Dismantling and inspection												■	513-01.30

L27/38

Major overhaul/inspection

Description ● = Overhaul to be carried out ■ = Check the condition	Check new/ overhauled parts after - hours	Time Between Overhauls: 50	200	2000	6000	12000	24000	Daily	Weekly	Monthly	3rd month	Observations	Working Card No
Fuel Oil System and Injection Equipment													
Fuel oil injection pump - Check of condition												●	514-01.06
Fuel injection valve - Adjustment of opening pressure				■									514-01.10
Lubricating Oil System													
Lubricating oil pump - Engine driven						■							515-01.00
Lubricating oil cooler												●	515-06.00
Prelubricating pump - El. driven						■							515-01.05
Thermostatic valve												■	515-01.20
Cooling Water System													
Cooling water pump - Engine driven (HT / LT water)						■							
Thermostatic valve												■	516-04.00
Alternator - see special instruction book in section 518													
Planned maintenance programme during operation, see 500.26.													

Duties during Operation

Description: ● = Overhaul to be carried out; ■ = Check the condition

Description	Check new/overhauled parts after - hours	50	200	2000	6000	12000	24000	Daily	Weekly	Monthly	3rd month	Observations	Working Card No
Operating of Engine													
Readings of data for Engine and Generator, with reference to "Engine Performance Data", section 502-1									■				502-01.00
Check for leakages		■											502-05.00
Specification - Cooling water													
Cooling water system - Water samples, see section 504									■				505-01.15
Cylinder Head													
Inlet and exhaust valve - check and adjustment of valve clearance				■									
Lubricating of operating gear - Check						■							
Check of valve rotators' rotation during engine rotation				■									505-01.15
Control and Safety System, Automatics and Instruments													
Safety, alarm and monitoring equipment											■		509-01.00
Lambda controller - Adjustment											■		509-10.00
Governor - Check oil level, see governor instruction book, section 509											■		section 509
Turbocharger System													
Cleaning of air filter - Compressor side												●	512-35.00
Dry cleaning of turbine side			●										512-10.00
Water washing of compressor side			●										512-05.00
Exhaust pipe compensator									■				512-01.10
Retightening of all bolts and connections			■										512-30.00

08028-01:115250/94.08.12

L27/38

Duties during Operation

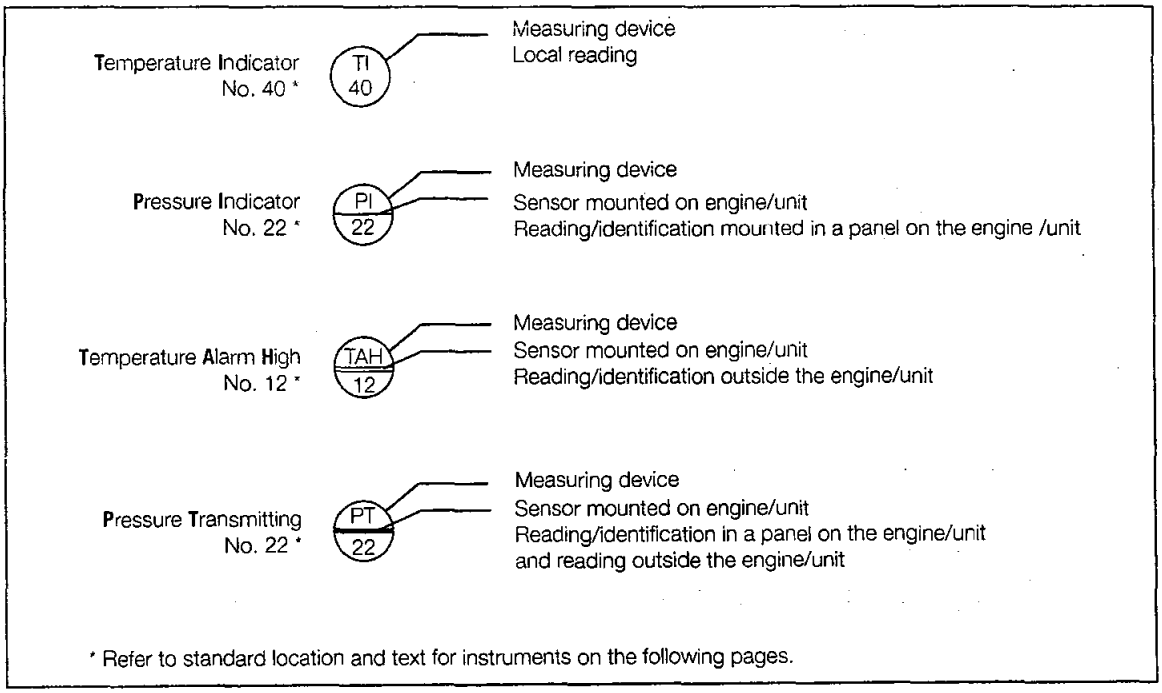
Description ● = Overhaul to be carried out ■ = Check the condition	Check new/ Overhauled parts after -hours	Time Between Overhaul: 50	200	2000	6000	12000	24000	Daily	Weekly	Montly	3th month	Observations	Working Card No
Compressed Air System													
Function test - Main and emergency starting valve											■		513-01.40
Air filter, draining of bowl (filter element to be replaced when pressure drop exceeds 0,7 bar)								●					513-01.21
Compressed air system - Check of the system									■				513-01.90
Fuel Oil System and Injection Equipment													
Fuel oil system - Check the system									■				514-01.90
Fuel oil - Oil samples after every bunkering, see sec.504													section 504
Fuel injection valve - Adjustment of opening pressure				■									514-01.10
Lubricating Oil System													
Lubricating oil filter - Cleaning and replacement				●									515-01.10
Centrifugal filter - Cleaning and replacement paper filter ..			●										515-15.00
Lubricating oil - Oil samples											■		
Lubricating oil system - Check the system									■				515-01.90
Cooling Water System													
Cooling water system - Water samples									■				
Cooling water system - Check the system									■				516-01.90
Engine Frame and Bedplate													
Flexible mounting - Check anti-vibration mountings				■									519-03.00
Safety cover - Function test													
Alternator - see special instruction book													
Major overhaul/inspection, see 500.25													

08028-0D/H5250/94.08.12

Code Identification For Instruments

L32/40, L16/24, L23/30H, L28/32H, V28/32H, V28/32S, L21/31, L27/38

Explanation of symbols



* Refer to standard location and text for instruments on the following pages.

Specification of letter code for measuring devices			
1st letter		Following letters	
F	Flow	A	Alarm
L	Level	D	Differential
P	Pressure	E	Element
S	Speed, System	H	High
T	Temperature	I	Indicating
U	Voltage	L	Low
V	Viscosity	S	Switching, Stop
X	Sound	T	Transmitting
Z	Position	X	Failure
		V	Valve, Actuator

L32/40, L16/24, L23/30H, L28/32H, V28/32H, V28/32S, L21/31, L27/38

Standard text for instruments

Diesel engine/alternator

LT water system

01	inlet to air cooler	04	inlet to alternator	07	inlet to lub. oil cooler
02	outlet from air cooler	05	outlet from alternator	08	inlet to fresh water cooler
03	outlet from lub. oil cooler	06	outlet from fresh water cooler (SW)	09	

HT water system

10	inlet to engine	14	inlet to HT air cooler	17	outlet from fresh water cooler
10A	FW inlet to engine	14A	FW inlet to air cooler	18	inlet to fresh water cooler
11	outlet from each cylinder	14B	FW outlet from air cooler	19	preheater
12	outlet from engine	15	outlet from HT system	19A	inlet to prechamber
13	inlet to HT pump	16	outlet from turbocharger	19B	outlet from prechamber

Lubricating oil system

20	inlet to cooler	24	sealing oil - inlet engine	28	level in base frame
21	outlet from cooler/inlet to filter	25	prelubricating	29	main bearings
22	outlet from filter/inlet to engine	26	inlet rocker arms and roller guides		
23	inlet to turbocharger				
23B	outlet from turbocharger	27	intermediate bearing/alternator bearing		

Charging air system

30	inlet to cooler	34	charge air conditioning	38	
31	outlet from cooler	35	surplus air inlet	39	
32	jet assist system	36	inlet to turbocharger		
33	outlet from TC filter/inlet to TC compr.	37	charge air from mixer		

Fuel oil system

40	inlet to engine	44	outlet from sealing oil pump	48	
41	outlet from engine	45	fuel-rack position	49	
42	leakage	46	inlet to prechamber		
43	inlet to filter	47			

Nozzle cooling system

50	inlet to fuel valves	54		58	oil splash
51	outlet from fuel valves	55	valve timing	59	alternator load
52		56	injection timing		
53		57	earth/diff. protection		

Exhaust gas system

60	outlet from cylinder	64		68	
61	outlet from turbocharger	65		69	
62	inlet to turbocharger	66			
63	combustion chamber	67			

L32/40, L16/24, L23/30H, L28/32H, V28/32H, V28/32S, L21/31, L27/38

Compressed air system

70	inlet to engine	74	inlet to reduction valve	78	inlet to sealing oil system
71	inlet to stop cylinder	75	microswitch for turning gear	79	
72	inlet to balance arm unit	76	inlet to turning gear		
73	control air	77	waste gate pressure		

Load speed

80	overspeed air	84	engine stop	88	index - fuel injection pump
81	overspeed	85	microswitch for overload	89	turbocharger speed
82	emergency stop	86	shutdown	90	engine speed
83	engine start	87	ready to start		

Miscellaneous

91	natural gas - inlet to engine	95	voltage	99	common alarm
92	oil mist detector	96	switch for operating location	100	inlet to MDO cooler
93	knocking sensor	97	remote	101	outlet to MDO cooler
94	cylinder lubricating	98	alternator winding	102	alternator cooling air

Basic Symbol For Piping

General

No	Symbol	Symbol designation
1. GENERAL CONVENTIONAL SYMBOLS		
1.1		Pipe
1.2		Pipe with indication of direction of flow
1.3		Valves, gate valves, cocks and flaps
1.4		Appliances
1.5		Indicating and measuring instruments
1.6		High-pressure pipe
1.7		Tracing
1.8		Enclosure for several components as-sembled in one unit
2. PIPES AND PIPE JOINTS		
2.1		Crossing pipes, not connected
2.2		Crossing pipes, connected
2.3		Tee pipe
2.4		Flexible pipe
2.5		Expansion pipe (corrugated) general
2.6		Joint, screwed
2.7		Joint, flanged
2.8		Joint, sleeve
2.9		Joint, quick-releasing
2.10		Expansion joint with gland
2.11		Expansion pipe
2.12		Cap nut
2.13		Blank flange
2.14		Spectacle flange
2.15		Orifice
2.16		Orifice
2.17		Loop expansion joint
2.18.		Snap coupling
2.19		Pneumatic flow or exhaust to atmosphere
3. VALVES, GATE VALVES, COCKS AND FLAPS		
3.1		Valve, straight through
3.2		Valve, angle
3.3		Valve, three-way
3.4		Non-return valve (flap), straight
3.5		Non-return valve (flap), angle
3.6		Non-return valve (flap), straight screw down
3.7		Non-return valve (flap), angle, screw down
3.8		Safety valve
3.9		Angle safety valve
3.10		Self-closing valve
3.11		Quick-opening valve
3.12		Quick-closing valve
3.13		Regulating valve
3.14		Ball valve (cock)
3.15		Butterfly valve
3.16		Gate valve

08926-0D/H5250/94.08.12

General

No	Symbol	Symbol designation	No	Symbol	Symbol designation
3.17		Double-seated changeover valve	4. CONTROL AND REGULATION PARTS		
3.18		Suction valve chest	4.1		Fan-operated
3.19		Suction valve chest with non-return valves	4.2		Remote control
3.20		Double-seated changeover valve, straight	4.3		Spring
3.21		Double-seated changeover valve, angle	4.4		Mass
3.22		Cock, straight through	4.5		Float
3.23		Cock, angle	4.6		Piston
3.24		Cock, three-way, L-port in plug	4.7		Membrane
3.25		Cock, three-way, T-port in plug	4.8		Electric motor
3.26		Cock, four-way, straight through in plug	4.9		Electromagnetic
3.27		Cock with bottom connection	4.10		Manual (at pneumatic valves)
3.28		Cock, straight through, with bottom conn.	4.11		Push button
3.29		Cock, angle, with bottom connection	4.12		Spring
3.30		Cock, three-way, with bottom connection	4.13		Solenoid
3.31		Thermostatic valve	4.14		Solenoid and pilot directional valve
3.32		Valve with test flange	4.15		By plunger or tracer
3.33		3-way valve with remote control (actuator)	5. APPLIANCES		
3.34		Non-return valve (air)	5.1		Mudbox
3.35		3/2 spring return valve, normally closed	5.2		Filter or strainer
3.36		2/2 spring return valve, normally closed	5.3		Magnetic filter
3.37		3/2 spring return valve contr. by solenoid	5.4		Separator
3.38		Reducing valve (adjustable)	5.5		Steam trap
3.39		On/off valve controlled by solenoid and pilot directional valve and with spring return	5.6		Centrifugal pump

General

No.	Symbol	Symbol designation	No.	Symbol	Symbol designation
5.7		Gear or screw pump	6. FITTINGS		
5.8		Hand pump (bucket)	6.1		Funnel / waste tray
5.9		Ejector	6.2		Drain
5.10		Various accessories (text to be added)	6.3		Waste tray
5.11		Piston pump	6.4		Waste tray with plug
5.12		Heat exchanger	6.5		Turbocharger
5.13		Electric preheater	6.6		Fuel oil pump
5.14		Air filter	6.7		Bearing
5.15		Air filter with manual control	6.8		Water jacket
5.16		Air filter with automatic drain	6.9		Overspeed device
5.17		Water trap with manual control	7. READING INSTR. WITH ORDINARY DESIGNATIONS		
5.18		Air lubricator	7.1		Sight flow indicator
5.19		Silencer	7.2		Observation glass
5.20		Fixed capacity pneumatic motor with direction of flow	7.3		Level indicator
5.21		Single acting cylinder with spring returned	7.4		Distance level indicator
5.22		Double acting cylinder with spring returned	7.5		Recorder
5.23		Steam trap			

08028-0D/H5250/94.06.12

Data For Pressure & Tolerance

L27/38

Section	Description	mm / bar
505	Safety valve to be adjusted to	230+7 bar at 20°C
	Maximum inner diameter, valve guide	20.2 mm
	For grinding of valve spindle and valve seat ring (see also working card 505-01.10)	
	Minimum height of valve head, inlet valve and exhaust valve, "H"1	9.0 mm
	Maximum height of spindle above cylinder head, "H" 2	
506	Piston and piston ring grooves (see working card 506-01.10)	
	Maximum clearance between connecting rod bush and piston pin	0.29 mm
	Maximum ovalness in big-end bore (without bearing)	0.08 mm
	Maximum inside diameter cylinder liner, maximum ovalness 0.1 mm	Ø 270.2 mm
	Sealing minimum height above the cylinder liner	0.2 mm
507	Maximum tolerance at the valve cam bearing	0.3 mm
	Maximum tolerance at the fuel cam bearing	0.35 mm
	Clearance between teeth on intermediate wheel	
	Plunger lift at TDC, injection timing:	
	IMO Tier II - E2	$11.30^{+0.05}$ mm*
	IMO Tier II - E3	$11.00^{+0.05}$ mm*
	IMO Tier II - D2	$10.75^{+0.05}$ mm*
	**) for information on max settings check the engine's IMO Technical file.*	
	Plunger Lift, World Bank II**	
	***) Standard injection timing value is based on ISO condition. Special injection timing of engines can be necessary due to Power plant size and/or Ambient conditions.*	
508	Valve clearance, Inlet valve (cold engine 15 - 50°C)	0.7 mm
	Valve clearance, Exhaust valve (cold engine 15 - 50°C)	0.7 mm
	Maximum clearance between rocker arm bush and rocker arm shaft	0.3 mm
	Maximum total tolerance between shaft bushing and roller	0.35 mm
509	Free spand between pick-up and band steel (Lambda controller), *only for single engine plant with hydraulic speed governor.*	
510	Deflection of crankshaft (autolog) (see working card 510-01.00)	
	Minimum axial guide bearing clearance	0.400 mm
	Maximum axial guide bearing clearance	0.663 mm
	Minimum radial main bearing clearance	0.225 mm
	Maximum radial main bearing clearance	0.336 mm
	Main bearing journal, min. diameter	249.9 mm
	Main bearing journal, max. ovality	0.03 mm
	Crankpin journal, min. diameter	249.9 mm
	Crankpin journal, max. ovality	0.03 mm

L27/38

Section	Description	mm / bar
514	Combustion pressure range at full load (Measured at indicator cock)	189 - 210 bar
	(Depending on rating/ambient condition)	
	Combustion pressure range at full load (Inside combustion chamber)	185 - 200 bar
	Individual cylinders; admissible deviation from average	± 5 bar
	Fuel valve, adjusment of opening pressure	400 - 410 bar
	(when new spring)	(420 bar)
	Clearance (A) of plunger between thrust plate	0.07-0.11 mm
	and plunger base plate / fuel injection pump	
	Clearance (B) from roller to mounting surface	160±0.18
	Clearance (C) axial and radial clearance of roller on fuelinjection pump	0.4 - 0.7 mm

Lubricant

M	Lubricating paste up to 200°C	Coefficient of friction 0.08 - 0.12
MH	High temperature lubricating paste above 200°C	Coefficient of friction 0.08 - 0.12
O	Oil	
Δl	Elongation of screw	

Tab. 1.

Pressure limitation of the hydraulic high pressure pump to be set to 50 bar above hydraulic oil pressure for tightening.
For correct use of hydraulic tools, please see working card 520-01.05.

Note: For tightening bolts to a specified torqe, only use the specified lubricants. For component temperatures up to 200°C, e.g. Molykote Pasta d or Optimoly Paste White-T. For component temperatures above 200°C, e.g. Molykote Paste HSC or Copa Slip.

Screw Connection	Oil pressure (bar)	Screw-in moment	Tightening torques (Nm) torsions angle (°) - lubricant	Working Card	Plate	Item
012 Cylinder Crankcase						
012-1 (long) Cap main bearing / Cylinder crankcase	1.step 2.step 100 3. step 1200 Δl = 3.2-3.9 mm	Hand crown nut Item 194 with Loctite 243	O	**510-01.05**	**51101**	**182, 086, 194**
012-1 (short) Cap main bearing / Cylinder crankcase	1.step 2.step 100 3. step 1200 Δl = 0.7-1.0 mm	300-M	O	**510-01.05**	**51101**	**456, 086**
012-2 Cap main bearing / Cylinder crankcase	1.step 2.step 100 3. step 1200	Hand-M	MH MH	**510-01.05**	**51101**	**216, 228**
012-3 Crankcase / Cylinder head	1. step 2. step 400 3. step 1200	Hand-M	MH	**505-01-55**	**51101**	**062, 086**
012-4 Crankcase/ Fuel injection pump		22-M Loctite 243	190-MH	**514-01.05**	**51101**	**277, 289**

L27/38

Screw Connection	Oil pressure (bar)	Screw-in moment	Tightening torques (Nm) torsions angle (°) - lubricant	Working Card	Plate	Item
020 Crankshaft						
020-1 Crankshaft / Counter weight	1. step 2. step 100 3. step 1200 Δl = 0.55-0.70 mm	130-M	M		**51001**	**082, 094**
020-2 Crankshaft/ Spur wheel			200-M or 250-O		**51001**	**141**
020-3 Lock of crankshaft lub. oil bores			1. step 50-M 2. step 250-M			
020-4 1st gear wheel part / 2nd gear wheel part			270-M or 340-O		**51001**	**189**
026 Turning Gear						
026-1 Spur gear/Shaft			260-M or 325-O		**51325**	**179**
027 Vibration Damper						
027-1 Gear wheel / Damper	1. step 2. step 100 3. step 1200	Hand-M	M		**51004**	**053,161**
Damper assembly bolts			580 Nm	510-04.00		**750**
030 Connecting Rod						
030-1 Connecting rod cover / Connecting rod cover	1. step 2. step 600 3. step 1200 Δl = 0.35-0.55 mm	Hand-M	M	**506-01.25**	**50601**	**152, 164**
030-2 Connection shaft / connecting rod bearing body	1. step 2. step 100 3. step 1200 Δl = 0.3-0.4 mm	Hand-M	M	**506-01.25**	**50601**	**188, 211**
034 Piston						
034-1 Stud screw / nut				**506-01.10**	**50601**	**176**
034-2 Stud screw / nut				**506-01.10**	**50601**	**176**

Screw Connection	Oil pressure (bar)	Screw-in moment	Tightening torques (Nm) torsions angle (°) - lubricant	Working Card	Plate	Item
056 Mounting of Fuel Injection Valve						
056-1 Clamp / Cylinder head		XX	115-MH	**514-01.10**	**51402**	**153, 177**
072 Covering on free end						
072-1 Stud screw / nut		XX	140-M or 175-O		**51502**	**755**
100 Control Drive						
100-1 Cylinder crankcase / Stepped spur gear	1.step 2. step 100 3. step 1200 Δl = 0.65-0.80 mm	Hand-M	M	**507-01.20**	**50701**	**073, 119**
101 Camshaft (Valve camshaft)						
101-1 Camshaft part piece / Bearing disk			200-M or 250-O	**507-01.00**	**50705**	**266**
101 Camshaft (Injection camshaft)						
101-4 Camshaft part piece / Bearing disk			210-M or 250-O	**507-01.00** **507-01.05**	**50705**	**266**
111 Valve Bridge						
111-1 Valve bridge / Setting screws			200-M or 250-O	**508-01.00**	**50502**	**071, 154**
111 Rocker arm						
111-1 Rocker arm / Setting screws			200-M or 250-O	**508-01.00**	**50502**	**071, 142**
200 Fuel Injection Pump with drive						
200-1 Valve support/Pump element			1. step 25-M or 30-O 2. step 50-M or 60-O 3. step 75-M or 90-O	**514-01.05/06**	**51401**	**421**

Screw Connection	Oil pressure (bar)	Screw-in moment	Tightening torques (Nm) torsions angle (°) - lubricant	Working Card	Plate	Item
434 Fuel Injection Pipe						
434-1 Threaded piece / Fuel injection valve			75-M or 95-O		**51404**	**010**
434-2 Fuel Injection pipe/ Threaded piece Fuel injection pipe/ Fuel injection pump			50-M or 65-O		**51404**	**033**
434 Fuel Oil Pipe						
434-3 Screw plug / Sealing ring			250-M or 310-O			
447 Water Cooling Pipe						
447-1 V-profile clamp / Intermediate pieces		12			**51630**	**200**
701 Flywheel with Gear Ring						
701-1 Crankshaft / Flywheel	1200	Hand-M	M		**51003**	**095, 105**

Tightening of Screwed Connections by the Torque

If screwed connections other than those listed are to be tightened using a torque wrench, see tab. 2, should be looked up for approximate tightening torques. The following should be observed:

The load acting on a screwed connection depends on the tightening torque applied, on the lubricant used, the finished condition of the surfaces and threads, and on the materials paired. It is, therefore, of great importance that all these conditions are met.

Tab. 2 lists the tightening torques for various threads as a function of the coefficient of friction μ, i.e. of the lubricant used. The torques are based on bolt material of the strength class 8.8 with the bolts stressed up to approximately 7% below the elastic limit.

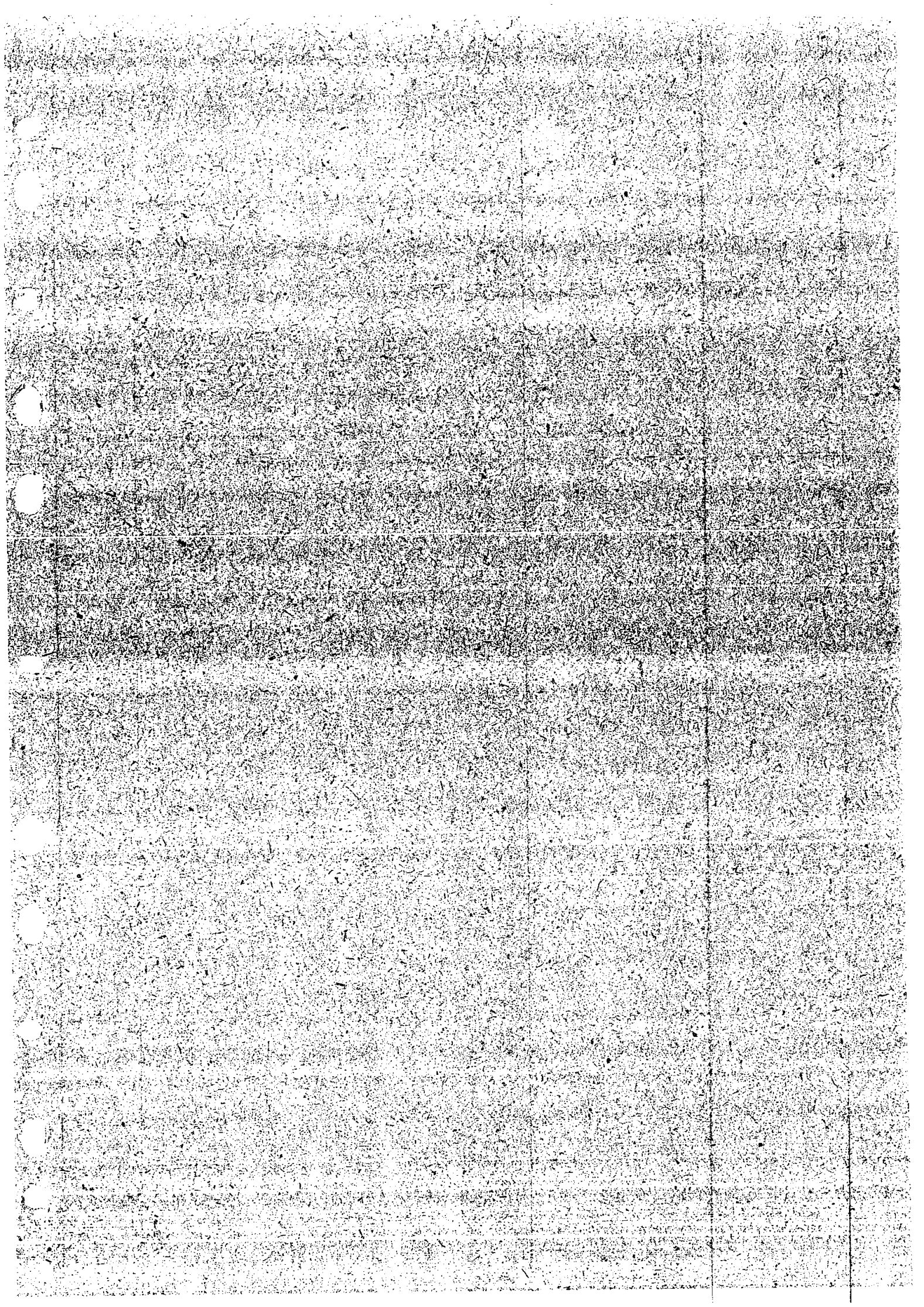
For other strength classes, the tightening torques listed in the table have to be multiplied by the corresponding conversion factors, see tab. 3. the strength class is stamped on the bolt head.

Thread mm quality class	Tightening torque in Nm			
	8.8		10.9	
	M/MH	O	M/MH	O
M 6	7	10	10	14
M 8	17	25	25	35
M 10	35	50	50	70
M 12	60	85	85	120
M 14	90	130	130	190
M 16	140	200	200	280
M 18	200	280	280	390
M 20	270	400	380	560
M 24	470	690	660	970

Tab. 2. Tightening torques for schoulder screws. Valve from AN 268 (if no data given in tabel).

Strength class	5.6	6.8	10.9	12.9
Conversion factor x	0.47	0.75	1.40	1.7

Tab. 3. Conversion factors for tightening torques as a function of the bolt strength class.



Schedule III (Regulation 3(4)(a)(D)	
9	Consumer Service Manual

USGROUP

Consumer Service Manual

Schedule III (Regulation 3(4)(a)(D)(9)

With reference to the subject clause, it is informed that

The document containing Consumer Service Manual will be provided within 60 days after submission of application.

Managing Director

Schedule III (Regulation 3(4)(a)(D)	
10 (i)	Proposed service territory

Proposed Service Territory

Schedule III (Regulation 3(4)(a)(D) (1)

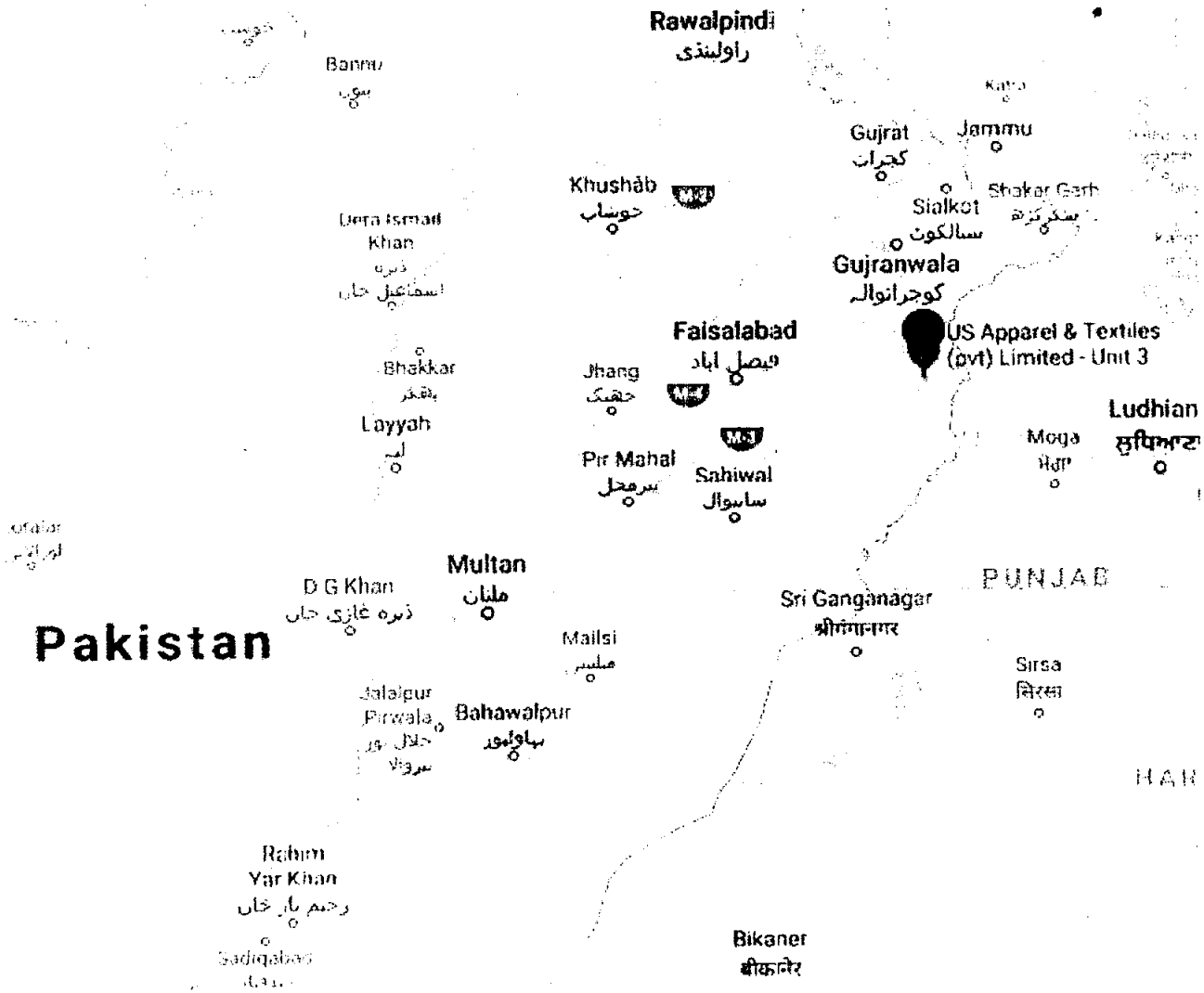
With reference to the requirement as per clause, following is the detail:

- US Apparel and Textiles Pvt Limited (USA&TPL) and sister concern BPC (Styler International Pvt Ltd) are situated at 20 km Off Ferozepur Road, Glaxo Town, Lahore, in the province of Punjab. (Location map is attached).

Managing Director

U.S. Apparel and Textiles (Private) Limited
20-km, Off Ferozepur Road,
Glaxo Town, Lahore,
in the Province of Punjab

Location
of the Generation Facility/Thermal Power Plant
of the Licensee



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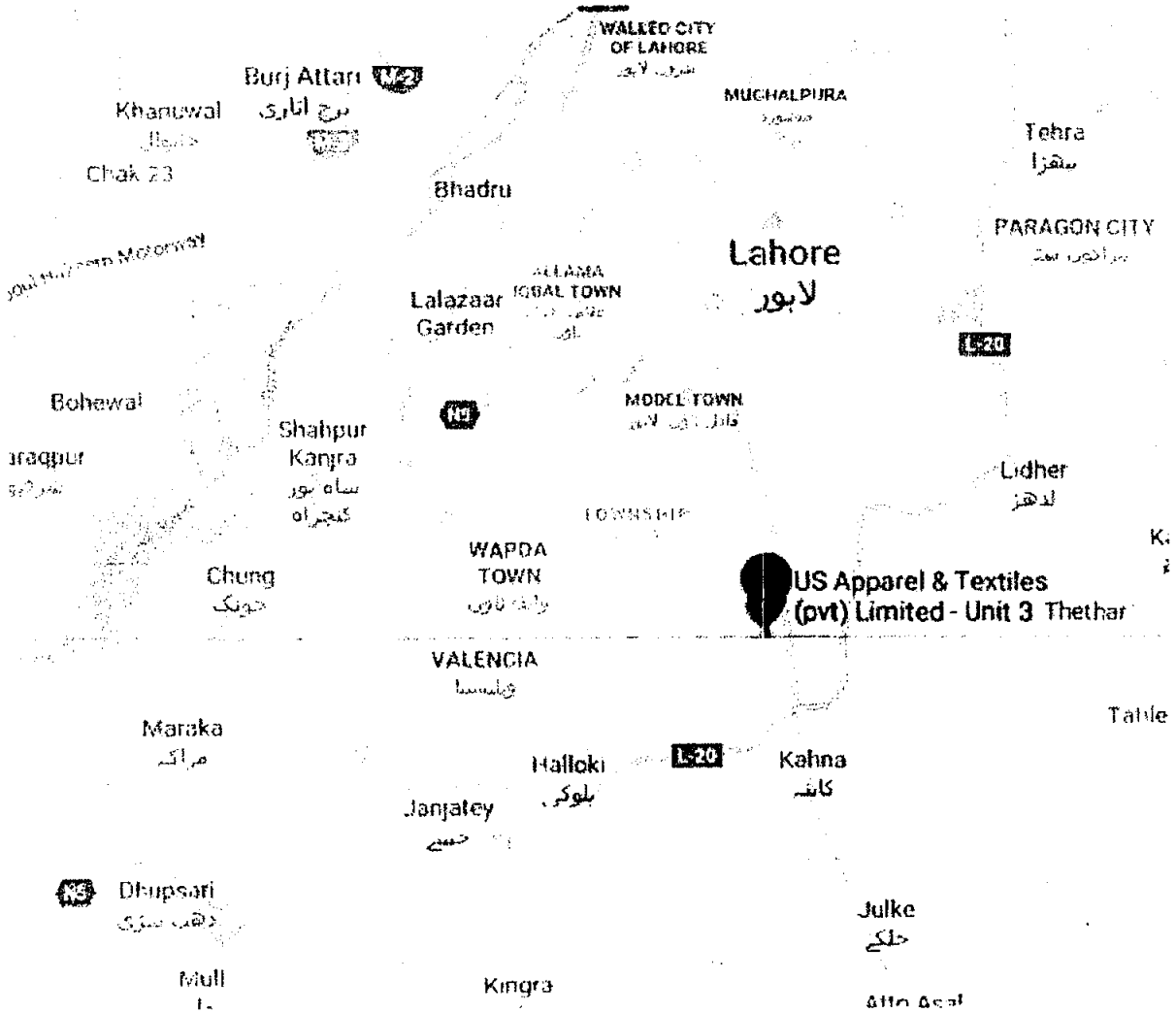
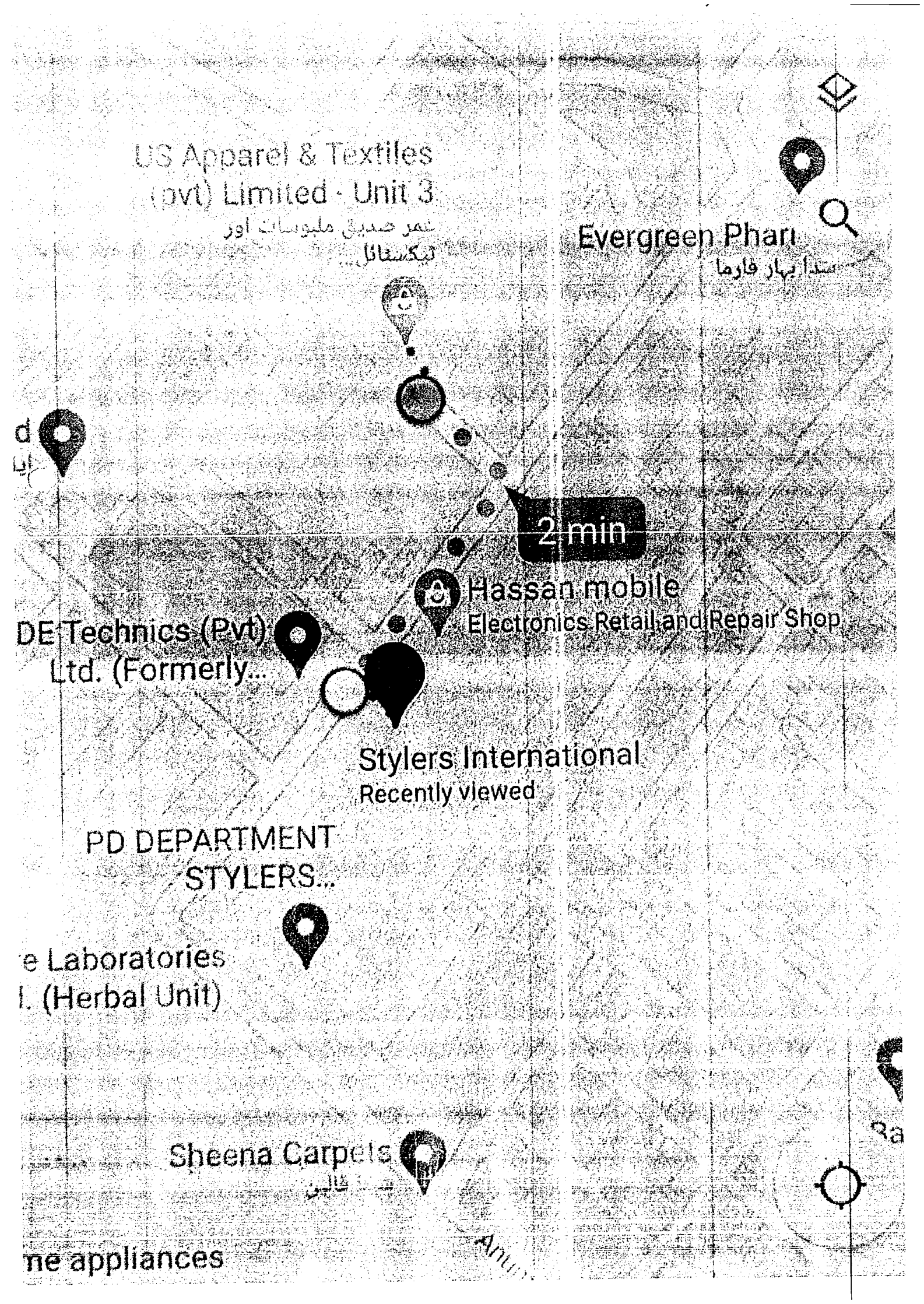



US Apparel & Textiles
(pvt) Limited - Unit 3
Evergreen Pharı
2 min
Hassan mobile
Electronics Retail and Repair Shop
DE Technics (Pvt)
Ltd. (Formerly...
Stylers International
Recently viewed
PD DEPARTMENT
STYLERS...
Sheena Carpets
ne appliances

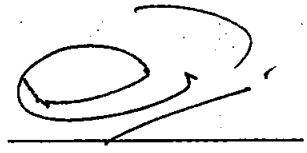
Sch III
3(1)(a)(D)(b)(ii)

Schedule III (Regulation 3(4)(a)(D)	
10 (ii)	Billing and collection procedures (including provisions for remote metering)

Billing and Collection Procedures

Schedule III (Regulation 3(4)(a)(D)(10)(ii)

USA&TPL has installed energy meters on the outgoing feeder switchgear for metering and charging the electricity consumption to its Bulk Power Consumer (Styler International Pvt Ltd). The energy consumption readings are recorded from these energy meters and billing is carried out on monthly basis accordingly against the agreed upon tariff.



Managing Director

ELECTRICITY SUPPLY AGREEMENT

This ELECTRICITY SUPPLY AGREEMENT is made on the 20th Day of Dec 2019 at Lahore, Pakistan

by and between

US Apparel and Textiles (Private) Limited a company incorporated under the laws of Pakistan and having its registered office at 20KM Ferozepur Road, Lahore, Pakistan (hereinafter referred to as "USA&T / Seller"), which expression shall, where the context admits, include its successors-in-interest and permitted assigns of the One Part:

and

Stylers International (Private) Limited a company incorporated under the laws of Pakistan and having its registered office at 20KM Ferozepur Road, Lahore, Pakistan (hereinafter referred to as "Stylers / Buyer"), which expression shall, where the context admits, include its successors-in-interest and permitted assigns of the One Part:

USA&T and Stylers International are hereinafter also referred to individually as a "Party" and collectively as the "Parties".

RECITALS

WHEREAS, Stylers International in its business premises located at 20-KM Ferozepur Road Lahore, requires Electricity on purchase basis at agreed rate of per Unit of Electricity.

WHEREAS, Seller owns Electric HFO Power house with complete allied systems, capable of supplying Electricity at sustained operating parameters, and desirous to let out as full package including its operation, maintenance and management of HFO Power house. The Seller has agreed to provide the same to Stylers International on the terms and conditions set forth in this Agreement.

NOW THEREFORE, in consideration of the mutual covenants, undertakings and conditions set forth below, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

NOW THEREFORE BOTH PARTIES WITNESTH:

1. **Effective Date and Term**. This Agreement shall be effective and shall govern the rights and obligations of the parties from Dec 20th, 2019 and "Effective for a period of Five (5) Years.
2. **Relationship of the Parties.** Seller is responsible to provide electricity and take full responsibility of its operations and maintenance in accordance with Prudent Utility Practice and business requirements.

3. **Electricity.** Seller will supply electricity at sustained parameters to Stylers International as or when required basis.

4. **Distribution voltage Level.** The supply of electrical energy will be three phases, at a nominal voltage of 11,000 volts and at a nominal frequency of 50 Hz. The sanctioned load shall be 1,000 KW.

5. **Metering.** Energy measurement (KWH) will be made from the Energy meters installed on outgoing feeder panel at US Apparel & Textiles Pvt Ltd.

6. **Billing.**

   a) Seller shall charge per unit Rate of Electricity (Based on current fuel rate.) with full responsibility of operations, management, maintenance, fuel purchases, fuel stock handling, supply chain management and sludge disposal with his own manpower.
   b) Billing will be carried out on monthly basis.

7. **Responsibilities of Stylers International**

   a) The supply of electrical energy shall be used by the Buyer for his own use at the premises.
   b) The Buyer confirms that he is lawful owner and has full authority to and, hereby shall provide secure, peaceful, unhindered access to consumer metering systems and other service equipment.
   c) Timely payments of Monthly bill.

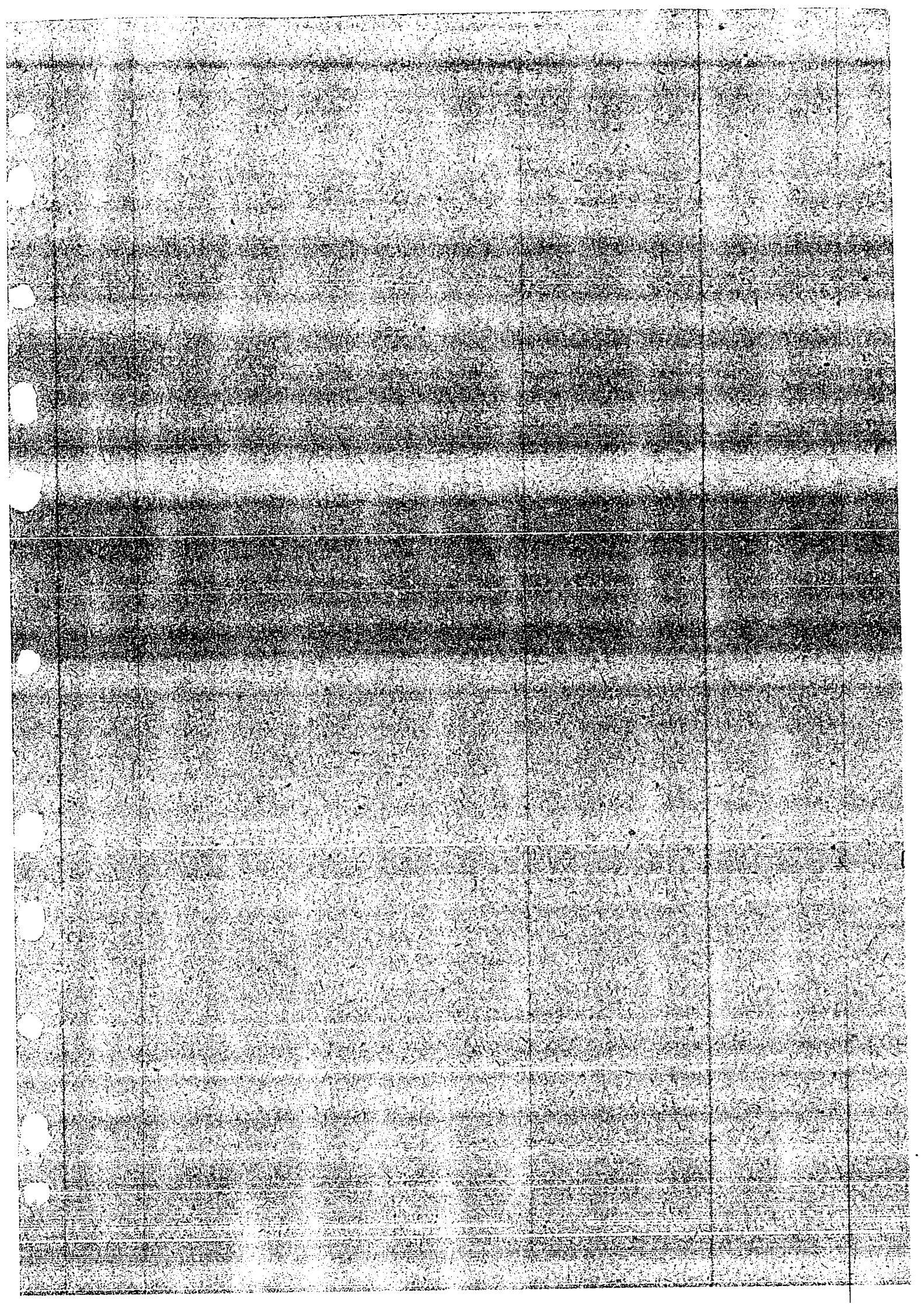
8. **Termination of contract**
   Either party may serve Three (3) months' prior notice for termination of the Agreement.

Stylers International Pvt. Ltd

US Apparel & Textiles Pvt. Ltd

Witness

Witness



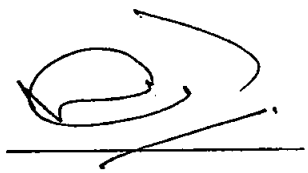
Schedule III (Regulation 3(4)(a)(D)(iii)	
10 (iii)	Ability to access consumer metering systems and other services/equipment

Ability to access consumer metering systems and other services/equipment

Schedule III (Regulation 3(4)(a)(D)(10)(iii)

The energy consumption readings are recorded from the energy meters installed on outgoing switchgears at USA&TPL premises and billing is carried out on monthly basis against the agreed upon tariff.

It is further stated USA&TPL has full access to consumer metering systems and other service equipment of BPC (Styler International Pvt Ltd).



Managing Director

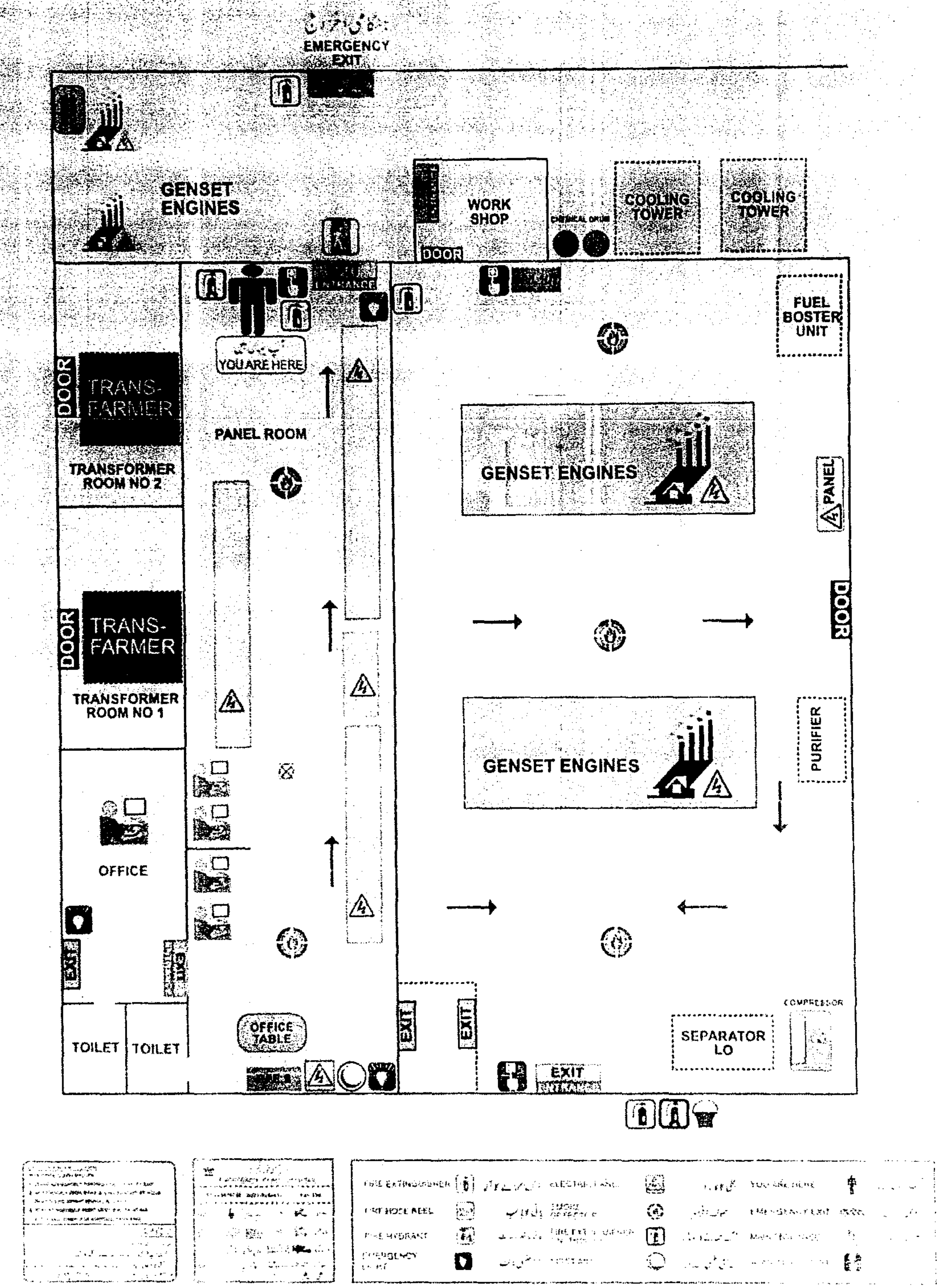
Schedule III (Regulation 3(4)(a)(D)	
10 (iv)	Emergency provisions and protocols

خاکہ ہنگامی اخراج

EMERGENCY EVACUATION PLAN

POWER HOUSE

No 2



Health and Safety Policy

10. Health & Safety Policy:

10.1. Policy:

US Apparel & Textiles (Pvt.) Ltd is committed to take necessary steps to prevent accident and injury occurring in the course of work or as a result of the operations at US facilities.

US APPAREL & TEXTILES (PVT) Ltd conducts Risk assessment of all of their processes to provide a safe, hygienic and healthy workplace environment to its employees

10.2. PURPOSE:

The purpose of this policy is to comply with health and safety regulation and to take all necessary measures for the safety of our employee.

10.3. SCOPE:

The scope of this policy is applicable at all level of the organizations

10.4. Responsibility:

All employees and managements is responsible for implementation of this policy

10.5. Procedure:

US Apparel & Textiles will establish following committee and team

1) Environment, Health & Safety Committee
2) Canteen Committee
3) First Aid team

4) Fire Fighting team

5) Emergency Response team

1. Environment, Health & Safety Committee:

The purpose of this committee is to highlight all environment, health and safety related issue and also to suggest or find solution of all such problems.

Establishment of Health and safety committee:

Factory has the responsibility to establish EHS Committee. Facility should select members that have the knowledge about issues related to EHS. Below is the key point of EHS committee

- EHS committee meeting should be held at least once a month.
- EHS committee member should be select from different department of facility beside that factory management also nominate member for EHS Committee.
- EHS committee head must be select by the committee members.
- Head of EHS committee are responsible to keep written record of EHS committee minutes of meeting and also to display meeting minutes in factory noticeboard.
- EHS committee Head also have the right to seek help from any EHS expert.

Orientation for EHS committee member:

Factory should conduct orientation for all committee member on below points

- Investigation procedure about accident or incident
- Responsibility during emergency situation in facility
- Identification of Hazard and Risk

- Identify and rectify the issue related to Environment, Health and safety

Responsibility of EHS committee members:

- Highlight the issue related to Environment, Health and safety with in facility:
- EHS Committee should focus on implementation of rule and regulation.
- Committee member actively work on investigation of any incident and also take corrective action to prevent that incident near future.
- Committee member should discuss factory EHS related issue at least once in a month
- Committee member should have the capability to highlight any emergency situation or an incident and also develop process to handle such situation.
- Committee has the responsibility to highlight EHS related issue in all department and approve the EHS report from management.
- Committee has to make report on all EHS Committee meeting and strongly work on solving issue raised by committee member
- All record related to Committee activity must kept in record

2. Canteen Committee:

Purpose of establishing canteen committee is to handle canteen matters properly and also to provide hygienic and quality food to factory workers by following below criteria

- Canteen committee management are selected by factory worker
- Committee head are responsible to conduct canteen meeting at least once a month and present canteen committee minutes of meeting to administration head and also need to inform canteen contractor about committee findings and suggestions.

- Canteen committee has the authority to visit canteen any time and check canteen arrangement and quality of foods.
- Minutes of meeting, attendance sheet, and meeting pictures must be kept in record and display after approval of committee head and administration head.
- Workers have the right to registered complaint in company register or convey verbally to canteen members
- Canteen committee must keep record of all complaint registered by worker and action taken against each complaint
- Committee member regularly check canteen arrangement and also update committee head about checklist.
- Committee meeting should be held monthly under the supervision of committee head

Committee activity:

Committee is responsible for

- Quality and Quantity of food
- Timing for eating on canteen
- Cooking of food according to selected menu
- All other instruction being issue by committee members
- Fire safety arrangement in the canteen are.
- Cleanliness should be maintained in the canteen area

Canteen requirement:

Factory management has the responsibility to provide canteen if more than 250 employees are working in facility and also make sure the availability of below facilities in canteen

- Canteen should be 50 foot away from boiler, waste yard, chemical store, Bathroom and fuel stocking
- Canteen area must have one large dining room, kitchen, and separate area for male and female worker.
- Canteen floor and ceiling must be proper cemented
- Canteen Door and window must be able to prevent fly
- Canteen must have the proper ventilation, lighting and fan system
- Each committee member represents 1000 employee of factory
- Committee member select one of the member as committee head
- Management has the responsibility to conduct free and fair election of canteen committee
- Canteen committee should reselect after every two years
- Canteen committee are responsible to decide food menu and factory management are responsible to provide food ingredients according to menu

Canteen must have below facilities available

- After every one year it is necessary to white wash or paint all canteen wall including Kitchen and Dining hall
- All wooden and iron item need to paint after every three years
- All maintenance related activities like paint and other must be kept in record
- Waste generated by canteen must be kept in proper designated waste area and also disposed of properly. Waste water of canteen also need to treated properly
- Canteen must have the proper ventilation system for the proper availability of fresh air
- Canteen area have the space to accommodate 30 % of total factory strength at a time of lunch

- Facility should provide proper sitting area and hand wash area to worker in canteen
- All kitchen pots and accessories must be provided and must be kept in neat and clean conditions.
- Canteen committee is responsible to select subsidies price of all food item and also make sure that price list available in local language are display in canteen wall

Canteen worker health checks:

- Canteen worker must inform his supervisor about any kind of health illness.
- Supervisor make sure that sick worker not able to start working in canteen until fully cured.
- Health related to skin allergy, injury, asthma etc. are not tolerated
- Canteen worker must follow the personal hygiene activities like taking bath, cutting nail, wearing neat and clean dress etc.
- Canteen worker must wash their hand before serving or cooking food and also wash dishes before serving food
- Canteen contractor are responsible to conduct hygiene & health tests of their worker every year against local/national law requirement.

3. First Aid Team:

- Facility will nominate first aid team from each department.
- The compliance Manager will arrange appropriate training for First Aid persons in line with legislative requirements and the identified level of risk.
- In addition to the statutory requirements for training, additional refresher training will be offered to First Aid team.

- First Aid team must respond for all major and minor incident according to its capability.
- An appropriately stocked first aid box complying with General requirement will be provided in a central location at all sites.

4. Fire Fighting Team:

- The facility uses Fire fighting team to assist in the evacuation during an emergency. Fire Fighting team are expected to be familiar with the area they are responsible for clearing, including all escape routes. Fire fighting team are given enhanced fire safety training, including the use of fire extinguishers.
- On hearing an intermittent fire alarm signal, Fire fighting team should be prepared to leave the building, identifying the whereabouts of those at greater risk (visitors, contractors, persons with limited mobility) and ensuring they are ready to evacuate.

On hearing the continuous signal Fire fighting team should:

- Responsible for their designated area and check all rooms are clear
- Direct occupants to the appropriate assembly point
- Close doors and windows and switch off any heat generating equipment, if safe to do so proceed to the assembly point and report to the Assembly Point Marshal, reporting the location of any individual(s) requiring assistance
- Where appropriate, assist in managing the flow of evacuees to the assembly point and prevent re-entry to the building until given the all clear by the Emergency response team

5. Emergency Response team (ERT):

- The ERT will aim to contain an emergency and make any rescue efforts (if safe to do so) until the arrival of the external emergency services such as fire

brigade and ambulance. The ERT is made up of Admin, Engineering, and compliance team and also from other departments.

- ERT members will search affected areas to make fire and/or chemical spill/gas leak assessments, identify any other hazards and search for casualties.
- ERT members are trained in basic firefighting and chemical spills at the early stage of development. If a fire has already taken hold by the time the ERT arrive, ERT will evacuate the area and leave advanced firefighting to the external emergency services.
- The ERT are responsible to perform duties in the event of the specific emergency situation such as fire chemical spill, gas leak, serious injury, bomb threat
- In case of any major emergency situation ambulance service will be provided to take injured person to nearby government and private hospital.
- Company will be responsible to bear all expense of the effected employee and also grant them leave until his recovery.

6. Water & Sanitation Hygiene:

US Apparel & Textiles is responsible to provide good quality and sufficient quantity of drinking water, good sanitation and hygiene arrangement for all his employees. The prevention of diseases related to water, sanitation and hygiene is possible with the institution of simple control measures at the factory level.

The factory management and other concerned staff (environment, health and safety team members) is responsible to provide water and sanitary condition according to local law.

The factory provides portable drinking water to all his employees and arranged drinking water points at different locations in the facility. All points must have filtration system to

ensure clean and safe drinking water.

The factory provides sufficient number of toilets segregated for male & female workers fitted with running water installation and provision of soaps & towels at all locations.

Drinking water test:

To ensure water Quality Company conducts drinking water testing through EPA approved third party lab. Test samples draw through lab and all parameter must be check as per local law test reports are kept in record.

Sanitary requirement:

Company provides required number of toilets, washrooms and other facilities segregated for men & women. More importantly, all facilities provided must be well maintained. Factory process where employees are exposed to chemicals at work, facilities should provide water for their bath and change of clothes before they go home. Sewerage line must be separate from other drain line and also that line fully covered

There should be septic tank where all sewerage line connects and then release in to municipal drain.

Housekeeping:

- All the rooms, corridors, staircases, washing places, drinking places and compound should be cleaned at least four times a day; as and when required basis.
- Proper cleaning schedule and checklist should be established and posted specially near washing and drinking places.
- In the morning it should be ensure no rubbish, dirt, debris of the previous day are left on the floor.

- The garbage collected should be disposed in the local authorized garbage dumping area only.
- All material enter with in facility must be checked regarding mold presence.
- Dampness Control: cartons, materials, fabric roll must be stored away from wall and on plastic pallets.
- To keep the areas clean and hygienic in all respects quick lime or any disinfectant should be used wherever required on regular basis without fail.
- All floor surface should be kept dry to prevent mold growth and development.
- All Leakage in roof, water pipes and steam pipe must be fixed by maintenance department.

Vaccination:

All workers are vaccinated against contagious diseases like typhoid, cholera and small pox. In addition, all exposed workers such as kitchen workers, first aiders and sewing workers may be vaccinated after complete blood tests and doctor recommendation.

Machine Guarding:

The factory provides machine guards on all moving parts and on the machine where any threat of life to the workers. Installation of machine guards are subjected to risk assessment recommendation.

Type of Guards

- Needle Guard
- Eye Guard
- Pulley Guard
- etc.

7. Personal Protective Equipment:

The Factory management is responsible to ensure that suitable personal protective equipment is provided to all employees who may be exposed to a risk to their health and safety while at work. (Personal protective equipment should take into account the ergonomic requirements of the wearer). PPE should be protecting worker from all kind of hazards. Need for different type of Protective equipment should decide according Hazard assessment of factory.

8. Machine Maintenance:

The purpose of this procedure is to develop guidelines for recording of incidents, seek out the direct and indirect causes of incidents, identify the need for corrective action (s), identify opportunities for preventive actions to avoid the recurrence and continually improve the QHSE performance

Machine Maintenance procedure will ensure the following activities.

- Preventive maintenance shall be carried out as per maintenance schedule circulated by maintenance department.
- Preventive maintenance checklists shall be prepared based on maintenance manuals and manufacturer's recommendations for every machine.
- Every checklist shall be approved by Maintenance (Mechanical/Electrical) head.
- Take necessary work permit from the concerned department wherever required.
- Ensure that quality of consumables including oil and grease are available.
- Ensure that maintenance staff are trained and expert on their work SOP and knowledge about require PPE's (gloves, helmets, belts, face masks etc.)
- Ensure the main switch of the machine is turned OFF, the fuses have been removed wherever available and utilities are isolated through LOTO kit whenever required.
- Tag MAINTENANCE WORK IN PROGRESS label near the machine which is under maintenance.

- Preventive maintenance should be carried out as per preventive maintenance checklist and tick mark the checks.
- In case if the repeated breakdowns observed during operation, corrective actions should be planned during preventive maintenance.
- If the equipment is removed from production area for repairs, it will be washed and sanitized by production personnel away from the machine area to avoid cross contamination.
- After completing the preventive maintenance, take machine trial and remove MAINTENANCE WORK IN PROGRESS label LOTO device.
- Hand over the machine to respective department representative.
- During all maintenance process appended will be ensured:
  - Role and responsibility
  - Training & Communication
  - Prevention of alcohol and drugs
  - Work
  - Electricity
  - Machinery
  - External contractor
  - Work in confined spaces
  - Use of PPEs
  - Asbestos
  - Lock-out & Tag out
  - Chemical Storage and Management
  - Welding
  - Piping Work
  - Hazardous Waste Management
  - Manual Handling

9. RISK ASSESSMENT:

US Apparel & Textiles performed a documented risk assessment for each Hazard and related activities and it will be reviewed/revised in following conditions;

- Annually in general
- Any process/layout changes
- After recommendation in any internal or external audit
- Changes in local/ national law and customer codes

Risk Assessment must include following:

- Identification of hazards associated with maintenance and repair tasks.
- Evaluation of risk with identified hazards.
- Identification of control measures to reduce or eliminate risk (e.g. personal protective equipment, hot work permit, Administrative control.

There is different risk related to heavy machines are as below.

- Open safeguards in Tonello/Dryers machines can cause personal injury.
- Since the big enough dimensions of the door in Tonello/Dryers, a person could enter the drum at the risk of getting trapped in the event that somebody close the door.
- The main door of Tonello / Dryer is fitted with pneumatic cylinders for opening and closing. When this is working, there is a risk of crushing & squashing is someone puts their hands in the movement at door.
- The use steam in Tonello/Dryers as heating agent, door and those parts in contact with it reach high temp e.g. steam pipe line.
- In laser machine the intensity of laser is too high that it can even burn the personal.
- In Curing ovens, the burner is fired via gas media so high intention should be.

- As machine is supplied with three phase electric supply, there may be risk of electric shock in case of any negligence.
- Electrical Distribution panels are also supplied with three phase electrical supply. Negligence may cause severe personal injury.
- Safety Risk while working with the machine in tilted position.
- There is risk in Tonello/Dryers that machine comes to horizontal position while executing the maintenance below the machine.
- Working at Height e.g. overhead water tank, roof top has risk of falling. Use of harness belt is recommended while working at height.
- Working in confined spaces e.g. Cargo Lift, boiler chimneys have risk of suffocation, fall hazard.
- For detail knowledge about Risk assessment see Annexes

Corrective Measures:

- US Apparel will ensure the machine maintenance through proper request (Work Order) from relevant department.
- According to work activity the trained staff will be allocate for maintenance and engineering / Safety department will ensure the required safety for specific task including personal protective equipment and work permit.
- Task going to perform must be free from any type of risk as well as written approval from concerned and safety department.
- These maintenance work will be proceeding under Corrective Measures of Machines.

Preventive measures:

The engineering department plan the periodic maintenance as per required of each machine with keep in mind major concerns with proper inspection list.

- Tonello washers (Each day in a month during morning shift, depending upon Production)

- Dryers (each day in a month during evening / night shift, due to production load).
- Ovens (after every month, cleaning of burner tubes and blower
- Sewing machine maintenance department plan the periodic maintenance of each machine
  Stitching machine will maintain each day in a month during morning shift, depending upon production)

Hot Work Permit:

- US Apparel ensuring the hot work with proper safety measures to avoid any incident / Accident.
- Engineering and safety department must review the place of work, type of work and taken necessary preventive measure for secure work.
- Hot Work permit need for all maintenance work need to perform in facility
- Engineering department must obtain the work permit from compliance department.

LOTO (Log Out Tag Out):

- **Lock Out** - isolation of energy from the system (a machine, equipment, or process) which physically locks the system in a safe mode.
- **Tag Out** –WARNS. A labeling system that informs others of the reason for LOTO, why it cannot be operated, who did LOTO.
- Notify all affected employees that a lockout is required and the reason therefor.
- If the equipment is operating, shut it down by the normal stopping procedure (such as: depress stop button,
- Operate the switch, valve, or other energy isolating devices so that the energy source(s) (electrical, mechanical, hydraulic, and other) is disconnected or isolated from the equipment.

- CAUTION: Return operating controls to neutral position after work is completed.

Competency of Maintenance Staff:

The personnel working in Maintenance Department are competent on the basis of appropriate education, experience, training or skills. The competence requirements are defined in the job description in the form of job specifications, which are maintained by HR department and Manager Maintenance. The Maintenance Staff require training and skills in the following areas:

- Identification of Machine Faults
- Maintenance Plan
- Usage / storage of tools & techniques
- Complaints handling
- Documentation of Maintenance Department
- On-job training
- Safe working method / Risk involved with maintenance safety program
- Preventive maintenance requirements of equipment and tools
- Hot work permit and procedure
- Use of equipment's (including firefighting equipment's)
- Lock out / Tag out implementation

Training needs are identified on annual basis using the Training Need Assessment form. In addition, training is also identified based on the following factors:

i. Changes in Maintenance procedures or operations;
ii. New or revised Maintenance procedures
iii. Inadequate performance of individuals or groups of personnel.
iv. Maintenance staff feedback or complaints
v. Results of internal audits
vi. Corrective/Preventive Actions

These training needs are identified and communicated to the Human Resource department, who then prepare the company-wide training plan. Records of training are maintained by Human Resources department.

Infrastructure & Work Environment:

The infrastructure requirements for Maintenance Department include:

- Well-furnished Office for Maintenance staff including separate working area, cabinets, and telephone facilities.
- Maintenance tools
- Computers and accessories including email connection.

Manager Maintenance must ensure that the above-mentioned infrastructure has been provided in the Maintenance department. Working environment must be appropriate to ensure better provision of services and maximized output. This includes:

- Organized work area
- Comfortable hall temperature
- Sufficient working space
- Minimum noise
- Personal protective equipment (Gloves, Face Masks etc.)

10. Chemical Store Management

- We have well ventilated Chemical Store & maintain Shelf life, Invoice Number, Hazardous Symbol, Manufacturing & Expiring Date Label of every chemical container.
- Our all chemical containers are segregated as per Hazardous substances & maintain also different keeping (Secondary Containment) place in chemical store.
- We have Hazardous chemical mapping floor plan & maintain also Hazardous Chemical Hazardous Pictograms as per floor mapping.
- We are maintaining strength checking of all liquid chemical as per every lot & keeping record.
- Chemical Store in-charge must make sure the availability of MSDS, TDS of all chemicals
- Every Liquid chemical has displayed with sample reagent bottle in chemical store.
- Our all workers are well trained of chemical using process & always they been prepared for any accidental release of chemicals with wearing proper PPE.
- Chemical spill kit is in a places where there is a chance of chemical spillage.
- All supervisors, employees working at washing plant, chemical stores and Lab are well known to the procedure how to handle chemical spillage with real time response. Response protocols are in place for both Major spillage and Minor spillage.

Safety Precautions:

- If you are ever in doubt of your ability to clean a chemical spillage safely, evacuate and call for help. If there is risk to the rest of the building, pull the fire alarm and evacuate the building immediately.

- Certain materials found in the clean room can be particularly hazardous when spilled. Review the MSDS and make sure you understand the hazardous properties of the spilled material before you attempt to clean it up.
- It is always better to arrange on caution on the other side of the container. If you spill something, and you are not sure if you can clean it up safely, consult with Technical Representative (TR).
- First aid is always the top priority. If you spill a hazardous material on yourself, remove any potentially contaminated clothing immediately and utilize the emergency shower. Seek appropriate medical treatment if material spills in your eye, flush for at least 15 minutes at the eyewash (for Corrosive materials, you may need to flush for up to 60 minutes – review the MSDS). Seek appropriate medical treatment immediately
- Spill will be treated according to class like minor spill and major spill. Procedure for both minor and major spill are explained in emergency preparedness and response plan.

Disposal of Empty Chemical Containers

The main purpose of this procedure is to ensure that the potential for minimizing the environmental pollution due to chemicals contamination and to minimize risk of affecting human health. The procedure of empty chemical drum disposal is

- Must remove all materials from the container that can be removed using the methods commonly employed to empty the container (pumping, pouring, etc.).
- Empty container must be kept separated in the storage area after rechecking that container is fully empty.
- Clean the container using water (that water need to go to waste water treatment plant.)

- If needed, use hot water for proper cleaning (that water need to go to waste water treatment plant)
- All containers must have the lids/bung caps that also need to be cleaned properly. Also the containers need to be closed properly before moving to designated storage area.
- Stores Executive supervises and approve for the transport to the designated Storage area.
- Need to paste the **"EMPTY DRUM for DISPOSAL"** sticker with the store executive signature & Date.
- Every week Store executive shall fill the empty drum disposal checklist and every end of month get the signature from the TR and Plant Head.

Chemical Training:

Employee Training is a major component of safe chemical management

- Training must be thorough, frequent and focused on specific work tasks.
- Management must support training by providing adequate time and funding.
- EHS executive are responsible to conduct a training on chemical handling, chemical spillage, SDS and safe working condition in chemical store
- See Annexes 2 for chemical policy

Reference:

- **Customer TOE & COC (Levis, Target, H&M, Tesco and others)**
- **Factory Act 1934**
- **Factory rule 1978**
- **Chemical Management Policy**
- **Emergency Preparedness and response plan**

Spillage Control Procedures

Of

HFO Building

US apparel &Textiles
30- Km Off Ferozpure road, Glaxo Town Lahore

Approved by: _____

1. Purpose

The purpose of this SOP is to provide awareness of the hazards of various types of oils, guidance for minimizing the potential for oil spills/releases, and action to take in response to an oil spill or release to mitigate threats to the environment, property, and persons.

2. Scope

This procedure applies to HFO building of US Apparel&Textiles Unit 3&4

3. Common Terms and Definitions

Some definition related to policy&procedures are as follows;

a) **Minor Spill:**	A minor spill is one that usually presents little or no hazard to person or property, and is small enough to be safely cleaned up using the emergency spill kit.
b) **Major Spill:**	A major spill is one that cannot be contained safely with the materials on the site, threatens safety to life and/or threatens to enter the sewer system or travel beyond the boundaries of building/property to endanger the environment. The Emergency Services shall be contacted.
c) **Combustible liquid:**	means any liquid having a flash point at or above 37.8 °C and below 93.3 °C.
d) **Flammable liquid:**	means a liquid having a flash point below 37.8 °C and having a vapor pressure not more than 275.8 kPa (absolute) at 37.8 °C as determined by ASTM D 323, "Vapor Pressure of Petroleum Products (Reid Method)".

e) **Flash point:**	means the minimum temperature at which a liquid within a container gives off Vapour in sufficient concentration to form an ignitable mixture with air near the surface of the liquid.
f) **MSDS:**	A compilation of information on the identity of hazardous chemicals, health, and physical hazards, exposure limits, and precautions
g) **Vapour Pressure:**	Means the pressure exerted by a liquid as determined by ASTM D 323, "Vapour Pressure of Petroleum Products (Reid Method)".

4. Responsibility

4.1. QHSE Team

a. A Multi-Disciplinary QHSE Team is responsible for carrying out all the activities related to this Procedure such as identification of oil spillage, risk assessment and determining appropriate controls.

b. QHSE Team is responsible for periodically reviewing this procedure and ensuring that it remains appropriate to the activities of US Apparel (pvt) Limited.

4.2. All Employees

All the employees working at US Apparel Ltd. are responsible for reporting any hazard to QHSE Officer identified during routine activities.

EMERGENCY CONTACTS

Contact	Number
Mr. Farhan Rafiq *Sr. Manager Power House*	**03336626947** 0423545350 Ext.328
Mr. Mustafa Kaleem *Manager EHS*	**03350445544** 0423545350 Ext.284
On-site Manager/Spill Coordinator	0423545350 Ext. 328
Emergency Rescue	1122
Fire Fighting Team	0423545350 Ext.227

SPILL CONTROL PROCEDURES

- The on-site manager (spill coordinator) will investigate any spill before evacuating the building or contacting any of the emergency contacts listed previously. The following criteria shall be used to determine the severity of the incident and if the spill or leak should warrant evacuation of the building.

  If Oil Spillage Take Place, then: -

  - Immediately evaluate the situation for an ignition source or other fire or explosion hazard. If such a hazard exists, evacuate the area immediately and call the US Facility Emergency team or Call Rescue 1122 Services.
  - Identify the source of the spill or release. If it is safe to do so, terminate the flow (i.e. shut off supply lines, close valves, etc.)

- Cover floor drains and/or storm water drains in the vicinity of the spill or release with appropriate drain plugs or covers if available (appropriate drain protection shall be available at every petroleum product storage tank).
- Contain the spill or release if possible with appropriate materials (i.e. oil absorbents, spill pads, dikes, etc.). Appropriate protective clothing will be prior to contain the spill if there will be a potential for contact with the petroleum product.
- Contact the Environmental Health and Safety Representative (EHSR) at Ext.227 or 284 during normal Facility Working hours and after normal working hours contact US Facility Emergency team. EHSR will provide assistance and/or advise on proper cleanup and/or containment.
- Collect petroleum-contaminated debris (i.e. gloves, dikes, soil, etc.) in containers for proper disposal. EHSS will provide assistance in determining proper disposal of contaminated items.

Spillage Clean up procedures:

Spill Event and Cleanup Procedures in the event of a spill occurrence, the following actions are to be taken:

- Don personal protective equipment (PPE);
- Contain the release using absorbent or absorbent socks or booms to minimize the extent of the spill;
- Protect sensitive receptors such as drains, storm drains, surface water bodies, and minimize the amount of uncontrolled release;
- Cordon off the spill area with "CAUTION" tape.
- Corrosive spills shall be neutralized using an appropriate neutralizing agents.
- Clean up the spill from the perimeter inward using appropriate absorbent (clays, pads, pillows, etc);

- Collect all contaminated media in drums, if quantities permit;
- Clean all reusable equipment using rags and cleaners as appropriate;
- Dispose of all disposable equipment (e.g., PPE) in drums;

Preventive Measures: -

Preventative Measures Spills of any amount of petroleum products or polluting materials shall be prevented by following:

Training:

Training of staff is an important part of this plan to ensure the proper containment and disposal of any leaked/spilled liquid. Training to staff on these spill procedures will happen as follows:

- All new employees will receive a copy of the spill procedures
- Within 3 months of being hired, all new employees will receive a spill procedure orientation seminar. This will include, but not be limited to, a review of the spill procedure document, explanation and location of relevant Personal Protective Equipment (PPE) and shown the spill kit locations, contents and use.

- All existing employees will be re-oriented, every 6 months, on the spill procedures as mentioned above or will be part of a Spill Control Drill.
- Precautionary measures to prevent spills;
- Sources of spills, such as equipment failure or malfunction;
- Equipment, materials, and supplies available for clean-up of a spill; and
- Use of PPE's

DISPOSAL

The disposal of waste material resulting from a spill or leak of flammable and combustible liquid is of extreme importance. The following steps shall be followed in an attempt to clean up a spill or leak in a safe and secure manner.

The following will be done once the spill has been contained:

- Apply absorbent material found within the spill kits to the entire spilled area
- Using a large hand tool (i.e., non-sparking shovel) ensuring all the liquid has been exposed and mixed with the absorbent material
- Place the used absorbent into a disposal bag and then a non-combustible container. Dispose of material in conformance with the MSDS sheet.

EMERGENCY SPILL PROCEDURES FOR FLAMMABLE AND COMBUSTIBLE LIQUIDS

NAME OF COMPANY:

US apparel &Textiles

30- Km Off Ferozpure road, Glaxo Town Lahore

IF THE SPILL CANNOT BE SAFELY CONTAINED USING THE SPILL KIT OR IF THE SPILL IS CAUSING A THREAT TO LIFE, EVACUATE THE BUILDING AND CONTACT WHITBY FIRE AND EMERGENCY SERVICES AT 1122

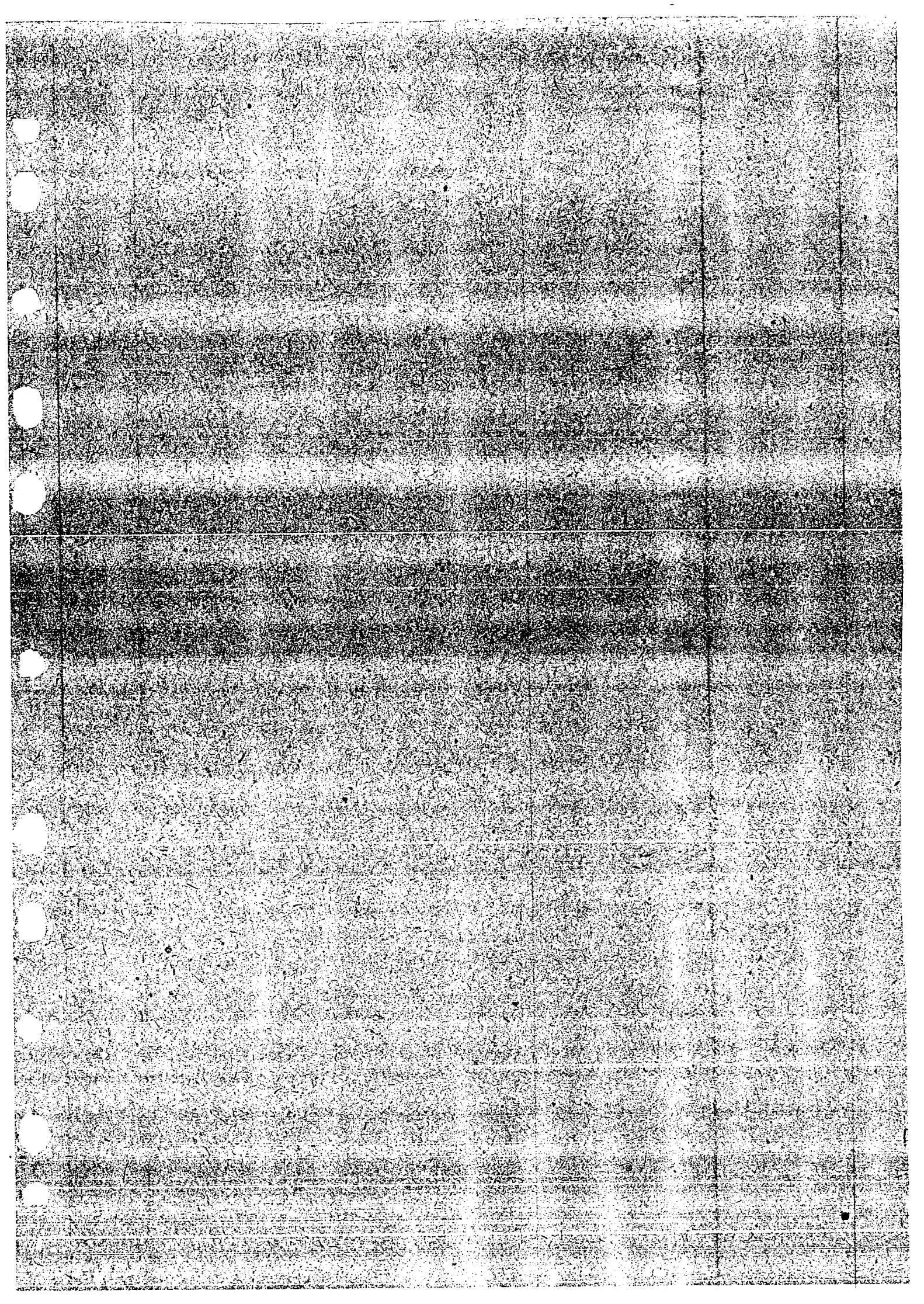
UPON DISCOVERY OF A MINOR SPILL

1. ENSURE THE SAFETY OF ALL STAFF AND BUILDING OCCUPANTS

- Warn all surrounding staff and building occupants
- Notify the On-Site Manager (Spill Coordinator). Act as the Spill Coordinator until his/her arrival
- If unsure of the product, consult the MSDS sheets
- Wear proper Personal Protective Equipment (PPE) contained in the spill kit
- Attempt to stop the leak or eliminate the source of the spill if safe to do so.
- Eliminate ignition sources and provide natural ventilation

2. CONTAIN THE SPILL:

- Use contents of the provided spill kits
- If necessary, ensure all drains are covered to prevent run-off
- Attempt to stop the spread of the spill/leak by using absorbent socks to surround the spill
- Once the spill is contained, attempt to soak it up using an absorbent material
- Place the absorbent material in an approved container and dispose of it in accordance with the MSDS sheet.
- If any leak/spill reaches the drainage system, contact the appropriate authorities as listed in the Emergency Contact section of the procedures



Schedule III (Regulation 3(4)(a)(D)	
10 (v)	Basis of common services for commercial and residential consumers and their allocation thereof

Not Applicable