



*Experience that delivers*

# **LIST OF ACCEPTABLE MAKES OF EQUIPMENT & SUPPLIES**

(Indigenous Supplies Only)



**MARCH 2025**





## PREAMBLE

This document "ACCEPTABLE MAKES OF EQUIPMENT AND SUPPLIES" is for indigenous supplies/ bought out items only and is a part of the tender specification for various packages.

The "makes" of various equipment and supplies are listed out in this document. It is essential that the equipment/ component/ materials to be supplied indigenously by the bidder will be of any one of the makes listed against that particular equipment/ component/ material in this document as further detailed subsequently.



### ACCEPTANCE CRITERIA

- The vendor shall have an established Quality Management System certified as per ISO-9001.
- The vendor should have installed or supplied at least one of the following within the last 7 years for the item(s):
  1. Either at least 2 references in any of the SAIL plants or RINL or NMDC steel (NSP).
  2. Or at least 3 references in any integrated steel plants.
  3. Or at least 3 references in Maharatna Public Sector Undertakings, Navratna Public Sector Undertakings, integrated steel plants, or registered Indian companies (excluding financial institutions) having a turnover more than Rs 7000 crores in the last financial year.
  4. Or at least 3 references satisfying any combination of the above three criteria.

Item-wise copies of purchase orders along with satisfactory performance certificate issued by the end user for the above references shall be provided.

For refractory, item-wise copies of purchase orders along with satisfactory performance certificate / inspection certificate (by client or its representative) along with relevant documents evidencing supply for the above references shall be provided.

- A self-declaration from the vendor stating that the company is not blacklisted/ banned in any SAIL plants, PSUs, or other government enterprises.

## CATEGORY 'A' ITEMS

**These are critical equipment and items. Contractor/ bidder to ensure that items listed under this category shall be supplied only from the makes listed.**

**In exceptional cases, if two or less makes out of the listed makes for a particular equipment/ item are available to the bidder/ contractor for supply then additional makes can be proposed. However, bidder/ contractor shall establish the non-availability of the listed makes. Additional makes proposed by bidder/ contractor shall be approved subject to fulfilling the acceptance criteria stipulated alongside.**





### **OBLIGATIONS OF ENLISTED VENDORS**

The enlisted vendors shall abide by following:

1. Provide Budgetary quotations as and when requested by SAIL.
2. Ensure participation in applicable SAIL tenders or provide justification for non-participation.
3. Follow fair business and ethical practices in case of requirement of collaboration/ integration with other makes.
4. In case of direct bid, the vendor should agree to the payment/ commercial terms and conditions of SAIL as per SBD.
5. Compliance of delivery schedule.
6. Prompt after sales service and support.
7. Information/ documents provided should be authentic.

### **DELISTING/ DELETION CRITERIA**

Enlisted vendors in the "List of Acceptable Makes of Equipment and Supplies" will be delisted and their enlistment shall not be considered for next two years, in case of the following:

- Any two recorded negative performance/ after sales support incidents communicated from any of SAIL units.

## **CATEGORY 'B' ITEMS**

**These equipment/ items are for general purpose. Bidder may suggest additional makes, if any, during tendering stage with credentials to fulfil the acceptance criteria stipulated alongside.**

**In case of non-availability of listed makes during implementation, procedure listed under category A will apply.**





### **Other Items not listed**

Contractor may supply any other item not mentioned in this list from any make.

- One reference as per the acceptance criteria
- Self-declaration from vendor is required that the company is not blacklisted in any SAIL plants or PSUs

**Note:** *The above categorization has been given for ease of project management. However, in exceptional cases, empowered committee of the plant may approve additional makes.*



# CONTENTS

Area	No. of items	Page Nos.
Computerization & Information Technology	14	1
Electrical	57	2 - 9
Mechanical	77	10 - 18
Mining & Mineral Processing Area	12	19
Process Control & Automation	71	20 - 26
Refractory	11	27 - 29
Utility & Services	119	30 - 44





**SECTION-A**

**COMPUTERIZATION &  
INFORMATION TECHNOLOGY**



**ACCEPTABLE MAKES LIST  
SECTION-A**

<b>S No.</b>	<b>ITEMS</b>	<b>CATEGORY</b>	<b>MAKE</b>
<b>1. IT EQUIPMENT</b>			
1.1.	Desktop PC	<b>B</b>	<b>DELL, HP, LENOVO</b>
1.2.	Industrial PC / Semi-Rugged Laptop	<b>B</b>	<b>ADVANTECH, DELL, PANASONIC, SIEMENS</b>
1.3.	Laptop	<b>B</b>	<b>DELL, HP, LENOVO</b>
1.4.	Server	<b>A</b>	<b>DELL, HPE, FUJITSU, LENOVO/IBM, ORACLE/SUN</b>
1.5.	Network Switch/ Router/ WAP (IT, Office)	<b>A</b>	<b>ALLIED TELESIS, CISCO, DELL, EXTREME, HP/HPE, RUCKUS</b>
1.6.	Network Switch/ Router/ WAP (Industrial)	<b>A</b>	<b>ADVANTECH, ALLIED TELESIS, CISCO, HIRSCHMANN, PHOENIX CONTACT(I) PVT.LTD, ROCKWELL, SCHNEIDER, SIEMENS</b>
1.7.	Cyber Security Solutions (Hardware/ Software)	<b>A</b>	<b>CHECKPOINT, CISCO, FORTINET, JUNIPER, SOPHOS, PALO ALTO</b>
1.8.	Passive network components / accessories	<b>B</b>	<b>DIGILINK/SCHNEIDER, MOLEX, RiT, ROSENBERGER, SYSTIMAX, TYCO (AMP)</b>
1.9.	UTP cable	<b>B</b>	<b>DIGILINK/SCHNEIDER, ELKAY, MOLEX, R&amp;M INDIA PRIVATE LIMITED, RiT, SYSTIMAX, TELELINK, TYCO(AMP), UNIVERSAL</b>
1.10.	FO cable	<b>B</b>	<b>BELDEN, DIGILINK/SCHNEIDER, FINOLEX, LUCENT, MOLEX, RiT, R&amp;M INDIA PRIVATE LIMITED, STARLITE, SYSTIMAX, TYCO(AMP), ROSENBERGER</b>
1.11.	Data storage system	<b>A</b>	<b>DELL/ EMC, FUJITSU, HP/HPE, HITACHI, IBM, NETAPP, ORACLE</b>
<b>2. CCTV SYSTEM</b>			
2.1.	CCTV system	<b>B</b>	<b>BOSCH, CP PLUS, HONEYWELL, PANASONIC, PELCO, PRAMA, SAMSUNG, SEIMENS, SONY, TYCO</b>
2.2.	LED display (40" or more)	<b>B</b>	<b>HITACHI, LG, PANASONIC, SAMSUNG, SONY</b>
2.3.	Video wall	<b>B</b>	<b>DELTA, HITACHI, LG, PANASONIC, SAMSUNG, SONY</b>



SECTION-B

# ELECTRICAL

**ACCEPTABLE MAKES LIST**  
SECTION-B

S No.	ITEMS	CATEGORY	MAKE
<b>1. 132 kV &amp; ABOVE EQUIPMENT</b>			
1.1.	132 kV/ 220 kV Gas Insulated Switchgear	A	CG POWER & INDUSTRIAL SOLUTIONS LTD, GE VERNOVA, HITACHI ENERGY INDIA LIMITED, HYOSUNG T&D INDIA PRIVATE LIMITED, SIEMENS, TOSHIBA TRANSMISSION & DISTRIBUTION SYSTEMS (INDIA) PVT LTD.
1.2.	132kV/ 220 kV outdoor Isolator/ Disconnecting Switch	A	CG POWER & INDUSTRIAL SOLUTIONS LTD, GR POWER, HITACHI ENERGY INDIA LIMITED, RAYCHEM, SIEMENS, SWITCHGEAR & STRUCTURALS, ELPRO
1.3.	132kV/ 220 kV outdoor Circuit Breaker	A	BHEL, CG POWER & INDUSTRIAL SOLUTIONS LTD, GE VERNOVA, HITACHI ENERGY INDIA LIMITED, SIEMENS
1.4.	132kV/ 220 kV outdoor CT/ PT/CVT	A	BHEL, CG POWER & INDUSTRIAL SOLUTIONS LTD, GE VERNOVA, HITACHI ENERGY INDIA LIMITED, MEHRU, SIEMENS, TELK
1.5.	132kV/ 220 kV outdoor Lightning Arrestor	A	BHEL, CG POWER & INDUSTRIAL SOLUTIONS LTD, ELPRO, OBLUM, RAYCHEM
1.6.	132kV/ 220 kV cable XLPE	A	CCI (Cable Corporation of India), KEC, KEI, STERLITE POWER TRANSMISSION LIMITED (for 132KV), UNIVERSAL
1.7.	132kV/ 220 kV outdoor Insulator & Bushing	B	ADITYA BIRLA INSULATORS, BHEL, CG POWER & INDUSTRIAL SOLUTIONS LTD, CJI, JAYSHREE INSULATORS, MODERN, OBLUM, WSI, YASH HIGH VOLTAGE LTD.
1.8.	ACSR Conductor for 132kV/ 220 kV Transmission Line	B	APAR, CABCON, STERLITE
<b>2. 33kV EQUIPMENT</b>			
2.1.	33 kV Indoor Switchgear	A	ABB, SCHNEIDER, SIEMENS

**ACCEPTABLE MAKES LIST**  
SECTION-B

S No.	ITEMS	CATEGORY	MAKE
2.2.	33 kV Gas Insulated Switchgear	A	ABB, BHEL, SCHNEIDER, SIEMENS,
2.3.	33kV outdoor Isolator/ Disconnecting Switch	A	ABB POWER PRODUCTS & SYSTEMS INDIA LIMITED, CG POWER & INDUSTRIAL SOLUTIONS LTD, GR POWER, RAYCHEM, SCHNEIDER, SIEMENS, SWITCHGEAR & STRUCTURALS, ELPRO
2.4.	33kV outdoor Circuit Breaker	A	ABB, BHEL, CG POWER & INDUSTRIAL SOLUTIONS LTD, SCHNEIDER, SIEMENS
2.5.	33kV outdoor CT/ PT	A	BHEL, CG POWER & INDUSTRIAL SOLUTIONS LTD, ECS, MEHRU, TELK
2.6.	33kV outdoor Lightning Arrestor	A	BHEL, CG POWER & INDUSTRIAL SOLUTIONS LTD, ELPRO, OBLUM, RAYCHEM
2.7.	33kV outdoor Insulator & Bushing	B	ADITYA BIRLA INSULATORS, BHEL, CG POWER & INDUSTRIAL SOLUTIONS LTD, CJI, JAYSHREE INSULATORS, MODERN, OBLUM, WSI, YASH HIGH VOLTAGE LTD.
2.8.	ACSR Conductor for 33kV transmission line	B	APAR, CABCON, STERLITE, GUPTA POWER
<b>3. MEDIUM VOLTAGE – INDOOR (3.3 kV to 11kV)</b>			
3.1.	Switchgear (Circuit Breaker with panels)	A	ABB, BHEL, LAURITZ KNUDSEN ELECTRICAL & AUTOMATION, SCHNEIDER, SIEMENS
3.2.	Vacuum Contactor	A	ABB, ANDREW YULE, BHEL, JYOTI, LAURITZ KNUDSEN ELECTRICAL & AUTOMATION, SCHNEIDER, SIEMENS
3.3.	CT & PT	B	AEL, JYOTI, KALPA, KAPPA, PRAGATI, PRAYOG, ECS, SCHNEIDER
3.4.	Isolator	B	ABB, A BONDSTRAND, MEGAWIN, PANICKER SWITCH GEAR PVT. LTD,
3.5.	HT Bus duct	B	BHEL, C&S, ECC, STARDRIVE BUSDUCTS LTD.

**ACCEPTABLE MAKES LIST**  
SECTION-B

S No.	ITEMS	CATEGORY	MAKE
<b>4. PROTECTION &amp; METERING</b>			
4.1.	Protective Relays	<b>A</b>	<b>ABB, GE VERNOVA, HITACHI ENERGY INDIA LIMITED, SCHNEIDER, SIEMENS</b>
4.2.	SCADA/ SAS System	<b>A</b>	<b>ABB, ECIL, ETAP, GE VERNOVA, HITACHI ENERGY INDIA LIMITED, HONEYWELL, SCHNEIDER ELECTRIC INFRASTRUCTURE LTD, SIEMENS</b>
<b>5. LT SWITCHGEAR</b>			
5.1.	Intelligent motor controller for IMCC	<b>A</b>	<b>ABB, LAURITZ KNUDSEN ELECTRICAL &amp; AUTOMATION, ROCKWELL AUTOMATION, SCHNEIDER, SIEMENS</b>
5.2.	Power Control Centre (PCC)	<b>B</b>	<b>ABB, ADARSHA CONTROL &amp; AUTOMATION PVT LTD, BCH, IEE PROJECTS, LAURITZ KNUDSEN ELECTRICAL &amp; AUTOMATION, PCE PROJECTS PVT. LTD., SCHNEIDER, SIEMENS, TENCO SYSTEMS AND SWITCH GEARS PVT. LTD., TRAANSRECT INDUSTRIES</b>
5.3.	Motor Control Centre (MCC) up to 1000 Amps and PDB	<b>B</b>	<b>ABB, ADARSHA CONTROL &amp; AUTOMATION PVT LTD, BCH, C&amp;S, DIVYA ENGINEERS, HAVELLS, IEE PROJECTS, LAURITZ KNUDSEN ELECTRICAL &amp; AUTOMATION, MARINE ELECTRICAL, MEDITRON, PCE PROJECTS PVT. LTD, SCHNEIDER, SEN &amp; SINGH, SIEMENS, SWITCHING CIRCUITS, TRAANSRECT INDUSTRIES</b>
5.4.	Motor Control Centre (MCC) above 1000 Amps	<b>B</b>	<b>ABB, ADARSHA CONTROL &amp; AUTOMATION PVT LTD, BCH, C&amp;S, LAURITZ KNUDSEN ELECTRICAL &amp; AUTOMATION, SCHNEIDER, SIEMENS</b>
5.5.	Air circuit breaker (ACB)	<b>B</b>	<b>ABB, LAURITZ KNUDSEN ELECTRICAL &amp; AUTOMATION, SCHNEIDER, SIEMENS</b>

**ACCEPTABLE MAKES LIST**  
SECTION-B

S No.	ITEMS	CATEGORY	MAKE
5.6.	Moulded case circuit breaker (MCCB)  (with positive isolation)	<b>B</b>	<b>ABB, BCH, C&amp;S, HAVELLS, LAURITZ KNUDSEN ELECTRICAL &amp; AUTOMATION, SCHNEIDER, SIEMENS, EATON, ANDREW YULE</b>
5.7.	Motor Protection Circuit Breaker (MPCB)	<b>B</b>	<b>ABB, BCH, C&amp;S, EATON, HAVELLS, LAURITZ KNUDSEN ELECTRICAL &amp; AUTOMATION, ROCKWELL AUTOMATION SCHNEIDER, SIEMENS, SPRECHER &amp; SCHUH</b>
5.8.	Power Contactors, Auxiliary contactors/ Auxiliary relays	<b>B</b>	<b>ABB, ANDREW YULE, BCH, C&amp;S, EATON, LAURITZ KNUDSEN ELECTRICAL &amp; AUTOMATION, OEN (AUXILIARY/ CONTROL RELAY ONLY), ROCKWELL AUTOMATION-ALLEN BRADLEY, SCHNEIDER, SIEMENS, SPRECHER &amp; SCHUH</b>
5.9.	Control switches	<b>B</b>	<b>ABB, BCH, EPCC, KAYCEE, LAURITZ KNUDSEN ELECTRICAL &amp; AUTOMATION, SCHNEIDER, SIEMENS, SALZER</b>
5.10.	Thermal bimetallic Overload relays	<b>B</b>	<b>ABB, ANDREW YULE, BCH, C&amp;S, LAURITZ KNUDSEN ELECTRICAL &amp; AUTOMATION, ROCKWELL AUTOMATION, SCHNEIDER, SIEMENS</b>
5.11.	Electronic over current relay/ Electronic motor protection relay (EOCR/ EMPR)	<b>B</b>	<b>ABB, BCH, C&amp;S, EATON, LAURITZ KNUDSEN ELECTRICAL &amp; AUTOMATION, ROCKWELL, SCHNEIDER, SIEMENS, SPRECHER &amp; SCHUH</b>
5.12.	LT bus duct	<b>B</b>	<b>C&amp;S, ECC, IEE PROJECTS PVT. LTD.  LOTUS POWER, LAURITZ KNUDSEN ELECTRICAL &amp; AUTOMATION, SPEARHEAD, STARDRIVE BUSDUCTS LTD.</b>
<b>6.</b>	<b>ILLUMINATION</b>		
6.1.	Lighting fixtures	<b>B</b>	<b>BAJAJ, CROMPTON GREAVES CONSUMER ELECTRICALS LIMITED, EVEREADY, FORUS ELECTRIC PVT. LTD., GE LIGHTING, HALONIX TECHNOLOGIES PVT. LTD,</b>

**ACCEPTABLE MAKES LIST**  
SECTION-B

S No.	ITEMS	CATEGORY	MAKE
			HAVELLS, ORIENT ELECTRIC LIMITED, PHILIPS, PYROTECH ELECTRONICS PRIVATE LIMITED, SURYA, SYSKA, TRANSRAIL LIGHTING LIMITED, TURNPOINT TECHNOLOGIES PRIVATE LIMITED, WIPRO
6.2.	High Mast Tower	B	BAJAJ, CROMPTON GREAVES CONSUMER ELECTRICALS LIMITED, ENERGYGREEN TECHNOPOWER PVT. LTD., PHILIPS, SURYA ROSHNI LIMITED, TRANSRAIL, VALMONT, CONSOL, BP PROJECTS, VENTURA
<b>7. TRANSFORMER</b>			
7.1.	Up to 33 kV (Oil Type)	A	BHARAT BIJLEE, BHEL, CG POWER & INDUSTRIAL SOLUTIONS LTD, INDCOIL TRANSFORMER (UPTO 2 MVA), ESENNAR TRANSFORMER, HITACHI ENERGY INDIA LIMITED, KIRLOSKAR ELECTRIC COMPANY, PROLEC GE, RAYCHEM-RPG, SAI ELECTRICALS (UPTO 1 MVA), SCHNEIDER, SIEMENS, VOLTAMP TRANSFORMERS LTD, ANDREW YULE, TRANSFORMER & RECTIFIER, KOTSONS (UPTO 630kVA only)
7.2.	Above 33 kV (Oil Type)	A	BHARAT BIJLEE, BHEL, CG POWER & INDUSTRIAL SOLUTIONS LTD, GE VERNOVA, HITACHI ENERGY INDIA LIMITED, TELK, SCHNEIDER, SIEMENS, TBEA ENERGY (INDIA) PRIVATE LIMITED, TOSHIBA TRANSMISSION & DISTRIBUTION SYSTEMS (INDIA) PVT LTD, TRANSFORMER & RECTIFIER, KIRLOSKAR ELECTRIC COMPANY
7.3.	Dry type	A	BHEL, CG POWER & INDUSTRIAL SOLUTIONS LTD, INDCOIL TRANSFORMER (UPTO 2 MVA), ESENNAR TRANSFORMER, HITACHI ENERGY INDIA LIMITED, KIRLOSKAR ELECTRIC COMPANY, RPG-

ACCEPTABLE MAKES LIST  
SECTION-B

S No.	ITEMS	CATEGORY	MAKE
			RAYCHEM, VOLTAMP TRANSFORMERS LTD, SUDHIR
8.	<b>MV REACTOR</b>	<b>A</b>	CG POWER & INDUSTRIAL SOLUTIONS LTD, GE T&D, PS ELECTRICALS, QUALITY POWER, SHRIHANS ELECTRICALS PVT. LTD., TRANSFORMER & RECTIFIER, SCHNEIDER
<b>9. DRIVES</b>			
9.1.	Variable frequency drive (VFD)<1.1kV	<b>B</b>	ABB, CG POWER & INDUSTRIAL SOLUTIONS LTD. (for motor upto 30 kW), CONTROL TECHNIQUES INDIA PRIVATE LIMITED (for motor upto 200 kW), DANFOSS, DELTA ELECTRONICS INDIA PVT LTD, FUJI, GE VERNOVA, HITACHI-HIREL, MITSUBISHI ELECTRIC INDIA PRIVATE LIMITED, ROCKWELL AUTOMATION, SCHNEIDER, SIEMENS, TMEIC, YASKAWA
9.2.	Thyristor Converter/ DC DRIVE	<b>B</b>	ABB, GE VERNOVA, PARKER, ROCKWELL AUTOMATION, SIEMENS, FUJI
9.3.	Soft starter	<b>B</b>	ABB, LAURITZ KNUDSEN ELECTRICAL & AUTOMATION, ROCKWELL AUTOMATION, SIEMENS, SCHNEIDER, DANFOSS
9.4.	FCMA /series reactor type soft starter	<b>B</b>	INNOVATIVE TECHNOMICS, JAYASHREE, SHRIHANS ELECTRICALS PVT. LTD., SCHNEIDER, LECON ENERGETICS PVT LTD
9.5.	MV Drive	<b>B</b>	ABB, HITACHI HI-REL POWER ELECTRONICS PVT. LTD (Except mill stand), INNOMOTICS INDIA PVT LTD, SCHNEIDER, TMEIC INDUSTRIAL SYSTEMS INDIA PRIVATE LIMITED (Except mill stand)
<b>10. MOTORS</b>			
10.1.	Synchronous Motor	<b>A</b>	ABB, BHEL, INNOMOTICS INDIA PVT LTD, GE VERNOVA



ACCEPTABLE MAKES LIST  
SECTION-B

S No.	ITEMS	CATEGORY	MAKE
10.2.	HT – AC	A	ABB, BHEL, CG POWER & INDUSTRIAL SOLUTIONS LTD., INNOMOTICS INDIA PVT LTD, KIRLOSKAR ELECTRIC COMPANY, WEG, TMEIC, JEUMONT ELECTRIC INDIA PVT LTD
10.3.	LT – AC	B	ABB, BHARAT BIJLEE, CG POWER & INDUSTRIAL SOLUTIONS LTD., HAVELLS INDIA LTD (UPTO 90 KW), HINDUSTAN ELECTRIC MOTORS (For up-to 22 kW), KIRLOSKAR ELECTRIC COMPANY, LHP, INNOMOTICS INDIA PVT LTD, WEG, NGEF, BHEL, NORD
10.4.	DC	B	BHEL, IEC, KIRLOSKAR ELECTRIC COMPANY, CG POWER & INDUSTRIAL SOLUTION
<b>11. CABLES</b>			
11.1.	33kV cable XLPE	A	CCI (Cable Corporation of India), CRYSTAL, GEMSCAB INDUSTRIES LTD, GLOSTER, HAVELLS INDIA LIMITED, KEC, KEI, POLYCAB, UNIVERSAL (MP BIRLA GROUP)
11.2.	HT (up to 11kV) cable XLPE	A	CCI, DYNAMIC CABLES LTD., GEMSCAB INDUSTRIES LTD., GLOSTER, HAVELLS, KEC, KEI, POLYCAB, STERLITE POWER, UNIVERSAL (MP BIRLA GROUP)
11.3.	LT power & control cable	B	BMI CABLES (UPTO 70 SQMM), CCI, CORDS CABLE INDUSTRIES LTD. (For CONTROL CABLES), FINOLEX CABLES, GEMSCAB INDUSTRIES LTD., GLOSTER, HAVELLS, INSUCON, KEC, KEI, POLYCAB, RAVIN, SPECIAL CABLE PVT. LTD., SUYOG ELECTRICALS LIMITED, SVARN INFRATEL PVT. LTD. (for control cable only), THERMO CABLES, UNIVERSAL (MP BIRLA GROUP), LAPP, NANGALWALA INDUSTRIES (P) LTD
<b>12. MISCELLANEOUS</b>			

ACCEPTABLE MAKES LIST  
SECTION-B

S No.	ITEMS	CATEGORY	MAKE
12.1.	Battery charger	B	AMARA RAJA POWER SYSTEMS LTD, APLAB, CHLORIDE (EXIDE), CHHABI ELECTRICALS, LIVELINE ELECTRONICS, NELCO, HBL POWER SYSTEMS LIMITED, VERTIV ENERGY PRIVATE LIMITED
12.2.	Battery Bank	B	AMARA RAJA, AMCO, EXIDE, FURUKAWA, PANASONIC, HBL POWER SYSTEMS LIMITED,
12.3.	Master controller	B	EATON, ELECTROMAG, EPCC, KAYCEE, LAURITZ KNUDSEN ELECTRICAL & AUTOMATION, SIEMENS, KAKKU, SPHONBUCKART, GESMANN, SCHNEIDER
12.4.	Un-interruptible power supply (UPS):	B	EATON POWER QUALITY PVT. LTD., FUJI ELECTRIC CONSUL NEOWATT P LTD, HITACHI-HIREL, NUMERIC, SCHNEIDER (APC), VERTIV ENERGY PRIVATE LIMITED
12.5.	Nitrogen injection fire protection system	B	CTR, EASUN-MR TAP CHANGERS(P) LTD., TECTONICUS, VENDERE
13.	<b>GENERATOR</b>	B	ABB, BHEL, INNOMOTICS INDIA PVT LTD, TOYO DENKI



SECTION-C

# MECHANICAL

ACCEPTABLE MAKES LIST  
SECTION-C

SNo.	ITEMS	CATEGORY	MAKE
1.	<b>GENERAL</b>		
1.1.	Gearbox (50 kW and above)	<b>A</b>	<b>BONFIGLIOLI, ELECON, SIEMENS-FLENDER, ROSSI, SUMITOMO, HEC, KIRLOSKAR, SHANTHI</b>
	Gearbox (below 50 kW)	<b>B</b>	<b>BONFIGLIOLI, ELECON, SIEMENS-FLENDER, ROSSI, SUMITOMO, ESENPRO POWER TRANSMISSION PVT. LTD., HEC, KIRLOSKAR, NAW, SHANTHI, PREMIUM TRANSMISSION, SAN ENGG. &amp; LOCOMOTIVE COMPANY LTD., SUMI- CYCLO DRIVE INDIA PVT. LTD., TRIVENI, SCHMIEDE AND MASCHINEN</b>
1.2.	Geared Motor (5 kW and above)	<b>A</b>	<b>BONFIGLIOLI, CYCLO TRANSMISSIONS, IC INDIA LTD., INNOMOTICS INDIA PVT. LTD., ROSSI, NORD, SEW-EURO DRIVE</b>
	Geared Motor (below 5 kW)	<b>B</b>	<b>BONFIGLIOLI, CYCLO TRANSMISSIONS, ESENPRO POWER TRANSMISSION PVT. LTD., IC INDIA LTD., INNOMOTICS INDIA PVT. LTD., NORD, POWER BUILD, ROSSI, SEW-EURO DRIVE, SHANTHI, SUMI-CYCLO DRIVE INDIA PVT.LTD.</b>
1.3.	Geared Coupling (50 kW and above)	<b>A</b>	<b>ELECON, RATHI (LOVEJOY), SIEMENS-FLENDER, TIMKEN, FENNER</b>
	Geared Coupling (below 50 kW)	<b>B</b>	<b>ELECON, FLEX-TRAN INDUSTRIES, RATHI (LOVEJOY), SIEMENS-FLENDER, TIMKEN, CONCORD STEEL WORKS PVT. LTD., ESCO, GBM, NAW, WELLMAN WACOMA, FENNER, SCHMIEDE AND MASCHINEN</b>
1.4.	Pin Bush/ Bibby Coupling (10kW and above)	<b>A</b>	<b>ELECON, GBM, RATHI (LOVEJOY)</b>
	Pin Bush/ Bibby Coupling (below 10kW)	<b>B</b>	<b>ELECON, GBM, RATHI (LOVEJOY), NAW, FENNER</b>
1.5.	Barrel Coupling	<b>A</b>	<b>JAURE, MALMEDIE, RINGFEDER POWER TRANSMISSION</b>

ACCEPTABLE MAKES LIST  
SECTION-C

SNo.	ITEMS	CATEGORY	MAKE
1.6.	Fluid Coupling	<b>A</b>	<b>ELECON, FLUIDOMAT, GHATGE-PATIL INDUSTRIES, PREMIUM TRANSMISSION, VOITH</b>
1.7.	Resilient Coupling	<b>A</b>	<b>ELECON, FENNER, RATHI (LOVEJOY), NAW, TIMKEN, WELLMAN WACOMA</b>
1.8.	Transmission Chain & Sprocket	<b>B</b>	<b>DIAMOND, GOLDEN ENGG &amp; ENTERPRISE, RENOLD, ROLCON, ROLKOBO, ROLON</b>
1.9.	DCEM Shoe Brake	<b>A</b>	<b>BCH ELECTRIC LTD, ELEKTROMAG, KAKKU, KATEEL, SIBRE, SPEED-O-CONTROL, EMCO PRECIMA ENGINEERING PVT LTD. (BUBENZER BREMSEN)</b>
1.10.	DCEM Disc Brake	<b>A</b>	<b>BCH ELECTRIC LTD, ELEKTROMAG, KAKKU, KATEEL, PETHE, SIBRE, SPEED-O-CONTROL, EMCO PRECIMA ENGINEERING PVT LTD. (BUBENZER BREMSEN)</b>
1.11.	Hydraulic thruster brake	<b>A</b>	<b>EMCO PRECIMA ENGINEERING PVT LTD. (BUBENZER BREMSEN), KATEEL, SIBRE</b>
1.12.	Non-metallic Liner	<b>B</b>	<b>KAVERI, TEGA, THEJO</b>
1.13.	Wearing Plates (Metallic)	<b>B</b>	<b>NLMK INDIA, SSAB (HARDOX), QUARD &amp; QUEND</b>
1.14.	Lathe & Shaper	<b>B</b>	<b>BATLIBOI, GUJARAT LATHE MANUFACTURING COMPANY PVT. LTD., HEC, HMT</b>
1.15.	Welding Rectifier/transformer	<b>B</b>	<b>ADVANI, ADOR, ESAB, MOGORA COSMIC, MEMCO</b>
1.16.	Bearing	<b>A</b>	<b>KOYO (JTEKT), NTN, SCHAEFFLER, SKF, TIMKEN</b>
1.17.	Slew Bearing	<b>A</b>	<b>LIEBHERR, ROTHE ERDE (THYSSENKRUPP), SKF</b>
1.18.	Split Bearing	<b>A</b>	<b>COOPER, TIMKEN, SKF</b>
1.19.	Passenger cum Goods Elevator (544 kg and above)	<b>A</b>	<b>MITSUBISHI, OTIS, THYSSENKRUPP, SCHINDLER</b>

ACCEPTABLE MAKES LIST  
SECTION-C

SNo.	ITEMS	CATEGORY	MAKE
	Passenger cum Goods Elevator (below 544 kg)	<b>B</b>	<b>MITSUBISHI, OTIS, THYSSENKRUPP, SCHINDLER, ECE, KONE ELEVATOR, OMEGA</b>
1.20.	Hook (up to 10 t)	<b>B</b>	<b>FREE TRADING CORPORATION, HERMAN MOHTA, SMRITI FORGING &amp; ENGG, MACHINE TOOLS, STEEL FORGINGS &amp; ENGINEERING</b>
1.21.	Hook (above 10t)	<b>A</b>	<b>FREE TRADING CORPORATION, HERMAN MOHTA, SMRITI FORGING &amp; ENGG, STEEL FORGINGS &amp; ENGINEERING</b>
1.22.	Wire Rope	<b>B</b>	<b>BHARAT WIRE ROPES, BOMBAY WIRE ROPE, ORION ROPES, USHA MARTIN</b>
1.23.	Expansion Joint for Hot Blast system (metallic)	<b>A</b>	<b>FLEXATHERM, FLEXICAN, LONE STAR, MB METALLIC BELLOWS</b>
1.24.	Stove Valves (two lever/ three lever/ double eccentric butterfly valve)	<b>A</b>	<b>FOURESS, JOSHI &amp; JAMPALA, L&amp;T</b>
1.25.	Hot Blast Valve	<b>A</b>	<b>FOURESS, JOSHI &amp; JAMPALA</b>
1.26.	Coil Strapping M/c	<b>B</b>	<b>KOHAN KOGYO CO., SIGNODE, SUND BRISTA, TITAN</b>
<b>2. MATERIAL HANDLING EQUIPMENT</b>			
2.1.	Conveyor Belt	<b>B</b>	<b>ARB CONVEYORS LIMITED, CENTURY INDUSTRIAL PRODUCTS, FORECH INDIA LTD, FENNER-DUNLOP, HINDUSTAN RUBBER, MAHAJAN CONVEYORS, NRC INDUSTRIES LTD., ORIENTAL RUBBER, PHOENIX CONVEYOR BELT (INDIA) PVT. LTD, SEMPETRANS INDIA PVT LTD.</b>

ACCEPTABLE MAKES LIST  
SECTION-C

SNo.	ITEMS	CATEGORY	MAKE
2.2.	Idler	<b>B</b>	AMPS ENGG. & EQUIPT. PVT. LTD., BENGAL TOOLS, BEVCON, ELECON, GOLDEN ENGG & ENTREPRISE, GOLDEN ENGINEERING INDUSTRIES, HITECH EQUIPMENTS PVT. LTD., INDIANA CONVEYORS, L & T, MACMET, TEGA MCNALLY MINERALS LIMITED, NEWALL INDUSTRIES, SANRAJ PROJECTS PVT. LTD., SANDVIK ASIA, SOLCON, TECHNO IMPEX, VINAR SYSTEMS, VN INDUSTRIES
2.3.	Pulley	<b>B</b>	AMPS ENGG. & EQUIPT. PVT. LTD., BENGAL TOOLS, BEVCON, ELECON, GOLDEN ENGG & ENTREPRISE, GOLDEN ENGINEERING INDUSTRIES, HITECH EQUIPMENTS PVT. LTD., INDIANA CONVEYORS, L & T, MACMET, TEGA MCNALLY MINERALS LIMITED, NEWALL INDUSTRIES, SANRAJ PROJECTS PVT. LTD., SANDVIK ASIA, SOLCON, TECHNO IMPEX, VINAR SYSTEMS, VN INDUSTRIES
2.4.	Belt Weigher / Weigh feeder System	<b>A</b>	ACME, FLSMIDTH, PFISTER, PRECIA MOLEN, QLAR, SIEMENS (MILTRONICS)
2.5.	Plummer Block (100mm shaft dia at bearing and above)	<b>A</b>	MASTA, SCHAEFFLER, SKF, TIMKEN
	Plummer Block (below 100mm shaft dia at bearing)	<b>B</b>	MASTA, NANDY ENGINEERING CONCERN, SCHAEFFLER, SKF, TIMKEN
2.6.	Belt Scraper (belt width 1000mm and above)	<b>B</b>	HOSCH, KAVERI, THEJO
	Belt Scraper (belt width below 1000mm)	<b>B</b>	HOSCH, KAVERI, INDIANA CONVEYORS, THEJO

ACCEPTABLE MAKES LIST  
SECTION-C

SNo.	ITEMS	CATEGORY	MAKE
2.7.	Vibrating Screen (100tph and above)	<b>A</b>	<b>METSO, QLAR, SANDVIK, FLSMIDTH</b>
	Vibrating Screen (below 100tph)	<b>B</b>	<b>ELECTRO ZAVOD, ELEKTROMAG-JOEST VIBRATION PVT. LTD., IC INDIA LTD., TEGA MCNALLY MINERALS LIMITED, METSO, QLAR, SANDVIK, FLSMIDTH,</b>
2.8.	Vibrating Feeder	<b>A</b>	<b>ELECTRO ZAVOD, ELEKTROMAG-JOEST VIBRATION PVT. LTD, IC INDIA LTD., TEGA MCNALLY MINERALS LIMITED, METSO, QLAR, SANDVIK, FLSMIDTH,</b>
2.9.	Apron Feeder (500tph and above)	<b>A</b>	<b>L &amp; T, THYSSEN KRUPP, SANDVIK, METSO</b>
	Apron Feeder (below 500tph)	<b>B</b>	<b>ELECON, HAZEMAG, L &amp; T, TEGA MCNALLY MINERALS LIMITED, TENGL, THYSSEN KRUPP, SANDVIK, METSO</b>
2.10.	Screw Conveyor	<b>B</b>	<b>GMV ENGG, MASYC, VINAR SYSTEMS</b>
2.11.	Electromechanical Actuator	<b>B</b>	<b>AUMA, LIMITORQUE, ROTORK</b>
2.12.	EOT Crane (all capacities)	<b>A</b>	<b>ANUPAM INDUSTRIES, HEC, JINDAL STEEL &amp; POWER, MUKAND, TATA GROWTH SHOP, UNIQUE INDUSTRIAL HANDLERS</b>
	EOT Crane (maximum 50 t)	<b>A</b>	<b>CENTURY CRANE, MELTECH CRANES PVT. LTD., FAFECO, SMACO, ALPHA, MECHTROTECH PROJECTS PVT. LTD.</b>
	EOT Crane (maximum 10 t)	<b>B</b>	<b>EDDY CRANE, SHIVPRA, TUOBRO FURGUSON, ELECTRO THERAPY, REVA INDUSTRIES</b>
2.13.	Electric Hoist	<b>B</b>	<b>BRADY &amp; MORRIS, CENTURY CRANE, EDDY CRANE, ELECTROTHERAPY, GRIP ENGRS., HERCULES HOIST LTD. (INDEF), HI-TECH INDUSTRIES, MELTECH CRANES PVT. LTD., REVA ENGG, SHIVPRA</b>



ACCEPTABLE MAKES LIST  
SECTION-C

SNo.	ITEMS	CATEGORY	MAKE
2.14.	Electric Winch	<b>B</b>	<b>EDDY CRANE, MHS PVT. LTD. ENGG, ELECTROTHERAPY, HMTC ENGG. CO., PULLMAN</b>
2.15.	Jib Crane	<b>A</b>	<b>BRADY &amp; MORRIS, CENTURY CRANES, GRIP ENGG, MELTECH CRANES PVT. LTD., EDDY CRANE</b>
2.16.	Chain Pulley Block & Hand Operated Travelling Crane	<b>B</b>	<b>BRADY&amp; MORRIS, CENTURY CRANES, HERCULES HOIST LTD. (INDEF), HI-TECH., LIGHT LIFT IND., REVA ENGG, TRACTEL TIRFOR</b>
2.17.	Underslung Cranes	<b>B</b>	<b>EDDY CRANE, CENTURY CRANES, FAFECO, MUKAND, KONE CRANES &amp; DEMAG, REVA ENGG, ALPHA, BRADY &amp; MORRIS, SHIVPRA, TUOBRO FURGUSON</b>
2.18.	Shock Absorbers /Hydraulic Buffer	<b>A</b>	<b>ENIDINE, OLEO, ACE CONTROLS</b>
2.19.	Electro Magnet	<b>A</b>	<b>EAST COAST ENTERPRISERS, ELEKTROMAG, SGM, SUPERLIFT</b>
2.20.	Tongs	<b>B</b>	<b>ARMATIC ENGG., BUCK, HEPPENSTALL, SOMERS, YELLOW STONE INDIA</b>
2.21.	Stacker or Reclaimer	<b>A</b>	<b>ELECON, FLSMIDTH, HEC, L &amp; T, TEGA MCNALLY MINERALS LIMITED, METSO, SANDVIK ASIA, TENOVA TAKRAF, THYSSENKRUPP</b>
2.22.	Stacker-cum-Reclaimer	<b>A</b>	<b>FLSMIDTH, HEC, L &amp; T, TEGA MCNALLY MINERALS LIMITED, METSO, SANDVIK ASIA, TENOVA TAKRAF, THYSSENKRUPP</b>
2.23.	Bucket-Wheel Reclaimer	<b>A</b>	<b>FLSMIDTH, HEC, L &amp; T, TEGA MCNALLY MINERALS LIMITED, METSO, TENOVA TAKRAF, THYSSENKRUPP, SANDVIK ASIA</b>
2.24.	Wagon Tippler	<b>A</b>	<b>ELECON, FLSMIDTH, HEC, L &amp; T, TEGA MCNALLY MINERALS LIMITED, METSO, THYSSENKRUPP</b>
2.25.	Hanging Magnet/ Cross belt/ Inline	<b>A</b>	<b>ELECTRO ZAVOD, ELEKTROMAG, HUMBOLDT WEDAG, TEGA MCNALLY MINERALS LIMITED, METSO</b>

ACCEPTABLE MAKES LIST  
SECTION-C

SNo.	ITEMS	CATEGORY	MAKE
	Magnetic Separator		
2.26.	Fork Lift	<b>B</b>	<b>GODREJ, TIL, VOLTAS</b>
2.27.	Crusher (Cone / Gyratory / Jaw)	<b>A</b>	<b>FLSMIDTH, HEC, L&amp;T, TEGA MCNALLY MINERALS LIMITED, METSO, SANDVIK, THYSSENKRUPP, URALMASH</b>
2.28.	Impact / Hammer Crusher	<b>A</b>	<b>HEC, L&amp;T, TEGA MCNALLY MINERALS LIMITED, METSO, SANDVIK, TERRASOURCE, THYSSENKRUPP</b>
2.29.	Roll Crusher	<b>A</b>	<b>ELECON, FLSMIDTH, HEC, L&amp;T, TEGA MCNALLY MINERALS LIMITED, SANDVIK, THYSSENKRUPP, URALMASH</b>
2.30.	Rotary Breaker	<b>A</b>	<b>L&amp;T, TEGA MCNALLY MINERALS LIMITED, TERRASOURCE, THYSSENKRUPP</b>
2.31.	Industrial/ Cabin/Crane e-room AC (except those used in coke oven machines & ladle handling cranes)	<b>A</b>	<b>ADVANCED COOLING SYSTEMS PVT. LTD., DOCON AIRCONDITIONING PVT. LTD., FRIGORTEC, KABU, LINTERN</b>
2.32.	Industrial/ Cabin/ Crane e-room AC	<b>A</b>	<b>FRIGORTEC, KABU, LINTERN</b>
<b>3.</b>	<b>HYDRAULICS SYSTEM</b>		
3.1.	Hydraulic Cylinder	<b>A</b>	<b>APEX FLUIDOMATICS PVT. LTD., CANARA HYDRAULICS, DANVER, EATON, HYDRO PNEUMATIC CONTROLS, OSCAR, PARKER, REXROTH, VEKTRA ENGG., VELJAN, WIPRO, YUKEN</b>
3.2.	Hydraulic System with Accessories	<b>A</b>	<b>EATON, HYDAC, PARKER, REXROTH, YUKEN</b>

ACCEPTABLE MAKES LIST  
SECTION-C

SNo.	ITEMS	CATEGORY	MAKE
3.3.	Hydraulic Valves	<b>A</b>	<b>CANARA HYDRAULICS, EATON, HYDAC, MOOG, PARKER, REXROTH, YUKEN</b>
3.4.	Accumulator	<b>A</b>	<b>BOSCH, EATON, EPE, HYDAC, PARKER, REXROTH, YUKEN</b>
3.5.	Hydraulic Fitting & Clamp	<b>B</b>	<b>EPE, FLUID CONTROL HYDROCRIMP, HYDAC, HYD-AIR, HYDROMATIK, HYTECH, PTS, STAUFF</b>
3.6.	Hydraulic Filter	<b>B</b>	<b>HYDAC, EATON (INTERNORMEN), PARKER</b>
3.7.	Hydraulic Motor	<b>A</b>	<b>DANFOSS POWER SOLUTIONS, EATON, MAHA HYDRAULICS, PARKER, REXROTH, YUKEN</b>
3.8.	Hydraulic Pump	<b>A</b>	<b>DANFOSS POWER SOLUTIONS, EATON, MAHA HYDRAULICS, PARKER, REXROTH, YUKEN</b>
3.9.	Hose	<b>B</b>	<b>AEROFLEX, EATON, HYDROKRIMP, HYDROLINES, INDIA FLEX INDUSTRIES, PARKER, PSI HYDRAULICS, SONI RUBBER PRODUCTS LTD., SUPERSEAL</b>
<b>4.</b>	<b>PNEUMATIC SYSTEM</b>		
4.1.	Pneumatic Cylinder	<b>B</b>	<b>CANARA HYDRAULICS, DUNCAN ENGINEERING LIMITED, EL-O-MATIC (INDIA) PVT. LTD., GABRIEL PNEUMATICS, HYD-AIR, HYDRO PNEUMATIC CONTROLS, I.L. PALAKKAD, NUCON, ROTEX, SMC, VELJAN, WIPRO</b>
<b>5.</b>	<b>LUBRICATION SYSTEM</b>		
5.1.	Oil Lubrication System for Rolling Mills, Sinter Plant, Blast Furnace, Bulk material equip	<b>A</b>	<b>HYDAC, SKF ENGINEERING AND LUBRICATION INDIA PRIVATE LIMITED, LUBRICATION SYSTEMS LTD, BIJUR DELIMON, REBS LUBRICATION</b>
5.2.	Oil Lubrication System other	<b>B</b>	<b>HYDAC, SKF ENGINEERING AND LUBRICATION INDIA PRIVATE LIMITED, LUBRICATION SYSTEMS LTD,</b>

ACCEPTABLE MAKES LIST  
SECTION-C

SNo.	ITEMS	CATEGORY	MAKE
	than above (Cl. 5.1)		<b>PRAKASH LUBRIQUIPMENT, SHAAN LUBE, BIJUR DELIMON, REBS LUBRICATION</b>
5.3.	Screw Pump	<b>B</b>	<b>ALLWEILER PUMPS PVT. LTD., ROTO, UT PUMPS &amp; SYSTEM</b>
5.4.	Gear Pump	<b>B</b>	<b>ALFA, ALLWEILER PUMPS PVT. LTD., PARKER, REXROTH, ROTO, ROTODEL</b>
5.5.	Filter Strainer	<b>B</b>	<b>MULTITEX FILTRATION, OTOKLIN, SPAN ASSOCIATES PUNE, SUPERFLO FILTERS</b>
5.6.	Oil Mist / Oil-Air Lubrication System	<b>A</b>	<b>BIJUR DELIMON, SKF ENGINEERING AND LUBRICATION INDIA PRIVATE LIMITED, REBS LUBRICATION</b>
5.7.	Grease Lubrication System for Rolling Mills, Sinter Plant, Blast Furnace, Bulk material Handling Equip	<b>A</b>	<b>AFMC, BIJUR DELIMON, SKF ENGINEERING AND LUBRICATION INDIA PRIVATE LIMITED, REBS LUBRICATION</b>
5.8.	Grease Lubrication System other than above (Cl 5.7)	<b>B</b>	<b>AFMC, BIJUR DELIMON, CENLUB SYSTEMS, SKF ENGINEERING AND LUBRICATION INDIA PRIVATE LIMITED, PRAKASH LUBRIQUIPMENT, REBS LUBRICATION</b>
5.9.	Hose	<b>B</b>	<b>AEROFLEX, HYDROKRIMP, HYDROLINES, PSI HYDRAULICS, SONI RUBBER PRODUCTS LTD., SUPERSEAL</b>



SECTION-D

# MINING & MINERAL PROCESSING AREA

**ACCEPTABLE MAKES LIST  
SECTION-D**

<b>SNo.</b>	<b>ITEMS</b>	<b>CATEGORY</b>	<b>MAKE</b>
1.	Sizer	<b>A</b>	<b>FLSMIDTH, MMD, SANDVIK, THYSSENKRUPP</b>
2.	Ball / Rod / Ag Mill	<b>A</b>	<b>CEMTEC, CHANDERPUR WORKS PVT. LTD., FLSMIDTH, HEC, L&amp;T, TEGA MCNALLY MINERALS LIMITED, METSO, OUTOTEC, SANDVIK, THYSSENKRUPP, URALMASH</b>
3.	Classifier	<b>A</b>	<b>DORR OLIVER, DURGA METALS, EIMCO-KCP, FLSMIDTH, METSO, MBE-CMT</b>
4.	Thickener	<b>A</b>	<b>EIMCO-KCP, FLSMIDTH, TEGA MCNALLY MINERALS LIMITED, METSO, OUTOTEC, TENOVA-DELKOR</b>
5.	Jig	<b>A</b>	<b>ALLMINERAL, MBE-CMT, TENOVA-DELKOR</b>
6.	Filter (Vacuum /Pressure)	<b>A</b>	<b>ANDRITZ, EIMCO-KCP, FLSMIDTH, METSO, OUTOTEC, TENOVA-DELKOR, TH COMPANY</b>
7.	Wet High Intensity Magnetic Separator / High Gradient Magnetic Separator	<b>A</b>	<b>ALLMINERAL, ERIEZ, MBE-CMT, METSO, LONGI MAGNET, MINERAL TECHNOLOGIES, OUTOTEC</b>
8.	Low Intensity Magnetic Separator	<b>A</b>	<b>ERIEZ, LONGI MAGNET, MBE-CMT, METSO, MINERAL TECHNOLOGIES, MULTOTEC</b>
9.	Dewatering Screen	<b>A</b>	<b>DERRICK, FLSMIDTH –LUDOWICI, IC, METSO, TEGA MCNALLY MINERALS LIMITED, SCHENCK PROCESS, WEIR MINERALS</b>
10.	Spiral – Gravity Concentrator	<b>A</b>	<b>AKW A+V GMBH, FLSMIDTH, MINERAL TECHNOLOGIES, MULTOTEC, OUTOTEC</b>
11.	Hydrocyclones	<b>A</b>	<b>CDE, FLSMIDTH KERBS, TEGA MCNALLY MINERALS LIMITED, METSO, MOZLEY, MULTOTEC, WEIR MINERALS</b>
12.	Metal Detector	<b>A</b>	<b>ELECTRO ZAVOD, ELEKTROMAG, ERIEZ, MBE-CMT, METSO</b>



SECTION-E

# PROCESS CONTROL & AUTOMATION

**ACCEPTABLE MAKES LIST  
SECTION-E**

<b>S No.</b>	<b>ITEMS</b>	<b>CATEGORY</b>	<b>MAKE</b>
<b>1.</b>	<b>FIELD INSTRUMENTATION</b>		
1.1.	Pressure/differential pressure/Level/Flow Transmitter	<b>A</b>	<b>ABB, EMERSON, E&amp;H, FUJI, HONEYWELL, YOKOGAWA, SIEMENS</b>
1.2.	Temperature Transmitter	<b>A</b>	<b>ABB, E&amp;H, EMERSON, HONEYWELL, SIEMENS, YOKOGAWA</b>
1.3.	Pressure / DP switch	<b>A</b>	<b>ASHCROFT, BAUMER, DANFOSS, INFOFOS, WIKA, SWITZER,</b>
1.4.	Tuning Fork/ Rod type Level Switch	<b>A</b>	<b>ABB, E&amp;H, EMERSON, NIVO CONTROL, SAPCON, SIEMENS, VEGA</b>
1.5.	Conductivity/RF/Capacitance type Level Switch	<b>A</b>	<b>E&amp;H, NIVO CONTROL, P&amp;F, SAPCON, VEGA,</b>
1.6.	Float type Level Switch	<b>A</b>	<b>BAUMER, EMERSON, ENDRESS &amp; HOUSER, KROHNE MARSHALL, LEVCON, NIVO CONTROL, SAPCON, TRAC</b>
1.7.	Ultrasonic Level Sensor	<b>A</b>	<b>E&amp;H, EIP ENVIRO, EMERSON, KROHNE MARSHALL, P&amp;F, SIEMENS, SICK, VEGA</b>
1.8.	Radar Type Level Sensor	<b>A</b>	<b>E&amp;H, EIP ENVIRO, EMERSON, KROHNE, MARSHALL, SIEMENS, VEGA</b>
1.9.	Electro Magnetic Flow Meter	<b>A</b>	<b>E&amp;H, EMERSON, KROHNE MARSHALL, ROCKWIN, YOKOGAWA, SIEMENS</b>
1.10.	Flow Elements (Orifice / Venturi / Flow nozzle / Pitot tube / Annubar)	<b>A</b>	<b>ENGG SPECIALTIES, EMERSON, MECHANICAL ENGINEERS, UNI CONTROL, WIKA</b>
1.11.	Radiation Pyrometer (online/portable)	<b>A</b>	<b>CHINO, EURO THERM, LAND, WILLIAMSON CORPORATION, FLUKE</b>



**ACCEPTABLE MAKES LIST  
SECTION-E**

<b>S No.</b>	<b>ITEMS</b>	<b>CATEGORY</b>	<b>MAKE</b>
1.12.	Level SW/ Transmitter (Nucleonic type)	<b>B</b>	<b>BERTHOLD, E&amp;H, THERMOFISHER</b>
1.13.	Temperature Switch	<b>B</b>	<b>E&amp;H, IFM, HYDAC, WIKA</b>
1.14.	Flow Switch	<b>B</b>	<b>EMERSON, IFM, KROHNE MARSHAL, KOBOLD</b>
1.15.	Vortex Flow Meter	<b>A</b>	<b>E&amp;H, EMERSON, KROHNE MARSHAL, SIEMENS, YOKOGAWA</b>
1.16.	Mass (Coriolis) Flow	<b>A</b>	<b>ABB, E&amp;H, EMERSON, KROHNE MARSHAL, SIEMENS, YOKOGAWA,</b>
1.17.	Level Switch/Transmitter (Displacer Type)	<b>B</b>	<b>CHEMTROL, DK INSTRUMENTS, EMERSON, LEVCON</b>
<b>2. CONTROL VALVES</b>			
2.1.	Globe Valve	<b>A</b>	<b>DEMBLA VALVES LTD., FISHER, FORBES MARSHALL, IL PALAKKAD, KOSO, SAMSON, SEVERN, UNIFLOW CONTROLS</b>
2.2.	Butterfly Valve	<b>A</b>	<b>AIRA, DEL VAL, DEMBLA VALVES LTD., FESTO INDIA PVT. LTD., FISHER, FOURESS, IL PALAKKAD, KOSO, SEVERN</b>
2.3.	Pneumatic Actuator	<b>A</b>	<b>DEL VAL, FORBES MARSHALL, IL PALAKKAD, KOSO, OM CONTROL, ROTEX, SAMSON, UNIFLOW CONTROLS</b>
2.4.	Electrical Motor Actuator	<b>A</b>	<b>AUMA, BERNARD, LIMITORQUE, ROTORK,</b>
2.5.	Electro Pneumatic Positioner	<b>A</b>	<b>ABB, EMERSON, FORBES MARSHALL, SIEMENS</b>
<b>3. CONTROL SYSTEM EQUIPMENT</b>			

**ACCEPTABLE MAKES LIST  
SECTION-E**

<b>S No.</b>	<b>ITEMS</b>	<b>CATEGORY</b>	<b>MAKE</b>
3.1.	Signal Isolator	<b>A</b>	<b>MASIBUS, MICROSYSTEMS &amp; CONTROLS, MTL, P&amp;F, PHOENIX, STAHL, YOKOGAWA</b>
3.2.	Distributed Control System	<b>A</b>	<b>ABB, BHEL, EMERSON, HONEYWELL, SCHNEIDER, SIEMENS, ROCKWELL, TOSHIBA, YOKOGAWA,</b>
3.3.	PLC System	<b>A</b>	<b>ABB, ECIL, HITACHI, HONEYWELL, EMERSON AUTOMATION (FORMERLY "GE INTELLIGENT"), ROCKWELL, SCHNEIDER, SIEMENS</b>
3.4.	Technological Control System/ Multi-Tasking Control System/ Embedded Control System	<b>A</b>	<b>ABB, DANIELI, EMERSON AUTOMATION (FORMERLY "GE INTELLIGENT"), SIEMENS, SMS, TMEIC</b>
3.5.	PDA	<b>A</b>	<b>DANIELI, IBA, LMS, MICA, SOMAT</b>
3.6.	Panel / Enclosure / Rack	<b>B</b>	<b>APW PRESIDENT, DIVYA ENGINEERS, HOFFMANN, PYROTECH, RITTAL, VALRACK</b>
3.7.	Surge Protection	<b>A</b>	<b>DEHN, MTL, P&amp;F, PHOENIX CONTACT, OBO BETTERMANN</b>
<b>4.</b>	<b>PANEL BASED INSTRUMENTATION</b>		
4.1.	Single Loop Stand Alone Controller	<b>A</b>	<b>ABB, FUJI, HONEYWELL, SIEMENS, TOSHIBA, YOKOGAWA</b>
4.2.	Paperless Recorder	<b>A</b>	<b>CHINO, EURO THERM, FUJI, HONEYWELL, LAXONS, YOKOGAWA,</b>
4.3.	Alarm Annunciator	<b>B</b>	<b>IIC, IL, MINILEC, PROCON, SEMUDA</b>
4.4.	Regulated DC Power Supply Unit / SMPS	<b>A</b>	<b>APLAB, COSEL, PHOENIX CONTACT, SIEMENS, WAGO, WEIDMULLER ELECTRONICS INDIA PVT LIMITED</b>

**ACCEPTABLE MAKES LIST  
SECTION-E**

<b>S No.</b>	<b>ITEMS</b>	<b>CATEGORY</b>	<b>MAKE</b>
<b>5.</b>	<b>ANALYSERS</b>		
5.1.	Gas Analyser	<b>A</b>	<b>ABB CHEMTROL (AMETEK), EMERSON, FUJI, FORBES MARSHALL, HONEYWELL, PANAMETRICS, SICK, SIEMENS, YOKOGAWA</b>
5.2.	Gas Detector	<b>A</b>	<b>BEILER &amp; LANG, DETRONICS, DRAGGER, INDUSTRIAL SC. CORPN MSA, TELEDYNE</b>
5.3.	Flame Detector	<b>A</b>	<b>DURAG, ENDEE, HONEYWELL, SICK, YAMATAKE</b>
5.4.	Moisture Analyzer (Nucleonic)	<b>A</b>	<b>CHINO, BERTHOLD, EMERSON, THERMO FISHER</b>
5.5.	Moisture Analyzer (Microwave/ Capacitance Type)	<b>A</b>	<b>ABB, CHEMTROL, MOISTECH, NDC, SIEMENS</b>
5.6.	Opacity Analyser	<b>A</b>	<b>DURAG, FORBES MARSHALL, MAIHEK, SICK,</b>
5.7.	Calorific Value Analyser	<b>A</b>	<b>CHEMTROL(AMS), REINEKE, UNION CALORIMETER, YOKOGAWA, IGCA</b>
5.8.	pH / Conductivity / ORP Analyser	<b>A</b>	<b>ABB, E&amp;H, EMERSON, FORBES MARSHAL, HONEYWELL, NEVCO ENGINEERS PVT LTD., YOKOGAWA</b>
5.9.	SOX / NOX/ CO Analyser	<b>A</b>	<b>ABB, AIC (FUJI), EMERSON, FUJI, FORBES MARSHAL, HONEYWELL, SICK, SIEMENS, YOKOGAWA</b>
5.10.	Elemental Analyser	<b>A</b>	<b>JICO, MAYA, PANALYTICAL, REAL TIME, SCANTECH, THERMO SCIENTIFIC</b>
<b>6.</b>	<b>WEIGHING</b>		
6.1.	Electronic Weighing System	<b>A</b>	<b>ABB, ACME, AVERY KELK, BEST, MINEBEA INTEC (FORMERLY</b>

**ACCEPTABLE MAKES LIST  
SECTION-E**

<b>S No.</b>	<b>ITEMS</b>	<b>CATEGORY</b>	<b>MAKE</b>
	(Hopper Weighing / Platform / Scales / In-motion W.B.)		<b>SARTORIOUS), PRECIA MOLEN, RICE LAKE, SCHENK, TRANSWEIGH</b>
6.2.	Load Cells & Accessories	<b>A</b>	<b>ABB, FLINTEK, HBM, MINEBEA INTEC (FORMERLY SARTORIOUS), PRECIA MOLEN, PRECISION, RICELAKE, SCHENCK, SIEMENS, KELK</b>
<b>7.</b>	<b>SPECIAL INSTRUMENTS</b>		
7.1.	Thickness Gauge	<b>A</b>	<b>IMS, IRM, MESACON, TOSHIBA, THERMO SCIENTIFIC,</b>
7.2.	Hot Metal Detector	<b>A</b>	<b>AMERICAN SENSORS, DANIELI, DELTA, SICK, TOSHIBA, HOKUYO AUTOMATIC CO. LTD.</b>
7.3.	Width Gauge	<b>A</b>	<b>ABB, DELTA, DANIELI, IMS, PSYSTEME, THERMO SCIENTIFIC, TOSHIBA</b>
7.4.	Vibration Monitoring System	<b>B</b>	<b>BHEL, GE OIL &amp; GAS, IRD MECHANALYSIS, SCHENCK, SHINKAWA</b>
7.5.	Portable Vibration Monitor with analysis software	<b>B</b>	<b>BENTLEY NEVADA, EMERSON PROCESS MANAGEMENT INDIA PVT LTD., FORBES MARSHAL, IRO</b>
7.6.	Test & Measuring Equipment	<b>B</b>	<b>APLAB, FLUKE, KANE, SCIENTIFIC, TECHNOFIX,</b>
7.7.	Laboratory Equipment	<b>B</b>	<b>BEAMEX, FLUKE, SCANDURA, WIKA</b>
7.8.	Digital Multi-Function Meter	<b>B</b>	<b>ACORD, CONSERVE, L&amp;T, RISHAV, SECURE</b>
7.9.	Strip Profile Gauge	<b>A</b>	<b>IMS, MESACON, NDC (IRM), THERMO SCIENTIFIC, TOSHIBA,</b>
7.10.	Flatness/ Shape Gauge	<b>A</b>	<b>ABB, DELTA, IMS, P-SYSTEME, SIEMENS, THERMO SCIENTIFIC,</b>

**ACCEPTABLE MAKES LIST  
SECTION-E**

<b>S No.</b>	<b>ITEMS</b>	<b>CATEGORY</b>	<b>MAKE</b>
7.11.	Laser Doppler Velocity Meter	<b>A</b>	<b>ACCUSPEED, AMERICAN SENSORS, DELTA, KELK, LASER SPEED,</b>
7.12.	Optical Barrier	<b>A</b>	<b>ABB, AMERICAN SENSORS, DELTA, PAULI, SICK,</b>
7.13.	Position Transducer	<b>A</b>	<b>LEONARD BAUR, NSD, SONY MAGNESCALE, TEMPOSONIC, DELTA</b>
7.14.	Optical Encoder	<b>A</b>	<b>HUBNER, KUEBLER AUTOMATION INDIA PVT. LTD., LINE &amp; LINDEY, STEGMANN</b>
7.15.	Surface Inspection System	<b>A</b>	<b>ABB, COGNEX, PARSYTEC, SIEMENS, SURCON</b>
<b>8. COMMUNICATION EQUIPMENT</b>			
8.1.	Wireless Communication Equipment	<b>A</b>	<b>CISCO, EXTREME, GE, JUNIPER, LOTUS WIRELESS, MOTOROLA, MOXA, RADIUS, SATELLINE, SHEETAL WIRELESS, STAHL, PHOENIX CONTACT</b>
8.2.	EPABX	<b>A</b>	<b>ALCATEL, AVAYA, ERICSON, ITI, SIEMENS</b>
8.3.	PA System/ Conferencing system	<b>B</b>	<b>AHUJA, BOSCH, HONEYWELL, PHI AUDIO COM</b>
<b>9. DISPLAY &amp; FDA SYSTEM</b>			
9.1.	Alpha Numeric Display/ Jumbo Display	<b>B</b>	<b>AGLA, BLE BELL, GE, LECTROTEK, MICROTECH, PYROTECH ELECTRONICS, VINAY</b>
9.2.	Large Screen Display	<b>B</b>	<b>HITACHI, LG, PANASONIC, SAMSUNG, SONY</b>
9.3.	Video Walls (LED)	<b>B</b>	<b>DELTA, HITACHI, LG, PANASONIC, SAMSUNG, SONY</b>

**ACCEPTABLE MAKES LIST  
SECTION-E**

<b>S No.</b>	<b>ITEMS</b>	<b>CATEGORY</b>	<b>MAKE</b>
9.4.	Fire Detection and Alarm (FDA) System	<b>A</b>	<b>BOSCH, HONEYWELL (ESSER), HONEYWELL (NOTIFIER), KEDWARD TECHNOLOGIES INDIA PVT LTD. (EDWARDS), SCHRACK SECONET, SECURITON, SIEMENS, TYCO</b>
<b>10. INSTRUMENTATION CABLES</b>			
10.1.	Instrumentation/ Screened/ Co-axial/ Special Cables	<b>A</b>	<b>CCI, CORDS, DELTON, FINOLEX, LAPP, MEM, NICCO, SPECIAL CABLES, SUN, THERMOCABLES, TOSHNIWAL, UNIVERSAL</b>
10.2.	Telephone Cable	<b>B</b>	<b>BELDON, DELTON, FINOLEX, NICCO, TELE LINK, UNIVERSAL,</b>
10.3.	Load Cell Cable	<b>A</b>	<b>FLINTEC, HBM, PRECIA MOLEN, RICELAKE, SARTORIOUS, SCHENK, SIEMENS</b>
10.4.	T/C Extension cable, Compensating cable, PTFE cable	<b>A</b>	<b>BELDEN, LAPP, MEM, TEMCON, TEMPSENS, THERMOCABLE, TOSHNIWAL CABLES</b>



SECTION-F

# REFRACTORY

ACCEPTABLE MAKES LIST  
SECTION-F

S No.	ITEMS	CATEGORY	MAKE
1.	Fireclay Refractories (Alumina Up to 44 %)	<b>B</b>	ARUN REFRACTORIES, ARVIND INDUSTRIES, ASSOCIATED CERAMICS LTD., BRAHMA REFRACTORIES PVT. LTD., BURNPUR CERAMICS, BURNPUR INDUSTRIES, CHAMPION CERAMICS PVT. LTD., INDUSTRIAL ASSOCIATES, KHEMKA REFRACTORIES PVT. LTD., MAHAKOSHAL REFRACTORIES PVT. LTD., MAITHAN CERAMIC LTD., MANISHRI REFRACTORIES & CERAMICS PVT. LTD., PREMIER REFRACTORIES PVT. LTD., RAJHANS REFRACTORIES PVT. LTD., RHI MAGNESITA INDIA REFRACTORY LIMITED, SAIL REFRACTORY UNIT, SB STEEL REFRACTORIES PVT. LTD., SHREEKANT INDUSTRIES, SKG REFRACTORIES LTD, TRL KROSAKI REFRACTORIES LTD., VALLEY REFRACTORIES PVT. LTD.
2.	High Alumina Refractories (Alumina Above 44 %)	<b>B</b>	ARVIND INDUSTRIES, ASSOCIATED CERAMICS LTD., BRAHMA REFRACTORIES PVT. LTD., CHAMPION CERAMICS PVT. LTD., INDUSTRIAL ASSOCIATES, KHEMKA REFRACTORIES PVT. LTD. MAHAKOSHAL REFRACTORIES PVT. LTD., MAITHAN CERAMIC LTD., MANISHRI REFRACTORIES & CERAMICS PVT. LTD., PREMIER REFRACTORIES PVT. LTD., RAJHANS REFRACTORIES PVT. LTD., RANCHI REFRACTORIES (INDIA) PVT. LTD., RHI MAGNESITA INDIA REFRACTORY LIMITED, SAIL REFRACTORY UNIT, SAINT-GOBAIN PERFORMANCE CERAMICS & REFRACTORIES, SB STEEL REFRACTORIES PVT. LTD., SKG REFRACTORIES LTD, TRL KROSAKI REFRACTORIES LTD.
3.	Silica Refractories	<b>B</b>	TRL KROSAKI REFRACTORIES LTD., RHI MAGNESITA INDIA REFRACTORY LIMITED, SAIL REFRACTORY UNIT
4.	Insulation Refractories	<b>B</b>	ACHINT CHEMICALS, ASSOCIATED CERAMICS LTD., CALDERYS INDIA REFRACTORIES LTD., CARBORUNDUM UNIVERSAL LTD., MAITHAN CERAMICS LTD., MATESHWARI INSULATIONS, MURUGAPPA MORGAN THERMAL CERAMICS LTD., NAVRANG REFRACTORIES PVT. LTD., NEWKEM PRODUCTS CORPOPATION, NUTECH



ACCEPTABLE MAKES LIST  
SECTION-F

S No.	ITEMS	CATEGORY	MAKE
			REFRACTORIES PVT. LTD., PREMIER REFRACTORIES PVT. LTD., RAJASTHAN CERAMICS INDUSTRIES, RELIABLE REFRACTORIES PVT. LTD., SHREE CERAMICS FIBERS PVT. LTD., SKG REFRACTORIES LTD, VALLEY REFRACTORIES PVT. LTD.
5.	Basic Refractories (Magnesite/ Mag Chrome/ Chrome Mag/ Magnesia-Carbon/ Alumina Magnesia Carbon)	<b>B</b>	CHAMPION CERAMICS PVT. LTD., MAITHAN CERAMIC LTD., MANISHRI REFRACTORIES & CERAMICS PVT. LTD., RANCHI REFRACTORIES (INDIA) PVT. LTD., RHI MAGNESITA INDIA LTD., SAIL REFRACTORY COMPANY LTD., SAIL REFRACTORY UNIT, SARVESH REFRACTORIES PVT. LTD., SKG REFRACTORIES LTD, TRL KROSAKI REFRACTORIES LTD., VESUVIUS INDIA LTD.
6.	Purging Refractories (Porous Plug/ Purging Plug)	<b>B</b>	IFGL REFRACTORIES LTD., MANISHRI REFRACTORIES & CERAMICS PVT. LTD., RHI MAGNESITA INDIA LTD, SARVESH REFRACTORIES PVT. LTD., TRL KROSAKI REFRACTORIES LTD., VESUVIUS INDIA LTD.
7.	Pouring Refractories (Well block/ Inner Nozzle/ Outer Nozzle/ Slide gate)	<b>B</b>	IFGL REFRACTORIES LTD., MANISHRI REFRACTORIES & CERAMICS PVT. LTD., RANCHI REFRACTORIES (INDIA) PVT. LTD., RHI MAGNESITA INDIA LTD., SARVESH REFRACTORIES PVT. LTD., TRL KROSAKI REFRACTORIES LTD., VESUVIUS INDIA LTD.
8.	Black Refractories (Shroud/ Mono block Stopper/ Tundish Nozzle/ SEN/ Single Taphole Sleeve)	<b>B</b>	IFGL REFRACTORIES LTD., RHI MAGNESITA INDIA LTD., SARVESH REFRACTORIES PVT. LTD., TRL KROSAKI REFRACTORIES LTD., VESUVIUS INDIA LTD.
9.	Silicon Carbide Refractories	<b>B</b>	CARBORUNDUM UNIVERSAL LTD., SAINT-GOBAIN PERFORMANCE CERAMICS & REFRACTORIES
10.	Alumina-Silicon Carbide-Carbon (ASC) Refractories	<b>B</b>	ARVIND INDUSTRIES, CHAMPION CERAMICS PVT. LTD., MANISHRI REFRACTORIES & CERAMICS PVT. LTD., RAASI REFRACTORIES LTD., RHI MAGNESITA INDIA LTD., SKG REFRACTORIES LTD, TRL KROSAKI REFRACTORIES LTD.

ACCEPTABLE MAKES LIST  
SECTION-F

S No.	ITEMS	CATEGORY	MAKE
11.	Acid Resistant Refractories	<b>B</b>	CHAMPION CERAMICS PVT. LTD., MAHAKOSHAL REFRATORIES PVT. LTD., MANISHRI REFRATORIES & CERAMICS PVT. LTD., RAJHANS REFRATORIES PVT. LTD., BURNPUR CERAMICS, ORIENT REFRATORIES
12.	Torpedo Ladle Set	<b>B</b>	MAITHAN CERAMICS LTD., MANISHRI REFRATORIES & CERAMICS PVT.LTD., RHI MAGNESITA INDIA LTD, SARVESH REFRATORIES PVT. LTD., SKG REFRATORIES LTD., TRL KROSAKI REFRATORIES LTD.
13.	RH Degasser Set	<b>B</b>	AARYA METALLURGICAL INDIA PVT LTD., RHI MAGNESITA INDIA LTD., TRL KROSAKI REFRATORIES LTD.



SECTION-G

## UTILITIES & SERVICES

ACCEPTABLE MAKES LIST  
SECTION-G

SNo.	ITEMS	CATEGORY	MAKE
<b>1. PUMPS</b>			
1.1.	Centrifugal Pumps (Horizontal Split Casing / Horizontal Back Pullout / Vertical axial, Volute & Mixed flow Types – All ranges)	<b>A</b>	<b>BHEL, FLOWMORE, FLOW SERVE, KIRLOSKAR (KBL), KSB, SAM, SULZER, WILO-MATHER &amp; PLATT, WPIL, JYOTI PUMPS</b>
1.2.	Centrifugal Pumps (Horizontal Split Casing / Horizontal Back Pullout / Vertical axial, Volute & Mixed flow Types – Less than 100 m <sup>3</sup> /h)	<b>A</b>	<b>BEST &amp; CROMPTON, CALAMA, CHEMFLO, CRI, SAM, SINTECH PRECISION PRODUCTS LTD., SJ INDUSTRIES, SPX FLOW (JOHNSON)</b>
1.3.	Boiler Feed Pumps / Condensate Extraction Pump	<b>A</b>	<b>BHEL, KIRLOSKAR EBARA PUMPS LIMITED (For boiler capacity upto 50 tph), KSB, SULZER</b>
1.4.	Submersible pump	<b>B</b>	<b>CALAMA, CRI, DARLING, FLOWMORE, GOODWIN PUMPS (for handling slurry), KISHOR PUMPS, KSB, LUBI, SAM, SU MOTORS, SULZER, VARAT, WPIL, XYLEM, KBL, WILO-MATHER &amp; PLATT</b>
1.5.	Horizontal Centrifugal Pumps For Slurry Handling	<b>A</b>	<b>BEST &amp; CROMPTON, CRI, FL SMIDTH (DORR OLIVER), FLOWMORE, FLOW SERVE, GOODWIN PUMPS, METSO, SAM, WEIR MINERALS</b>
1.6.	Reciprocating Slurry Pump	<b>A</b>	<b>FL SMIDTH (DORR OLIVER), ROTO, WEIR MINERALS</b>
1.7.	Vertical Centrifugal Pumps for Slurry Handling	<b>A</b>	<b>METSO, SAM, WEIR MINERALS</b>
1.8.	Reciprocating Pumps	<b>A</b>	<b>ACME, AIRAUTO, CHEMTROL ENGG., FLOW SERVE, SWELORE</b>
<b>2. VALVES &amp; GATES</b>			

ACCEPTABLE MAKES LIST  
SECTION-G

SNo.	ITEMS	CATEGORY	MAKE
<b>2.1.FLUIDS (EXCEPT STEAM &amp; OXYGEN) SERVICE</b>			
<b>General Services-Make-up water system, Cleaning &amp; Washing, Service air system, Purging system</b>			
2.1.1.	Gate and Globe (Cast Steel) <b>General Services</b>	B	BHEL, DEMBLA VALVES LTD, FLUIDTECH EQUIPMENT Pvt. Ltd., FOURESS, GM ENGG., INTERVALVE, IVC, JOSHI JAMPALA, KIRLOSKAR, KSB, L&T, LEADER, MASCOT, OSWAL INDUSTRIES, STEELSTRONG, S&M INDUSTRIAL VALVES (KOLKATA), SWIMS (BDK), TYCO VALVES, UNIVERSAL ENGG. CONCERN, VALVE TECH IND.
2.1.2.	Gate and Globe (Cast Steel) <b>ALL Process</b>	A	BHEL, DEMBLA VALVES LTD, FLUIDTECH EQUIPMENT Pvt. Ltd, FOURESS, KSB, L&T, TYCO VALVES, S&M INDUSTRIAL VALVES (KOLKATA), SWIMS (BDK), VALVE TECH IND.
2.1.3.	Non-return Valves (Cast Steel) <b>General Services</b>	B	ADVANCE VALVES (NOIDA), BHEL, DEMBLA VALVES LTD, DEZURIK, FLUIDTECH EQUIPMENT Pvt. Ltd, FOURESS, GM ENGG., INTERVALVE, KIRLOSKAR, KSB, L&T, OSWAL INDUSTRIES, STEELSTRONG, LEADER, S&M INDUSTRIAL VALVES (KOLKATA), SWIMS (BDK), UNIVERSAL ENGG. CONCERN, UNIVERSAL ENGG., VALVE TECH IND.
2.1.4.	Non-return Valves (Cast Steel) <b>All Process</b>	A	ADVANCE VALVES (NOIDA), BHEL, FLUIDTECH EQUIPMENT Pvt. Ltd, FOURESS, KSB, L&T, SWIMS (BDK), VALVE TECH IND.
2.1.5.	Gate, Globe and Non-return Valves (Forged Steel) <b>General Services</b>	B	BHEL, FLUIDTECH EQUIPMENT Pvt. Ltd, FOURESS, HYDRO TECH ENGG., INTERVALVE, JOSHI JAMPALA, KIRLOSKAR (KBL), KSB, L&T, OSWAL INDUSTRIES, S&M INDUSTRIAL VALVES (KOLKATA), SWIMS (BDK), VALVE TECH IND.
2.1.6.	Gate, Globe and Non-return Valves (Forged Steel)	A	BHEL, FOURESS, KSB, L&T, SWIMS (BDK), VALVE TECH IND.

## ACCEPTABLE MAKES LIST SECTION-G

SNo.	ITEMS	CATEGORY	MAKE
	<b>All Process</b>		
2.1.7.	Gate and Globe Valves (SS & Alloy Steel)	<b>A</b>	<b>BHEL FLUIDTECH EQUIPMENT Pvt. Ltd, FOURESS, INTERVALVE, KSB, L&amp;T, OSWAL INDUSTRIES, SWIMS (BDK), VALVE TECH IND.</b>
2.1.8.	Gate, Globe, Non-Return Valves  (Cast Iron, & SG Iron)  <b>General Services</b>	<b>B</b>	<b>BANKIM, CALSEN, CHEMTECH, DURGA VALVES, FLUIDTECH EQUIPMENT Pvt. Ltd, GM DALUI, IVC, JOSHI JAMPALA, KIRLOSKAR, LEADER, S&amp;M INDUSTRIAL VALVES (KOLKATA), SHIVA DURGA, SIGMA FLOW, UNIVERSAL ENGG. CONCERN, UNIVERSAL ENGG., UPADHYAY, VALVE TECH IND., VICTRAM VALVES</b>
2.1.9.	Gate, Globe, Non-Return Valves  (Cast Iron, & SG Iron)  <b>All Process</b>	<b>A</b>	<b>FLUIDTECH EQUIPMENT Pvt. Ltd, IVC, JOSHI JAMPALA, KIRLOSKAR, S&amp;M INDUSTRIAL VALVES (KOLKATA), SHIVA DURGA, UPADHYAY</b>
2.1.10	Double Eccentric Butterfly Valves	<b>A</b>	<b>ADVANCE VALVES (NOIDA), DELVAL FLOW CONTROLS, DEMBLA VALVES LTD, FOURESS, INTERVALVE, JOSHI JAMPALA, L&amp;T, STAFFORD (VIRGO), VALVE TECH IND., SWIMS (BDK), KSB, KIRLOSKAR, IL</b>
2.1.11	Triple Eccentric Butterfly Valves	<b>A</b>	<b>ADVANCE VALVES (NOIDA), DELVAL FLOW CONTROLS, DEMBLA VALVES LTD, EMERSON (VIRGO), FOURESS, INTERVALVE, JOSHI JAMPALA, L&amp;T, PENTAIR (TYCO), SWIMS (BDK), VALVE TECH IND.</b>
2.1.12	Butterfly Valve  <b>General Services</b>	<b>B</b>	<b>BRAY CONTROLS, DELVAL FLOW CONTROLS, DEMBLA VALVES LTD, DEZURIK, DURGA VALVES, CHEMTECH, FLUIDTECH EQUIPMENT Pvt. Ltd, FLOW SERVE, FOURESS, INTERVALVE, JOSHI</b>

## ACCEPTABLE MAKES LIST SECTION-G

SNo.	ITEMS	CATEGORY	MAKE
			JAMPALA., KIRLOSKAR, KSB, L&T, MASCOT, METSO, ROTEX, S&M INDUSTRIAL VALVES (KOLKATA), SIGMA FLOW, STAFFORD CONTROLS, TYCO VALVES, UNIVERSAL ENGG. CONCERN, UNIVERSAL ENGG., VALVE TECH IND., AVCON, SWIMS (BDK), LEADER, VICTRAM VALVES
2.1.13	Butterfly Valve  <b>All Process</b>	A	ADVANCE VALVES (NOIDA), BRAY CONTROLS, DELVAL FLOW CONTROLS, DEMBLA, FLOW SERVE, FOURESS, INTERVALVE, KSB, L&T, METSO, TYCO VALVES, S&M INDUSTRIAL VALVES (KOLKATA), SWIMS (BDK), VALVE TECH IND.
2.1.14	Fabricated Valves (Gate Valves)	A	FLUIDTECH EQUIPMENT Pvt. Ltd, FOURESS, JOSHI JAMPALA, L&T, CHEMTECH, VALVE TECH IND.
2.1.15	Fabricated Valves (Butterfly Valves)	A	FLUIDTECH EQUIPMENT Pvt. Ltd, FOURESS, IL, INTERVALVE, JOSHI JAMPALA, L&T, VALVE TECH IND.
2.1.16	Goggle Valves	A	FOURESS, JOSHI JAMPALA, ZIMMERMAN & JHONSON-INDIA, CHEMTECH, VALVE TECH IND.
2.1.17	3 or 4 Way Cock/Plug valve (CI / CS/ FS)	B	FLUIDTECH EQUIPMENT Pvt. Ltd, FLOWSERVE, UNIVERSAL ENGG. CONCERN, L&T, S&M INDUSTRIAL VALVES (KOLKATA)
2.1.18	Ball Valve (SS/CS / FS / CI)  <b>General Services</b>	B	AQUA VALVES, DELVAL FLOW CONTROLS, DEMBLA VALVES LTD, EMERSON (VIRGO), FLUIDTECH EQUIPMENT Pvt. Ltd, INTERVALVE, KSB, L&T, MAGWEN VALVES PVT LTD., MASCOT, OSWAL INDUSTRIES, MICROFINISH, NSSL, PENTAIR (TYCO), ROTEX, VALVE TECH IND., S&M INDUSTRIAL VALVES (KOLKATA), SWIMS (BDK)

ACCEPTABLE MAKES LIST  
SECTION-G

SNo.	ITEMS	CATEGORY	MAKE
2.1.19	Ball Valve (SS/CS / FS / CI)  All Process	A	DELVAL FLOW CONTROLS, EMERSON (VIRGO), INTERVALVE, KSB, L&T, MICROFINISH, PENTAIR (TYCO), ROTEX, S&M INDUSTRIAL VALVES (KOLKATA), SWIMS (BDK), VALVE TECH IND.
2.1.20	Float Valve	B	CALSEN, IVC, LEADER, LEVCON, SHIVA DURGA, UPADHAYA,
2.1.21	Foot Valve	B	CALSEN, DEZURIK, IVC, KIRLOSKAR (KBL), LEADER, LEVCON, SHIVA DURGA, UPADHAYA, SWIMS (BDK)
2.1.22	Diaphragm Valve	A	CRANE PROCESS, FLUID SYSTEM, MASCOT, SWIMS (BDK)
2.1.23	Air Release Valve	B	BANKIM, CALSEN, FLUIDTECH EQUIPMENT Pvt. Ltd, IVC, LEADER, LEVCON, S&M INDUSTRIAL VALVES (KOLKATA), SHIVA DURGA, SIGMA FLOW, UPADHYAY, VICTRAM VALVES
2.1.24	Safety Valve	A	BHEL, IL, FORBES MARSHALL, MEKASTAR, PENTAIR (TYCO), SWIMS (BDK)
2.1.25	Needle Valve	A	AIR CHEM, DUNCUN, SCHRODER, SEIMAG, VALVE TECH IND.
2.1.26	Knife-edge Gate Valve	A	DEZURIK, FLOWLINK SYSTEMS, HABONIM VASS, JASH, JOSHI JAMPALA, METSO, ORBINOX, PENTAIR (TYCO), VALVE TECH IND, WEIR-MINERALS, BRAY CONTROLS
2.1.27	Pressure Reducing Valve	A	CRESCENT, FLOWTEK, FORBES MARSHALL, IL, MEKASTER
2.1.28	Sluice Gate	B	FLUIDTECH EQUIPMENT Pvt. Ltd, IM ENGG, INTERVALVE, JASH, LEVCON, S&M INDUSTRIAL VALVES (KOLKATA), VALVE TECH IND.



**ACCEPTABLE MAKES LIST**  
SECTION-G

<b>SNo.</b>	<b>ITEMS</b>	<b>CATEGORY</b>	<b>MAKE</b>
<b>2.1.29</b>	Non-Ferrous Valves (General Purpose)	<b>B</b>	<b>AKSONS, ASCO, BOMBAY METAL, CRESCENT, FLUIDLINE, GM DALUI, LEADER, SANT VALVES, VALVE TECH IND</b>
<b>2.1.30</b>	Dampers – (in Flue duct)	<b>B</b>	<b>DTL, FLEXATHERM EXPANLLOW PRIVATE LIMITED, FOURESS, INTERVALVE, JOSHI JAMPALA, STAFFORD, VALVE TECH INDUSTRIES</b>
<b>2.2. STEAM SERVICE</b>			
<b>2.2.1.</b>	Gate and Globe (Cast Steel & Forged Steel)	<b>A</b>	<b>BHEL, FLUIDTECH EQUIPMENT Pvt. Ltd., FOURESS, HOPKINSONS-WEIR, HYDRO TECH ENGG., INTERVALVE, KSB, L &amp; T, OSWAL INDUSTRIES, PRUSS(HS), SWIMS (BDK), VALVE TECH IND.</b>
<b>2.2.2.</b>	Non-return Valves (Cast Steel & Forged Steel)	<b>A</b>	<b>BHEL, DEZURIK, FOURESS, INTERVALVE, KSB, L&amp;T, SWIMS (BDK)</b>
<b>2.2.3.</b>	Gate, Globe & Non-return Valves (SS & Alloy Steel)	<b>A</b>	<b>BHEL, FOURESS, HOPKINSONS-WEIR, KSB, L &amp; T, OSWAL INDUSTRIES, VALVE TECH IND.</b>
<b>2.2.4.</b>	Ball valves (Cast Carbon Steel and alloy Steel)	<b>A</b>	<b>BHEL, KSB, L &amp; T, OSWAL INDUSTRIES, THERMAX</b>
<b>3. HEAT EXCHANGERS</b>			
<b>3.1.</b>	Heat Exchanger (Plate Type)	<b>A</b>	<b>ALFA LAVAL, APV, HRS, IDMC, SWEP, TRANTER, KELVION INDIA</b>
<b>3.2.</b>	Heat Exchanger (Shell & Tube Types)	<b>B</b>	<b>AIR CARE EQUIPMENTS, ALFA LAVAL, APV, BHEL, EASTERN EQUIP ENG (EEE), EUREKA ENGG., GODREJ, HRS HEAT EXCHANGERS, ING-TECH ENGG. CO., L&amp;T, PRECISION COOLING, REILIENCE, RELIANCE, TEMA INDIA, TEXMACO, THERMAL SYSTEMS, THERMAX</b>

ACCEPTABLE MAKES LIST  
SECTION-G

SNo.	ITEMS	CATEGORY	MAKE
4.	Cooling towers	A	GAMMON, GEA COOLING TOWERS, KOOLAQUA TOWERS PRIVATE LIMITED, PAHARPUR, PALTECH, SHRIRAM TOWER, WET BULB
5.	<b>FILTERS / STRAINERS</b>		
5.1.	Filters /Strainers	A	AMIAD, FILTRATION ENGINEERS, HYDAC FILTERS, OTOKLIN, SUPERFLO, SUREFLO PUROLATOR, TECHNOMAX ENTERPRISES (I) Pvt Ltd (MUMBAI), YAHA WATER SYSTEMS
5.2.	Pressure Filters/ Pressure Sand Filters	A	DOSHI ION-VEOLIA, DRIPLEX, ING- TECH ENGG. CO., EFFWA, EUREKA ENGG. RESIN INDIA, FILTRATION ENGINEERS, ION EXCHANGE, McLANAHAN, OTOKLIN, PENTAIR WATER, TECHNOMAX ENTERPRISES (I) Pvt Ltd (MUMBAI), THERMAX, VA TECH, VOLTAS, YAHA WATER SYSTEMS
5.3.	Activated Carbon Filter	A	ARUDRA, ION EXCHANGE, OTOKLIN, PENTAIR WATER, RESIN INDIA, SUREFLO, THERMAX, VASMYL, VOLTAS, YAHA WATER SYSTEMS
5.4.	Iron Removal Filter	A	ION EXCHANGE, SPARKLE, THERMAX, VOLTAS, ZEOLITE INDIA (P) LTD
5.5.	Y-Strainer	B	CADILLAC, DRAYTON-GREAVES, FILTRATION ENGINEERS, FORBES MARSHALL, OTOKLIN, SUPERFLO, UNIKLINGER
5.6.	Cyclone Separator	B	FILTRATION ENGINEERS INDIA PVT. LTD., LAKOS, SUPERFLO, TIMEX (AMIAD)
6.	<b>EXPANSION JOINTS/COMPENSATORS (Utility &amp; Services)</b>		

ACCEPTABLE MAKES LIST  
SECTION-G

SNo.	ITEMS	CATEGORY	MAKE
6.1.	Expansion Joints / Compensators  (Metallic)	A	ATHULYA, DWREN, FLEXICAN, FLEXITHERM, LONE STAR, BD ENGINEERS, METALLIC BELLOWS, PRECISION ENGINEERS, SUR INDUSTRIES
6.2.	Expansion Joints/Compensators  (Rubber)	B	CORI ENGG., DWREN, GBM, KELD ELLETOFT INDIA, PRECISION ENGRS., STANDARD PRECISION BELLOWS, SUR INDUSTRIES
7.	<b>CENTRIFUGAL GAS BOOSTER (BF/CO/BOF/MIXED FUEL GAS)</b>	A	AEROTO BOLDROCCHI, ANDREW YULE, BHEL, HOWDEN, TLT
8.	<b>INSULATION MATERIAL AND WORK</b>	B	BAKELITE HYLAM, FINLAY INSULATIONS, LLYOD INSULATION, RAYCHEM, UP TWIGA
9.	<b>PRESSURE VESSELS / BUFFER VESSELS</b>	A	BHEL, L&T, NTPC-ALSTOM, PRESSURE VESSEL INDIA (P) LTD., TEXMACO, TITAN ENGINEERING
10.	<b>GAS HOLDER (DRY SEAL TYPE)</b>	A	MB Engg (CLAYTON WALKER GROUP -UK), LAZARUS & ASSOCIATES
	<b>GAS HOLDER (WET SEAL TYPE)</b>	A	MB Engg (CLAYTON WALKER GROUP -UK), LAZARUS & ASSOCIATES
11.	<b>PIPES</b>		
11.1.	Steel Pipes	B	INDIAN SEAMLESS (ISMT), JSW, JINDAL SAW, JCO GAS PIPE LTD, LALBABA SEAMLESS TUBES, KHANDELWAL, MAHARASHTRA SEAMLESS, SAIL, SURYA TUBES, TATA TUBES, UTKARSH, RATNADEEP METAL & TUBES LTD.
11.2.	Stainless Steel Pipes	B	CHOKSY, DIVINE TUBES, JINDAL SAW, MAHARASHTRA SEAMLESS, MEC TUBES, SURAJ LTD., QUALITY STAINLESS, STANDARD (INDIA), STERLING, VENUS

ACCEPTABLE MAKES LIST  
SECTION-G

SNo.	ITEMS	CATEGORY	MAKE
			PIPES AND TUBES, ZENITH, RATNADEEP METAL & TUBES LTD
11.3.	Cast Iron Pipes & Specials	B	KALINGA IRON WORKS, KESORAM INDIA LTD.
11.4.	DI Pipes	B	ELECTRO STEEL CASTINGS., JINDAL SAW, TATA METALIKS DI PIPE LTD.
<b>12. WATER TREATMENT AND DM WATER PLANT</b>			
12.1.	DM, Soft Water Plant, RO PLANT	A	VEOLIA, DRIPLEX, EFFWA, EUREKA FORBES, GE POWER & WATER, GEA ENERGY SYSTEMS, ION EXCHANGE, ISGEC (Except RO Plant), PENTAIR WATER, RESIN INDIA, SPARKLE, THERMAX, TRIVENI ENGG., VOLTAS
12.2.	Clarifier	B	EIMCO-KCP, EUREKA FORBES, JORD ENGINEERS, MCNALLY SAYAJI, TECHNOMAX ENTERPRISES (I) PVT LTD (MUMBAI), TRIVENI ENGG. WATER SYSTEMS INDIA PVT. LTD., YAHA WATER SYSTEMS
12.3.	Thickener	-	As per makes of Thickener mentioned in MINING & MINERAL PROCESSING AREA
12.4.	Chemical Dosing	B	CHEMBOND, GE POWER & WATER, NALCO, SJ INDUSTRIES, TELLABS CHEMICALS, TRIVENI ENGG
12.5.	Filter Press	A	ANDRITZ, DINSHAW, FILTER MACHINE, FL SMITH, PANAMA, SUREFLO
<b>13. EQUIPMENT &amp; SYSTEM FOR AIR AND GAS</b>			
13.1.	Turbo Blower	A	BHEL (For Centrifugal), Howden CKD Compressors (For Centrifugal), KAWASAKI, Mitsui E&S Machinery Co., MAN Energy Solutions, SIEMENS

**ACCEPTABLE MAKES LIST**  
SECTION-G

<b>SNo.</b>	<b>ITEMS</b>	<b>CATEGORY</b>	<b>MAKE</b>
13.2.	Compressor (Centrifugal)	<b>A</b>	<b>ATLAS COPCO, FS-ELLIOTT, INGERSOLL RAND, KAZANCOMPRESSORMASH, KIRLOSKAR, KOBELCO, SIEMENS</b>
13.3.	Compressors (Screw)	<b>A</b>	<b>ATLAS COPCO, ELGI, INGERSOLL RAND, KAEZER, KIRLOSKAR PNEUMATIC</b>
13.4.	Compressors (Reciprocating)	<b>A</b>	<b>BURCKHARDT COMPRESSION, ELGI, INGERSOLL RAND, KIRLOSKAR PNEUMATIC</b>
13.5.	Portable Air Compressors	<b>B</b>	<b>ATLAS COPCO, ELGI, HOLMAN CLIMAX, INGERSOLL RAND, KIRLOSKAR</b>
13.6.	Centrifugal Blowers & Fans – For all applications except fuel gas		
	Capacity < 80,000 m3/h	<b>A</b>	<b>AEROTO BOLDROCCHI, ANDREW YULE, BATLIBOI, BHEL, C. DOCTOR, HOWDEN, MAXFLOW, REITZ, TLT ENGG.</b>
	Capacity > 80,000 m3/h	<b>A</b>	<b>AEROTO BOLDROCCHI, ANDREW YULE, BHEL, HOWDEN, MAXFLOW, TLT ENGG</b>
13.7.	Air Drier	<b>B</b>	<b>ATLAS COPCO, DELAIR, EXAL, INGERSOLL RAND, ROOS TEMPKOOL, SANPAR, TRIDENT</b>
13.8.	Air Trap	<b>B</b>	<b>DRAYTON GREAVES, FORBES MARSHAL, UNI KLINGER</b>
13.9.	Moisture Separator	<b>B</b>	<b>DRYTECH ENGINEERS, FESTO CONTROL, HYDAIR, NUCON, ROSS, SCHRADER, SMC, THERMAX, UNIKLINGER, VELJAN</b>
<b>14.</b>	<b>POWER PLANT EQUIPMENT</b>		
14.1.	Boilers (Stoker, Pulverised, AFBC, CFBC)	<b>A</b>	<b>BHEL, GE, ISGEC, THERMAX, THYSENKRUPP</b>
	Gas Fired Boiler	<b>A</b>	<b>BHEL, GE, ISGEC, THERMAX</b>
	Waste Heat Boilers	<b>A</b>	<b>BHEL, ISGEC, THERMAL SYSTEM (less than 50 tph capacity), THERMAX</b>

**ACCEPTABLE MAKES LIST**  
SECTION-G

<b>SNo.</b>	<b>ITEMS</b>	<b>CATEGORY</b>	<b>MAKE</b>
14.2.	Steam Turbines (For turbo-blower)	<b>A</b>	<b>BHEL, MAN Energy Solutions, SIEMENS</b>
14.3.	Steam Turbines (For power generation)	<b>A</b>	<b>BHEL, MAN Energy Solutions, SIEMENS, SKODA, TRIVENI TURBINE</b>
14.4.	Auxiliary Steam Turbines (Range less than 1000 kW)	<b>A</b>	<b>KEPL, FORBES, TRIVENI TURBINE</b>
14.5.	Gas Turbines	<b>A</b>	<b>ALFA LAVAL, ALSTOM, BHEL, GE, MITSUBISHI, SIEMENS</b>
14.6.	Top Pressure recovery Turbine	<b>A</b>	<b>KAWASAKI, Mitsui E&amp;S Machinery Co., MAN Energy Solutions</b>
14.7.	Condenser (Water)	<b>A</b>	<b>ALSTHOM, BHEL, GE GODAVARI, MAZDA, SIEMENS, UNIVERSAL HEAT EXCHANGER</b>
14.8.	De-aerator	<b>A</b>	<b>BHEL, ION EXCHANGE, ISGEC, THERMAX</b>
14.9.	PRDU	<b>A</b>	<b>BHEL, CHEMTROL, FORBES MARSHAL, THERMAX, KOSO FLUID CONTROL, EMERSON PROCESS MANAGEMENT</b>
14.10.	HP / LP Dosing	<b>A</b>	<b>ASIA LMI, ENPRO, META CHEM, VK PUMPS</b>
14.11.	Soot Blowers	<b>A</b>	<b>BERGMAN, BHEL, SISTON</b>
14.12.	HP Heater & LP Heater	<b>A</b>	<b>BHEL, ISGEC, SIEMENS, THERMAX</b>
14.13.	Steam Traps	<b>B</b>	<b>DRAYTON, FORBES MARSHALL, GREAVES, THERMAX, UNIKLINGER, ESCO, UNISON VALVES, PENANT ENGG, ECON STEEL</b>
<b>15. POLLUTION CONTROL EQUIPMENT</b>			
15.1.	ESP		-----
	Capacity < 5,00,000 m3/h	<b>A</b>	<b>ANDREW YULE, ANDRITZ TECHNOLOGIES PRIVATE LIMITED, BATLIBOI ENVIRONMENTAL ENGG, BHEL, ELEX, FL SMIDTH, GEA PROCESSING, HARMONY ENVIRONMENTAL SYSTEMS (HES), K. C</b>

**ACCEPTABLE MAKES LIST**  
SECTION-G

<b>SNo.</b>	<b>ITEMS</b>	<b>CATEGORY</b>	<b>MAKE</b>
			<b>COTTRELL INDIA, RIECO INDUSTRIES, SOIL &amp; ENVIRO INDUSTRIES, THERMAX INDIA</b>
	Capacity > 5,00,000 m3/h	<b>A</b>	<b>ANDRITZ TECHNOLOGIES PRIVATE LIMITED, BHEL, ELEX, FL SMIDTH, GEA PROCESSING, K. C COTTRELL INDIA, SOIL &amp; ENVIRO INDUSTRIES, THERMAX</b>
15.2.	<b>BAG FILTERS</b>		-----
	Capacity < 2,50,000 m3/h	<b>A</b>	<b>ANDREW YULE, APC SYSTEMS, BATLIBOI ENVIRONMENTAL ENGG., BEVCON WAYORS, CK AIRTECH, CLAIR ENGINEERS, F. HARLEY, GLOBAL ENVIRO SYSTEM, RIECO INDUSTRIES, SOIL &amp; ENVIRO INDUSTRIES, THERMAX</b>
	Capacity > 2,50,000 m3/h	<b>A</b>	<b>ANDREW YULE, BATLIBOI ENVIRONMENTAL ENGG., BOLDROCCHI, RIECO INDUSTRIES, THERMAX</b>
15.3.	<b>DUST SUPPRESSION SYSTEM</b>	<b>B</b>	<b>CHEMTROL SAMIL, DUST SOLUTION SYSTEM, F. HARLEY, KAVERI ULTRAPOLYMERS, SPRAYING SYSTEMS, TPS INFRASTRUCTURE</b>
15.4.	<b>CYCLONES AND MULTI CYCLONES</b>	<b>B</b>	<b>AEROTO BOLDROCCHI, AIR TECHNICO, ANDREW YULE, BATLIBOI ENVIRONMENTAL ENGINEERING, F. HARLEY, RAJDEEP ENGG, RIECO INDUSTRIES, THERMAX</b>
<b>16.</b>	<b>AIR CONDITIONING, REFRIGERATION &amp; VENTILATION</b>		
16.1.	Window/Tower/Split AC/ Ductable Split AC	<b>B</b>	<b>BLUE STAR, CARRIER, DAIKIN, FEDDERS LLYOD, HITACHI, MITSUBISHI, SAMSUNG, VOLTAS, ZAMIL</b>
16.2.	Packaged Chillers	<b>A</b>	<b>BLUE STAR, CARRIER, DAIKIN, DUNHUM BUSH HITACHI, TRANE, VOLTAS, YORK</b>
16.3.	Package AC	<b>B</b>	<b>ACCEL, BLUE STAR, DAIKIN, VOLTAS</b>

ACCEPTABLE MAKES LIST  
SECTION-G

SNo.	ITEMS	CATEGORY	MAKE
16.4.	Precision Air Conditioning	A	CLIMAVENETA, EMERSON, STULLZ-CHSPL (INDIA)
16.5.	Cooling Tower (ACVS)	B	ADVANCE COOLING TOWERS, ARMEC, DBR, FRICK INDIA, GAMMON INDIA, HIMGIRI, MIHIR ENGINEERS, PAHARPUR, SOUTHERN COOLING TOWERS, VOLTAS, WET BULB
16.6.	Air Handling Unit	B	DAIKIN, EDGETECH, ETA, ROOTS COOLING, VOLTAS, ZAMIL, ZECO AIRCON
16.7.	Tube Axial Fan	B	ABLE AIR-O TECH, AEROVENT, ANDREW YULE, CARYAIRE, DUSTVEN, EFE, FLOWLINK, HUMIDIN, KHAITAN, KRUGER, MAXFLOW, MESINA, SH ENGG., TUBOFLOW
16.8.	Panel Filter For Air	B	ABB, ACCO, BHARAT, C. DOCTOR, CADILLAC, EFE, FLOW LINK, FMI, GEC, PUROLATOR, WFI
16.9.	Air Washer	B	AIRLINK, EFE, HUMIDIN, MARCO, MESINA, ROOTS COOLING, SYMPHONY
16.10.	Propeller Fan	B	ABB, ACCO, AEROVENT, DUVENT, INDVENT FANS, MESINA, SH ENGG., TUBOFLOW, VENTURA
16.11.	Roof Extractors	B	AIRLINK, ALMONARD, ANDREW YULE, C. DOCTOR, CARYAIRE, EFE, FLOWLINK, HUMIDIN, KRUGER, VENTURA
16.12.	Vapor Absorption Machine	A	BLUE STAR, CARRIER, KIRLOSKAR, THERMAX, VOLTAS
17.	<b>OXYGEN &amp; CRYOGENIC SERVICE</b>		
17.1.	Cryogenic Pump	A	CRYOPUMP, CRYOSTAR, ICL



ACCEPTABLE MAKES LIST  
SECTION-G

SNo.	ITEMS	CATEGORY	MAKE
17.2.	Oxygen Filter / Y-Strainer	A	BEE, BLUESTAR, CARBERN, CLASSIC, FILTRATION ENGINEERS INDIA PVT. LTD., NOVINTEC, ORSEAL, SHIPHAM, VEE
17.3.	Non-Ferrous Control Valves	A	BLACKHALL, FISHER, LEEDS, METSO, SAMSON, SEVERN GLOCON
17.4.	Non-Ferrous Self-regulating Valves	A	BALEY BRIKETT, BROADY, FISHER, SAMSON, SEVERN GLOCON, TYCO
17.5.	Non-Ferrous Valves (Gate, Globe, Ball) - < DN50	B	CRESCENT, FLUIDLINE, LEADER, MICROFINISH
17.6.	Non-Ferrous Valves (Gate, Globe, Ball) - > DN50	A	BESTOBELL, BROOKSBANK, FISHER, HEROSE, LEEDS, MACK, METSO, SAMSON, SEVERN GLOCON, SHIPHAM
17.7.	Safety Relief Valve	A	ARCA, BAILEY BRIKETT, BROADY, CROSSBY, DARLING MUESEO, FARRIS, IL, JN MARSHALL, KEYSTONE, KUNKLE, SEBIM, SEMPELL, TYCO
17.8.	Vaporizers	A	CRYOQUIP, ICL, INOX, IWI CRYOGENICS, SHELL & TUBE
18.	<b>FIRE FIGHTING EQUIPMENT</b>		
18.1.	Portable Fire Extinguishers	B	DEFLAME, FIRE SHIELD, FIREX, GUNNEBO, INTIME FIRE, KANADIA FYR FYTER, MINIMAX, NITIN, SAFEX, SUPREMEX, ZENITH
18.2.	Fire hydrant	B	ASCO, GUNNEBO, MINIMAX, NEWAGE, NITIN, STEELCO, ZENITH
19.	<b>REHEATING FURNACE (Pusher/Rotary)</b>	A	ANDRITZ, ENCON, FIVESTEIN, HYPERTHERM, TECHNO THERM, TENOVA, WESMAN
20.	<b>MISCELLANEOUS ITEMS</b>		

ACCEPTABLE MAKES LIST  
SECTION-G

SNo.	ITEMS	CATEGORY	MAKE
20.1.	Surge Tanks	<b>B</b>	<b>ANUP ENGG., PERFECT ENGG., SAKTHI HITECH, ZENITH ERECTORS</b>
20.2.	Oil Skimmer	<b>B</b>	<b>HI-TECH ENGRS, JVM ENG., POTENTIAL ENGG, PREMIER OIL SKIMMER</b>
20.3.	Traveling Water Screen	<b>B</b>	<b>MACMET, MAHINDRA ASTECH, McGALE, OTOKLIN, SWAMINA INT., TRIVENI</b>
20.4.	<b>Electrical Heat Tracer</b>	<b>B</b>	<b>NICROPAD, RAYCHEM, THERMON, THERMOPAD</b>

Centre for Engineering & Technology  
Ranchi-834002