

**Annexure -1**

**INDEX OF CATEGORIES  
OF  
ITEMS/PRODUCTS  
AS PER PDIL MASTER VENDOR LIST**

	<b>PROJECTS &amp; DEVELOPMENT INDIA LTD.</b>	04-00MM-0011	8
		DOCUMENT NO	REV

CONTENTS

SECTION NUMBER	DESCRIPTION
1.0	MECHANICAL ITEMS (PR.VESSELS/HEAT EXCHANGERS)
2.0	MECHANICAL ITEMS (PIPING )
3.0	MECHANICAL ITEMS (MACHINERY)
4.0	MECHANICAL ITEMS (REFORMER)
5.0	MECHANICAL ITEMS (MATERIALS HANDLING)
6.0	INSTRUMENT ITEMS
7.0	CIVIL ENGG. ITEMS
8.0	PROCESS ENGG. ITEMS
9.0	ELECTRICAL ITEMS
10.0	CUSTOMS CLEARANCE & TRANSPORTATION ITEMS

## INDEX MECHANICAL (PV/HE) ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
<b>1101</b>	<b>BOILERS</b>	
110101	INDUSTRIAL & POWER BOILERS	
110103	W.H. BOILER (RG/CG/SYNLOOP, STEAM SUP. & STEAM DRUMS)	
110104	WASTE HEAT BOILER (SULPHURIC / NITRIC ACID ETC)	
<b>1102</b>	<b>PRESSURE VESSELS,GAS HOLDERS, COLUMNS ETC.</b>	
110201	AMMONIA CONVERTER (PRESSURE SHELL)	
110202	CONVERTER BASKET	
110203	UREA REACTOR	
110204	SECONDARY REFORMER, METHANATOR & OTHER REACTORS	
110205	VESSELS IN CS/AS/SS PRESSURE UPTO 10 Kg/cm <sup>2</sup> g	
110206	VESSELS IN CS/AS/SS PRESSURE 11 TO 60 Kg/cm <sup>2</sup> g	
110207	VESSELS IN CS/AS/SS PRESSURE ABOVE 60 Kg/cm <sup>2</sup> g	
110208	TALL COLUMNS	
110209	SMALL COLUMNS	
110211	VACUUM SEPARATOR, PRECONCENTRATOR FOR UREA PLANT	
110212	LPG BULLETS	
110213	HORTON SPHERE	
110214	GAS HOLDERS	
110215	DEARATORS (Vendor Design)	
<b>1103</b>	<b>TANKS</b>	
110301	SHOP FABRICATED TANKS & NONCODED VESSELS	
110302	STORAGE TANKS (Site Fabricated)	
110303	FLOATING ROOF TANKS	
<b>1104</b>	<b>TOWER INTERNALS</b>	
110401	METALLIC TOWER PACKINGS	
110403	TRAYS, DISTRIBUTORS & INTERNALS	
110404	DEMISTERS	
<b>1105</b>	<b>HEAT EXCHANGERS</b>	
110501	H.P. UREA STRIPPER	
110502	H.P. CARBAMATE CONDENSER	

## INDEX MECHANICAL (PV/HE) ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
110503	HEAT EXCHANGERS UPTO 30 Kg/cm <sup>2</sup> g	
110504	HEAT EXCHANGERS 30 TO 60 Kg/cm <sup>2</sup> g	
110505	HEAT EXCHANGERS ABOVE 60 Kg/cm <sup>2</sup> g	
110506	EXCHANGERS AIRCOOLED/ FINNED TYPE	
110507	PLATE TYPE HEAT EXCHANGERS	
110508	SAMPLE COOLERS	
<b>1106</b>	<b>FRP/PVC/RUBBER/GLASS/LEAD LINED TANKS &amp; VESSELS AND LINING</b>	
110601	FRP/PVC TANKS & VESSELS	
110607	FRP/PVC LINING	
110608	RUBBER LINING	
<b>1107</b>	<b>MISC ITEMS(PV/HE)</b>	
110702	NITROGEN BOTTLES	
110703	DISHED ENDS	
<b>1108</b>	<b>MECHANICAL CONTRACTORS</b>	
110801	MECHANICAL WORKS(piping , machinery & equipment erection	
110802	HEAVY LIFT	
110803	HOT & COLD INSULATION OF EQUIPMENT & PIPING	
110804	CAST IN-SITU TANK INSULATION	
110805	CHEMICAL CLEANING	
110806	EPOXY LINING	
110807	PAINTING OF STRUCTURAL , EQUIPMENT & PIPING	
110811	ONLY UNDERGROUND PIPING WORKS	
110812	CROSS COUNTRY PIPELINE	

## INDEX MECHANICAL (PIPING) ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
<b>1201</b>	<b>PIPES, FITTINGS &amp; FLANGES</b>	
120101	CS PIPES IS-1239 (BLACK & GI)	
120102	CS WELDED PIPES IS-3589	
120103	CS WELDED PIPES TO API 5L SPIRAL/LONG. WELDED (SAW/EFSW)	
120104	CS / AS / LTCS SEAMLESS PIPES	
120105	SS SEAMLESS/WELDED PIPES	
120106	SS SEAMLESS TUBES	
120107	SS PIPES UREA GRADE	
120110	HDPE/ MDPE PIPES & PIPE FITTINGS	
120111	SS WELDED TUBES	
120113	FITTINGS: CS/AS/SS SEAMLESS & FORGED	
120114	FITTINGS: SS UREA GRADE	
120115	FRP/PVC PIPE AND PIPE FITTINGS	
120116	CAST IRON FITTINGS & PIPES	
120117	FORGED FLANGES	
120118	PLATE RING FLANGES	
120119	FITTINGS: CS/AS/SS WELDED	
120120	PIPE COATINGS	
<b>1202</b>	<b>PIPING ACCESSORIES</b>	
120201	STRAINERS (PERMANENT INCLUDING Y-TYPE)	
120202	STEAM TRAPS	
120203	SPRING SUPPORTS	
120204	FLAME ARRESTORS	
120205	SPRAY NOZZLE ASSEMBLY	
<b>1203</b>	<b>VALVES</b>	
120301	GATE/GLOBE/CHECK VALVES CS/SS/AS < 900 Lbs	
120302	GATE/GLOBE/CHECK VALVES CS/SS/AS >=900 Lbs	
120303	BALL VALVES (SOFT SEATED)	
120304	BALL VALVES (METAL SEATED)	
120305	BUTTERFLY VALVES	
120306	BLOWDOWN VALVES	
120307	SAMPLING VALVES/ NEEDLE VALVES	
120308	PLUG VALVES (NON LUBRICATED)	

## INDEX MECHANICAL (PIPING) ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
120309	PLUG VALVES (LUBRICATED)	
120311	DIAPHRAGM VALVES / RUBBER LINED CHECK VALVES	
120312	CAST IRON VALVES	
120313	PVC/CPVC VALVES	
<b>1204</b>	<b>GASKETS ,EXPANSION JOINTS &amp; FASTNERS</b>	
120401	ASBESTOS/RUBBER GASKETS	
120402	SPIRALLY WOUND GASKETS	
120403	LENS GASKETS & RING JOINT (METALLIC)	
120405	EXPANSION JOINTS & BELLOWS	
120406	FASTENERS	
<b>1205</b>	<b>FIRE FIGHTING SYSTEM AND ASSOCIATED ITEMS</b>	
120501	FIRE FIGHTING SYSTEM	
120503	HOSE PIPES(METALLIC) & CAM LOCK COUPLING	
120504	HOSE PIPE (NON-METALLIC) & CAM LOCK COUPLING	
120505	FIRE WATER PUMPS	
120506	PORTABLE FIRE EXTINGUISHERS & FIRE FIGHTING CHEMICALS	
120507	SMOKE / GAS DETECTOR	
120508	FIRE FIGHTING EQUIPMENTS	
<b>1206</b>	<b>MARINE LOADING SYSTEM</b>	
120601	MARINE LOADING ARM	
120602	TRUCK/WAGON LOADING ARM	

## INDEX MECHANICAL (MACHINERY) ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
<b>1301</b>	<b>CENTRIFUGAL PUMPS (HORIZONTAL)</b>	
130101	PUMPS FOR HP BFW SERVICE (ABOVE 60 KG/CM2 DISCH. PR.)	
130102	PUMPS FOR SEMI LEAN SOLUTION	
130103	PUMPS FOR HP REACTOR FEED (AMMONIA & CARBAMATE)	
130104	PUMPS FOR UREA MELT	
130105	PUMPS FOR CHEMICALS/ACID/ALKALI/BFW/CONDENSATE USE	
130106	COOLING WATER PUMPS (HORIZONTAL)	
130107	PUMPS FOR SLURRY SERVICE	
130108	RUBBER LINED PUMPS	
130109	POLY PROPYLENE PUMPS/FRP PUMPS	
130110	PUMPS FOR UTILITY SERVICES	
130111	DIAPHRAGM PUMPS	
130112	BARREL PUMPS	
<b>1302</b>	<b>CENTRIFUGAL PUMPS (VERTICAL)</b>	
130201	PUMPS FOR VERY LOW NPSH REQUIREMENTS (AMM./NAPHTHA )	
130203	PUMPS FOR COOLING WATER SERVICE (VERTICAL)	
130204	DEEP TUBEWELL PUMPS	
130205	VERTICAL CAN PUMPS	
130206	CENTRIFUGAL MONOBLOCK PUMP SET	
130207	POT/CAN MOUNTED AND INTANK SUBMERGED MOTOR CRYOGENIC	
130208	SUMP PUMPS	
<b>1303</b>	<b>RECIPROCATING / ROTARY PUMPS</b>	
130301	PUMPS FOR REACTOR FEED(AMMONIA & CARBAMATE)	
130302	PUMPS FOR CHEMICAL DOSING / METERING	
130303	PUMPS FOR MISC. SERVICE	
130304	ROTARY PUMPS /SCREW PUMPS	
<b>1304</b>	<b>CENTRIFUGAL COMPRESSORS</b>	
130401	COMPRESSOR FOR HP SERVICE (SYN.GAS,CO2,NG ETC.)	
130402	COMPRESSOR FOR MP SERVICE (PROCESS AIR,REF.,CO2,N2,NG)	
130403	BOOSTER COMPRESSOR FOR CO2 & N2	
130404	COMPRESSOR FOR INSTRUMENT AIR SERVICE	

## INDEX MECHANICAL (MACHINERY) ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
<b>1305</b>	<b>RECIPROCATING COMPRESSOR/SCREW COMPRESSOR/VACCUM</b>	
130501	RECIPROCATING COMPRESSOR	
130502	PASSIVATION AIR COMPRESSOR FOR HP STRIPPER	
130504	SCREW COMPRESSOR	
130505	VACCUM PUMPS AND COMPRESSORS	
130506	DIAPHRAGM COMPRESSOR	
130507	ROTARY COMPRESSOR	
<b>1306</b>	<b>TURBINE / BLOWERS</b>	
130601	STEAM TURBINE UPTO 3 MW	
130602	STEAM TURBINE ABOVE 3 MW	
130603	GAS TURBINE	
130604	HEAT RECOVERY STEAM GENERATION FOR GAS TURBINE	
130605	FANS & BLOWERS	
<b>1307</b>	<b>MISCELLANEOUS EQUIPMENTS</b>	
130701	AGITATORS/ MIXERS	
130702	FILTERS & SEPARATORS	
130703	PROCESS EJECTORS	
130704	COUPLINGS	
130705	ARC VALVES	
130706	AXIAL FLOW PUMPS	
<b>1309</b>	<b>AIR CONDITIONING</b>	
130901	AIR CONDITIONING SYSTEM	
130902	POLLUTION CONTROL EQUIPMENT	
130903	REFRIGERATION SYSTEMS	



## INDEX MECHANICAL (REFORMER) ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
<b>1401</b>	<b>PRIMARY REFORMER PACKAGE AND ASSOCIATED ITEMS</b>	
140101	COMPLETE REFORMER PACKAGE	
140102	COMPLETE REFORMER PACKAGE EXCEPT FREE ISSUE OF MATLS.	
140103	FIRE HEATER PACKAGE	
140104	CATALYST TUBES /REFORMER TUBES	
140105	BURNERS	
140107	REFRACTORIES (BRICKS)	
140108	REFRACTORIES (CERAMIC FIBRES)	
140109	HOT COLLECTOR & OUTLET PIGTAIL	
140110	INLET PIGTAIL & INLET DISTRIBUTOR	
140111	W.H. RECOVERY COILS & TUBE MATL.FOR W.H.R. & FIRED HEATERS	
140113	COMBUSTION AIR PRE-HEATER	
140114	ID/FD FAN SET	
140115	STATIC CASTINGS (TUBE SHEET / FITTINGS)	
140116	FINNED TUBES / STUDDERED TUBES	

## INDEX MECHANICAL (MATERIAL HANDLING) ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
<b>1501</b>	<b>MATERIAL HANDLING PACKAGES</b>	
150101	UREA HANDLING SYSTEM	
150102	RAW MATL / COAL HANDLING SYSTEM	
150103	ASH HANDLING SYSTEM	
150104	PNEUMATIC HANDLING SYSTEM	
150105	AUTOMATIC BAGGING & PACKING	
150106	PALLETIZER	
<b>1502</b>	<b>CONVEYORS &amp; RELATED EQPTS/ITEMS</b>	
150201	BELT CONVEYOR	
150202	SCREW CONVEYOR	
150203	PIPE CONVEYORS	
150204	CONVEYOR BELTING	
150205	BUCKET ELEVATOR	
150206	CONTINUOUS BELT WEIGHER	
150207	BELT CONVEYOR COMPONENTS(IDLERS & PULLEYS)	
150208	EXTERNAL BELT CLEANER	
150209	SKIRT BOARD SEALING SYSTEM	
150210	PRILLING BUCKETS FOR UREA, AN & ANP	
<b>1503</b>	<b>BAGGING &amp; LOADING / DESPATCH EQPTS.</b>	
150301	WEIGHING CUM TIPPING MACHINE (BAGGING M/C)	
150302	BAG STITCHING MACHINE	
150303	BIG BAG FILLING MACHINE	
150304	WAGON LOADERS & TRUCK LOADERS	
150305	FILLED BAG DIVERTOR	
150306	BULK LOADING / UNLOADING SYSTEM & SPOUT	
<b>1504</b>	<b>OTHER MATERIAL HANDLING EQUIPMENTS</b>	
150401	CRUSHERS & VIBRATING SCREENS	
150402	E.O.T. CRANES	
150403	H.O.T CRANES	
150404	ELECTRIC HOISTS	
150405	CHAIN PULLEY BLOCKS/CHAIN HOISTS	

## INDEX MECHANICAL (MATERIAL HANDLING) ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
150406	RAIL/ROAD WEIGH BRIDGE	
150407	JIB CRANE	
150408	DUST EXTRACTION SYSTEM	
<b>1508</b>	<b>LPG CHAIN CONVEYOR SYSTEM &amp; INLINE EQUIPMENTS</b>	
150801	LPG CHAIN CONVEYOR SYSTEM & INLINE EQUIPMENTS	
150802	LPG CAROUSAL	
150803	LPG AIR COMPRESSOR	
150804	DG SET FOR LPG BOTTLING PLANT	
150805	WEIGHBRIDGE (WEIGHING MACHINE)	

## INDEX INSTRUMENT ENGINEERING ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
<b>3101</b>	<b>ANALYSERS</b>	
310101	GAS ANALYSERS(IR,Thermal Conductivity, Paramagnetic)	
310102	pH , CONDUCTIVITY& ORP ANALYSER	
310103	TRACE ANALYSER / ION SELECTIVE	
310104	SOx / NOx ANALYSER	
310105	MASS SPECTROMETER	
310106	GAS CHROMATOGRAPH	
310107	FLUE GAS ANALYSER (ZrO2 Type)	
310108	H2S / TOTAL SULPHUR ANALYSERS	
310109	SYSTEM HOUSE ANALYSERS	
310110	DENSITY ANALYSERS	
310111	MOISTURE ANALYSERS	
310113	GAS & FIRE DETECTION SYSTEM	
310114	AIR QUALITY MONITORING SYSTEM	
310115	SAMPLE HANDLING SYSTEM	
<b>3102</b>	<b>FLOW INSTRUMENTS</b>	
310201	FLOW ELEMENT:ORIFICE/VENTURI/ FLOW NOZZLE	
310202	PITOT TUBE / ANNUBAR	
310203	ROTAMETERS	
310204	MASS FLOW METER (CORIOLIS TYPE)	
310205	TURBINE FLOW METER	
310206	VORTEX METER	
310207	PD METER	
310208	MAGNETIC FLOW METER	
310209	INSERTION TYPE FLOW METER	
310210	ULTRASONIC FLOW METER	
310211	ORIFICE METER	
310212	METERING SKID	
<b>3103</b>	<b>PRESSURE INSTRUMENTS</b>	
310301	PRESSURE GAUGES	
310302	VOL. SEAL PR. GAUGES	
310303	LOCAL D/P INDICATORS	
310304	PRESSURE & D/P TRANSMITTERS	

## INDEX INSTRUMENT ENGINEERING ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
310305	VOL. SEAL PR./DP TRANSMITTER	
310310	PRESSURE & D/P SWITCHES INCLUDING VOL. SEAL	
310311	VOL. SEAL PRESSURE.&DP SWITCHES (UREA SERVICE)	
<b>3104</b>	<b>LEVEL INSTRUMENTS</b>	
310401	TRANSPARENT/ REFLEX / BICOLOR MAG.LEVEL GAUGES	
310402	LEVEL SWITCHES (FLOAT & DISPLACER TYPE)	
310403	DISPLACER TYPE LEVEL TRANSMITTERS	
310404	NUCLEONIC LEVEL TRANSMITTER	
310405	CAPACITANCE TYPE LEVEL TRANSMITTER	
310406	TANK LEVEL INSTRUMENTS	
310408	RESITIVE ELECTRODE TYPE LEVEL INSTRUMENT	
310409	SPECIAL LEVEL SWITCHES (VIBRATION FORK/RF ADMITTANCE)	
310410	ULTRASONIC LEVEL TRANSMITTER	
310411	TANK FARM MANAGEMENT	
310412	GUIDED WAVE RADAR	
310413	NUCLEONIC DENSITY METER	
<b>3105</b>	<b>TEMPERTURE INSTRUMENTS</b>	
310501	TEMPERATURE ELEMENTS (THERMOCOUPLE, RTD)	
310502	BIMETALLIC THERMOMETER	
310503	DIAL THERMOMETER (Hg in Steel/Glass)	
310504	RADIATION PYROMETER	
310505	TEMPERATURE TRANSMITTER	
310506	TEMPERATURE SWITCHES	
<b>3106</b>	<b>CONTROL VALVES</b>	
310601	GATE/PLUG VALVES	
310602	GLOBE / ANGLE VALVES	
310603	BALL VALVES	
310604	BUTTERFLY VALVES	
310605	SAUNDERS (PINCH) VALVES	
310606	SOLENOID VALVES	
310607	PRDS & SPRAY NOZZLE, VENT VALVES upto 2500#	
310611	ELECTRIC ACTUATOR	
310613	AIR FILTER REGULATOR	

## INDEX INSTRUMENT ENGINEERING ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
310614	LIMIT/PROXIMITY SWITCHES	
310615	VALVE ACTUATOR (PNEUMATIC / ROTARY)	
310616	SELF ACTUATED PRESSURE CONTROL VALVES	
310617	SLAM SHUT OFF VALVE	
310618	ELECTROPNEUMATIC POSITIONER	
310619	TURBINE BYPASS VALVES	
310620	DESUPERHEATERS	
310621	PRESSURE REDUCING STATION	
310622	PRESSURE REGULATOR	
<b>3107</b>	<b>SAFETY DEVICES</b>	
310701	SAFETY VALVES & THERMAL RELIEF VALVES upto 2500#	
310703	VACUUM BREAKERS	
310704	RUPTURE DISCS	
310705	PILOT RELIEF VALVES	
310706	LOW PRESSURE RELIEF VALVES	
310708	FLAME ARRESTOR	
<b>3108</b>	<b>CONTROL SYSTEM &amp; ACCESSORIES</b>	
310801	CONTROL PANEL	
310802	PANEL ACCESS. ( Relay,Switch,Lamp,Terminal,Push Button)	
310803	PROGRAMABLE LOGIC CONTROLLER	
310804	DISTRIBUTED CONTROL SYSTEM	
310805	MULTIPLEXER / REMOTE I/O	
310806	RECEIVER INSTRUMENTS (INDICATOR,CONTROLLER,RECORDER)	
310807	ALARM ANNUNCIATOR	
310808	BARRIER/ISOLATOR/TRIP AMPLIFIER	
310809	TEMPERATURE SCANNER	
310810	CCTV / ACCESS SYSTEM	
310815	MISCELLANEOUS ITEMS (RTU / SCADA ETC)	
310816	ENERGY METER	
310821	SURGE PROTECTION DEVICES	
310824	WIRING DUCTS	
310825	DIN RAIL	
310826	INTERFACE MODULE	
310827	CABLE CONNECTOR	

## INDEX INSTRUMENT ENGINEERING ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
310828	ADVANCE PROCESS CONTROL SYSTEM	
<b>3109</b>	<b>PUMP &amp; COMPRESSOR INSTRUMENTS</b>	
310901	MACHINE MONITORING SYSTEM	
310902	SPEED INDICATOR	
310903	ANTI SURGE CONTROLLER	
<b>3110</b>	<b>BURNER INSTRUMENTATION</b>	
311001	BURNER MANAGEMENT SYSTEM	
311002	FURNACE CAMERA, HEATER, THERMAL IMAGER	
<b>3111</b>	<b>TERMINAL AUTOMATION</b>	
311101	TERMINAL AUTOMATION SYSTEM	
<b>3115</b>	<b>OTHER INSTRUMENTS</b>	
311501	I/P CONVERTER	
<b>3116</b>	<b>ERECTION MATERIALS</b>	
311601	INSTRUMENT POWER & CONTROL CABLES	
311602	EXTENSION & COMPENSATING CABLES	
311603	SPECIAL CABLES (FOUNDATION FIELD BUS CABLES)	
311606	CABLE TRAYS & ACCESSORIES (AL./GI)	
311607	MULTI TRANSIT INLET SYSTEM	
311608	JUNCTION BOX & CABLE GLAND	
311615	CS SEAMLESS PIPES	
311616	SS SEAMLESS PIPES	
311617	SS TUBES	
311618	PIPE FITTINGS	
311619	COMPRESSION FITTINGS	
311620	INSTRUMENT MINIATURE VALVES	
311621	PURGE ROTAMETER	
311622	AIR HEADER/ADPOT	
311623	CONDENSATE POT	
311624	VALVE MANIFOLDS	
311626	CALIBRATION EQUIPMENT & SERVICES	

## INDEX INSTRUMENT ENGINEERING ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
311627	ENCLOSURES	
<b>3117</b>	<b>INSTRUMENT CONTRACTOR</b>	
311701	INSTRUMENT CONTRACTOR FOR INST. CONSTRUCTION/ERECTION	



## INDEX CIVIL ENGINEERING ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
<b>6102</b>	<b>CIVIL CONTRACTS</b>	
610201	PILING	
610202	PRILLING TOWER(UREA) (using slip from technique)	
610203	CHIMNEY(using slip form technique)	
610204	SILLO(parabolic or a type)	
610205	WORKS CIVIL &STRUCTURAL	
610206	UNDERGROUND PIPING WORKS (AS PART OF CIVIL WORK)	
610213	PRILLING TOWER LINING (INSIDE)	
610216	COMPOSITE WORK	
610221	ARCHITECTURAL SERVICES	
610222	GEOTECHNICAL WORKS	
610226	SMALL MAINTENANCE WORKS	
610228	STRUCTURAL GRATINGS	
610231	WATER PROOFING AND ROOF TREATMENT	
610232	WATER SUPPLY AND SANITATION	
610233	ANTI-CORROSIVE MATERIAL (MANUFACTURE & APPLICATOR)	
610234	REHABILITATION WORKS	

## INDEX PROCESS ENGINEERING ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
<b>7101</b>	<b>PROCESS ENGG. ITEMS (AMMONIA PLANT)</b>	
710101	CATALYST	
710102	CATALYST BED SUPPORT,CERAMIC BALLS ,ALUMINA BALLS	
710103	PURGE GAS RECOVERY	
710104	ACTIVATED CARBON	
<b>7102</b>	<b>PROCESS ENGG ITEMS ( OFFSITE &amp; UTILITIES)</b>	
710201	OIL WATER SEPARATION UNIT (TPI/CPI TYPE DISC OIL)	
710202	FLARE SYSTEM	
710203	DM WATER / CONDENSATE POLISHING UNIT	
710204	INSTRUMENT AIR DRYING UNIT	
710205	PSA NITROGEN PLANT	
710206	REVERSE OSMOSIS PLANT	
710207	AIR LIQUIFICATION / LIQUID NITROGEN PLANT	
710208	CHLORINATION UNIT	
710209	VALVELESS AUTO WASH GRAVITY SAND FILTER	
710210	WATER PRE-TREATMENT PLANT	
710211	WASTE WATER TREATMENT PLANT	
710212	CHEMICAL DOSING SYSTEM FOR COOLING TOWER	
710213	COOLING TOWERS	
710214	POLLUTION CONTROL EQUIPMENTS	
710215	MIST TYPE COOLING TOWER	
710216	EFFLUENT TREATMENT PLANT (ETP)	
710217	SEA WATER DESALINATION PLANT	
710218	SEWAGE TREATMENT PLANT	
710219	JET AERATOR	
710221	Chemicals-V2O5,Antifoam agent,TSP,KNO2,H2SO4,HCL,	
710222	NATURAL GAS TREATMENT PLANT	
710223	TOWER PACKING	
710224	TOWER/SEPARATOR INTERNALS	
710225	DISTILLATION TOWER TRAYS	
710226	COLD BOXES	
710227	MEMBRANE BIO REACTOR	
710228	ULTRA FILTRATION PLANT	
710229	SEWAGE / EFFLUENT TREATMENT PLANT	

## INDEX PROCESS ENGINEERING ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
7104	CONTRACTORS	
710401	LOADING OF CATALYST & PACKING	

## INDEX ELECTRICAL ENGINEERING ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
<b>8101</b>	<b>CIRCUIT BREAKERS</b>	
810101	CIRCUIT BREAKERS,66KV & ABOVE.	
810102	HIGH VOLTAGE CIRCUIT BREAKERS.	
810103	MV ACB.	
810104	MOULDED CASE CIRCUIT BREAKERS (MCCB)	
810105	MINIATURE CIRCUIT BREAKERS(MCB)	
810106	MV ELCB	
<b>8102</b>	<b>SWITCHES / ISOLATORS</b>	
810201	EHV SWITCHES/ISOLATORS	
810202	HV SWITCHES/ISOLATORS	
810203	LOW VOLTAGE INDUSTRIAL SWITCHES/ISOLATORS	
<b>8103</b>	<b>TRANSFORMERS / REACTORS</b>	
810301	POWER TRANSFORMER, 66 KV & ABOVE (OIL FILLED)	
810302	POWER TRANSFORMER,33KV & BELOW	
810303	AUXILIARY SUPPLY TRANSFORMER	
810304	AUTO TRANSFORMER	
810305	REACTOR	
810306	EARTHING TRANSFORMER	
810307	CURRENT TRANSFORMERS, 66KV & ABOVE	
810308	POTENTIAL TRANSFORMER, 66KV & ABOVE	
810309	HV CURRENT TRANSFORMERS	
810310	HV POTENTIAL TRANSFORMER	
810311	MV CURRENT TRANSFORMERS	
810312	MV POTENTIAL TRANSFORMERS	
<b>8104</b>	<b>SWITCH BOARDS / PANELS / AUXILIARY BOARDS</b>	
810401	HIGH VOLTAGE SWITCH BOARD	
810402	MEDIUM VOLTAGE SWITCH BOARD(PCC/MCC)	
810403	DRAW-OUT MCC	
810404	NON-DRAWOUT M.C.C.	
810405	ELECTROMAGNETIC TYPE CONTROL PANEL/DESKS	
810406	PROGRAMMABLE LOGIC CONTROLLER.	

## INDEX ELECTRICAL ENGINEERING ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
810407	STATIC TYPE CONTROL PANEL/DESKS.	
810408	FLOOR MOUNTING TYPE DISTRIBUTION BOARDS.	
810409	WALL MOUNTING TYPE DISTRIBUTION BOARDS.	
810410	VARIABLE SPEED MOTOR PACKAGE	
810411	SOFT STARTER	
<b>8105</b>	<b>CABLES</b>	
810501	HT POWER CABLE	
810502	LT POWER CABLES	
810503	CONTROL CABLE	
810504	FLEXIBLE CABLE.	
810505	TELEPHONE CABLE	
810506	CABLES FOR EARTHING	
810507	SPECIAL CABLES	
<b>8106</b>	<b>MOTORS</b>	
810601	HIGH VOLTAGE INDUCTION MOTORS	
810602	MEDIUM VOLTAGE INDUCTION MOTORS	
810603	MEDIUM VOLTAGE FLAME PROOF/ INCREASED SAFETY MOTORS	
810604	SYNCHRONOUS MOTORS	
810605	CANNED MOTORS	
810606	GEARED MOTORS	
<b>8107</b>	<b>BATTERY CHARGER / UPS / VOLTAGE STABILIZERS</b>	
810701	BATTERY CHARGER	
810703	STATIC TYPE UPS SYSTEM	
810705	ELECTROSTATIC TYPE VOLTAGE STABILIZERS	
<b>8108</b>	<b>EARTHING / LIGHTNING PROTECTION MATERIAL</b>	
810801	NEUTRAL EARTHING RESISTOR	
810802	EARTHING & LIGHTNING PROTECTION MATERIAL, AL WIRE/STRIP	
810803	EARTHING & LIGHTNING PROTECTION MATERIAL,G.I.WIRE/STRIP	
<b>8109</b>	<b>EXPLOSION PROOF ITEMS</b>	
810901	MV Ex. Proof Items(Switches/Switch Skt./Plugs/Isolators/J.Box/LCS/ DB)	

## INDEX ELECTRICAL ENGINEERING ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
810903	EXPLOSION PROOF LIGHTING FIXTURES	
810904	EXPLOSION PROOF PANIC LIGHTS	
810906	FLAMEPROOF CABLE GLAND	
810909	EXPLOSION PROOF EXHAUST FAN	
<b>8110</b>	<b>LIGHTING FITTINGS AND ACCESSORIES</b>	
811001	COMMERCIAL LTG FIXTURES	
811002	CORROSION PROOF INDUSTRIAL LTG.FIXTURES	
811003	HOSE PROOF INDUSTRIAL LTG.FIXTURES	
811004	STREET/FLOOD LTG.FIXTURES	
811005	AIR OBSTRUCTION LIGHTS (NEON TYPE)	
811006	LAMPS & TUBES	
811007	COMPACT FLUORESCENT LAMPS	
<b>8111</b>	<b>BATTERY</b>	
811101	ALKALINE BATTERY	
811102	LEAD ACID BATTERY	
<b>8112</b>	<b>LIFT</b>	
811201	LIFT	
<b>8113</b>	<b>D G SET</b>	
811301	DIESEL GENERATOR SET.	
<b>8114</b>	<b>BUSDUCTS</b>	
811401	HIGH VOLTAGE BUS DUCT.	
811402	MEDIUM VOLTAGE BUS DUC	
<b>8115</b>	<b>ELECTRICAL ERECTION PACKAGE</b>	
811501	SWITCHYARD PACKAGE	
811502	SUB-STATION PACKAGE	
811503	PLANT ELECTRIFICATION PACKAGE(Major Projects)	
811504	PLANT ELECTRIFICATION PACKAGE(MINOR PROJECTS)	
811505	AIR PRESSURISATION / VENTILLATION SYSTEM	

## INDEX ELECTRICAL ENGINEERING ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
<b>8116</b>	<b>ELECTRICAL ERECTION MATERIALS</b>	
811601	PRE-FABRICATED AL-CABLE TRAYS	
811602	PRE-FABRICATED G.I. CABLE TRAYS	
811603	FRP CABLE TRAYS	
811604	GI PIPES & CONDUITS	
811605	PVC PIPES & CONDUITS	
811606	INDUSTRIAL CABLE GLAND	
811607	CABLE LUGS	
811608	BITUMENOUS BASED CABLE TERMINATION/STRAIGHT THROUGH	
811609	EPOXY BASED TERMINATION/STRAIGHT THROUGH JOINTING KITS.	
811610	SI RUBBER BASED CABLE TERM./STRAIGHT THRU JOINTING KITS.	
811611	LIGHTING POLES	
811612	TRANSFORMER OIL	
811613	INDUSTRIAL EXHAUST FAN	
<b>8117</b>	<b>RELAYS / METERS / RECORDERS</b>	
811701	ELECTRO-MECHANICAL RELAYS	
811702	MICROPROCESSOR / NUMERICAL RELAYS	
811703	METERS	
811704	RECORDERS	
<b>8118</b>	<b>CAPACITORS</b>	
811801	HIGH VOLTAGE SHUNT CAPACITORS	
811802	MEDIUM VOLTAGE SHUNT CAPACITORS	
811803	LOW VOLTAGE SHUNT CAPACITORS	
<b>8119</b>	<b>OVERHEAD TRANSMISSION EQUIPMENT</b>	
811901	OVERHEAD CONDUCTORS-AL /ACSR	
811902	EHV/HV INSULATORS	
811903	M.V.INSULATORS	
811904	LIGHTNING ARRESTOR	
<b>8120</b>	<b>TELEPHONE EXCHANGE / PA / PAGING EQUIPMENT</b>	
812001	TELEPHONE EXCHANGE EQUIPMENTS	

## INDEX ELECTRICAL ENGINEERING ITEMS

ITEMCODE	ITEM DESCRIPTION	Status
812002	PAGING EQUIPMENTS / PUBLIC ADDRESS SYTEM	
<b>8121</b>	<b>INDUSTRIAL HEATERS ETC.</b>	
812101	INDUSTRIAL HEATER	
<b>8122</b>	<b>INDUSTRIAL CONTROL &amp; SIGNALLING EQUIPMENT</b>	
812201	HOSE PROOF LOCAL CONTROL STATION	
812202	INDUSTRIAL TYPE SW. SOCKET & PLUG	
812203	HOSEPROOF JUNCTION BOXES	
812204	ELECTROMAGNETIC EQUIPMENT	
812205	LIMIT SWITCHES / BELT MONITORING SWITCHES	
812206	LIMIT SWITCHES (FLAMEPROOF TYPE)	
812207	HORN/HOOTER/KLAXON	
<b>8123</b>	<b>CATHODIC PROTECTION SYSTEM</b>	
812301	CATHODIC PROTECTION SYSTEM	



**INDEX CUSTOM CLEARANCE & TRANSPORTATION ITEMS**

ITEMCODE	ITEM DESCRIPTION	Status
9101	CUSTOM CLEARANCE & TRANSPORTATION (INCLUDING ODC / OWC)	
910101	CUSTOM CLEARANCE & TRANSPORTATION (INCLUDING ODC / OWC)	