NAME OF ORGANISATION WEBSITE LINK MINISTRY/DEPT

INDIAN OIL CORPORATION LIMITED https://iocl.com MoPNG

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FINANCIAL YEAR 2024-25

Capex Procurement Projected _ Refineries

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Sl. No.	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores		
1	Vessels/Drums/Tanks		427	Nos.	342.39		
2	Pumps		898	Nos.	512.08		
3	Reactors		64	Nos.	299.32		
4	Column/Column Internals/Column Modification		117	Nos.	381.85		
5	Heat Ex/Air coolers/Fin Fan Coolers		486	Nos.	692.93		
6	Filters		1	Nos.	0.08		
7	Instrumentation items (DCS, PLC, Analyser,,sensors,, Flowmeter,Transmitter etc.)		LOT	LOT	71.05		
8	Instrument Cables		LOT	LOT	27.44		
9	Electrical Items (Transformer, Switchboard,Switch gears, HV/MV Boards,Motors,Hoist,PFIC Panel,VFD,Genset)		LOT	LOT	69.40		
10	Electrical Cables		LOT	LOT	45.94		
11	Compressors/Blowers/Fans		38	Nos.	354.86		
12	Heaters & Stacks		29	Nos.	409.20		
13	Bulk (Pipe/Fittings/Flanges/Valve)		LOT	LOT	193.72		
14	Package Items(HVAC,ETP,Refigeration,Cooling Tower,DI Guard,Chlorine Injection,Chemical Injection,Side Stream Filter,Ehylene BOG,TEG Barelling,Flare,Communication Mgmt Sytem,Nitrogen Cooling System,Control Monitoring System,Ambience Air Monitoring system,PCK metering Skid,Cathodic Protectin System,FDAS system,CCTV,Custody Transfer Metering Skid,Clean Agent System) Fire Fighting		LOT	LOT	1735.93		
15	system/equipment/package, Foam Concentrate, Manual & Remote Operated High Volume Longe Range Monitor with Accessories		LOT	LOT	10.00		
16	Incinerator & Instr. Components		-	Nos.	-		
17	Mech items :EOT Crane,Forklift,Weigh Bridge,Industrial Lift,Belt & Screw conveyors/Dock leveller		16	Nos.	2.00		

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18	Steam Turbine	1	Nos.	50
19	Rotary Valves/Safety Valves/Control Valves/On-off Valves/Emergency Vent Valves/Shutdown Valves	 LOT	LOT	4.72
20	Mixers & Agitators	35	Nos.	226
21	Driers	-		-
22	Separators	-		-
23	Boiler			-
24	Lab Equipment	-		-
25	Pig Launcher & Pig Receiver	-		-
26	Marine Loading Arm	-		-
27	Inert Ceramic balls	-		-
28	Sample Coolers (PI) & Sample Bombs (PE)	-		-
29	Mounded Bullet	5	Nos.	66
30	Spare Components (Compressor/Pumps/Feed Coalescer)	LOT	LOT	10.82
31	Miscellaneous items (including FR approved project)	LOT	LOT	826.89
32	API 610 Centrifugal Pump	4	No.	25
33	Venturi type Steam Trap	8	Nos	1
34	Bottom mounted constant spring support	24	Nos	2.3
0.5	CLARIANT OleMax 101 (8mm Spheres)	62588	Kgs	
35	Support Balls (Ceramic/Alumina) - 12 mm Size	5460	Kgs	45
36	Treater Adsorbent	1	Lot	12
37	Chloride Guard Bed Adsorbent	1	Lot	0.72
38	Dryer treater Adsorbent	1	Lot	8
39	Automatic Storage & Retrieval System for Petrochemical Warehouse	1	Set	198
40	Burner for Process heaters	4	Set	30
41	Oxygen Analyser	3	Nos.	1
42	Plant Lift (Hazardous area & Flameproof)	1	No.	5
43	H2S Analyser, H2/COS Analyser	1	No.	2
44	H2S Analyser in Sulphur recovery Tail Gas Analyser in Sulphur recovery unit Analyser in Stack & Ambient air quality measurement for Sox	1	No.	2.5
45	Water Quality Analyzers like COD, BOD, Turbidity, TOC.	14	Nos.	5
46	Vibration Monitoring System	2	Nos.	5
47	Analyser in Stack & ambient air quality measurement for PM2.5 /	2	Nos.	0.1

	DV40		T .	T	T
	PM10				
48	Bagging and Pelletizing Plant		4	Nos.	35
49	Check Valves (exotic metallurgy, dual plate, swing type, duplex)		14	Nos.	1
50	Reactor Internals (of Proprietary profile wire and baffle with MOC - SS 347 for PX-PTA Expansion project, Panipat)		1	Lot	0.5
51	BALL VALVES of Duplex, Alloy 276		50	Nos.	3.5
52	Know-how, Process Package, Proprietary Equipment (if any) and other services for the Bitumen Manufacturing Unit		2	No.	32
53	Gas Chromatograph		1	No.	1.60
54	EXTRUSION AND PELLETIZING UNIT (22-PK-3851)		1	Package	120
55	Supply of License, Basic Engineering Design Package, Catalyst(s), Proprietary Items (if any) and Other Services for Cracked LPG (CR LPG) Treater Unit at Panipat Refinery		1	Package	16.79
	Steam turbine driven (single stream) Air Blower package (412-K-1001)' along with accessories, auxiliaries, control panel(s), all instrumentation and controls, mandatory spares, commissioning spares and special tools & tackles.		1	Package	135
57	Supply of "License Know How, Basic Design Engineering Package (BDEP) and assistive services for Maleic Anhydride (MAH) based Butane Diol-Tetrahydrofuran (BDO-THF) unit at Panipat Refinery & Petrochemical Complex, Panipat"		1	Package	178.49
	Proc	curement Projected - For Repa Maintenance of Refineries	ir &		
		Maintenance of Remieries			
		Proad		Accounting	Estimated Value

Sl. No.	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores
1	Pump Spares			Lot	49
2	Mechanical Seal Spares			Lot	58
3	Bearings			Lot	5
4	Turbine Spares			Lot	119
5	Steam Engine Spares			Lot	1
6	Furnace Spares			Lot	15
7	Compressor Spares			Lot	62
8	Fan & Blower Spares			Lot	7
9	Agitator & Mixer Spares			Lot	2
10	ETP, LPG Plant Equipment Spares			Lot	12
11	Air Conditioner Spares			Lot	2

12	Heat Exchanger Spares			Lot	47
13	Column/ Reactor Spares			Lot	35
14	Pipe & Pipe Fittings			Lot	130
15	Gear Box Spares			Lot	9
16	Motor Spares			Lot	4
17	Transformer, Battery, Switch Gear, Cable, Lampetc. Spares			Lot	82
18		Liquid oxidation Catalyst for spent caustic regeneration	1.5	МТ	2.18
19		Anti Oxidant (AO 1010) Pentaerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)	980	МТ	36.42
20		Anti Oxidant AO 168/ AO9	1565	MT	38.10
21		AO1076 (Octadecyl β – (3,5-ditert -butyl-4-hydroxy phenyl)- propionate	96	MT	3.8
22		ATF Merox Catalyst - Pre impregnated activated charcoal	36	M3	0.81
23		Benzene hydrogenation catalyst for ISOM unit	2.1	MT	2.55
24		CAB catalyst	16	МТ	2.65
25		CAB-2 catalyst (Blend of vanadium oxytrichloride & titanium tetrachloride 50/50)	31	MT	4.65
26		Carbon Monoxide (CO) promoter catalyst additive for FCC Unit	16	MT	5.87
27		Catalyst for DCU LPG Merox Unit	547	L	0.28
28		Hindered amine light stabilizer (HALS) - Chimassorb 944	9	MT	0.93
29		Claus Catalyst (Al based)	151.2	M3	1.45
30		Claus Catalyst charge for Sulphur Recovery Unit (SRU)	22	M3	0.71
31		Chloride guard adsorbent for Continuous Catalytic Reforming Unit (CCRU) stabilizer feed	30.5	MT	0.9
32		2-Hydroxy-4-n- octoxybenzophenone (Cyasorb 531/ UV-1)	6	МТ	0.75
33		Cyclo-Hexyl Methyl Methoxysilane (DONOR C)	33	MT	3.19
34		Di-ICyclo-Pentyl-Di-Methoxy- Silane (DONOR D)	3	MT	1.21
35		Slip additives (Erucamide)	110	MT	4.7
36		Ethylene drying and CO2 removal bed (Adsorbant)	8	MT	0.37
37		Ethylene drying and CO2 removal bed (Foxed) for PP Unit	3	МТ	0.43
38		Fluidized Catalytic Cracking Catalyst	4435	MT	139

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39	Chemicals, Catalyst &	Grease (VASELINE)	27	MT	0.72
40	additives	Hydrotreating and Hydrocracking catalyst for Hydrocracking unit	320	MT	80.25
41		Hydrotreating Catalyst for DHDT unit	478	MT	80.4
42		ISOM catalyst	24	MT	35
43		Liquid oxidation Catalyst for spent caustic regeneration	1.59	MT	2.18
44		Low temp. hydrogenation catalyst (Tail Gas Treatment Unit)	21.57	МТ	1.77
45		Molecular sieves-desiccant (sodium-potassium-alumino silicate)	47.6	МТ	1.25
46		Optical brightener	1	MT	0.62
47		PEPQ (Phosphorous trichloride, reaction products with 1,1- biphenyl and 2,4-bis(1,1- dimethylethyl)phenol) (secondary antioxidant)	186	МТ	19.80
48		Peroxide-101 (2, 5 Dimethyl- 2,5-di (tert-butyl-peroxy) henaxe)	92	MT	8.91
49		PG/Pelargonic acid/ C8-C10 fatty acid	330	MT	9.50
50		PP Catalyst. A composition of Magnesium Chloride and 1,2 Benzenedicarboxylic acid, 1,2 Bis[2- cholro-1- (chloromethyle)ethyl] ester.	7.5	МТ	24.20
51		PPA (Polymer Processing Additive)	40	MT	5.29
52		Propylene drying and CO2 removal bed for PP unit (Fixed bed)	9	MT	0.24
53		Silica gel-desiccant (Compound of Silicon dioxide)	187	MT	4.30
54		T Fuel & U-Fuel for analysis of Cetane number	3690	Ltr	0.91
55		UV stabilizer 622	150	MT	8.80
56		ZN-180M (Avant CATALYST) or equivalent	240	Kg	0.75
57		ZSM-5 catalyst	100	MT	8.74
58		Primary Reference Fuel (PRF) {ISO-Octane & n heptane}	880	Kg	0.11
59		ATF (Aviation Turbine fuel) Merox catalyst – Pre impregnated activated charcoal	36	M3	0.81
60		DSTDP (distearyl thiodipropionate) - acts as a secondary antioxidant for PP polymers.	65	MT	2.30

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	Speciality Grease - Mixture of higher paraffin hydrocarbon used			
61	as catalyst protection in Spheripol PP technology for production of Polypropylene.	15	МТ	0.40
	Magnesium Aluminium Hydroxide Carbonate Hydrate			
62	(DHT 4A/Hycite 713) -used in reaction for acid scavenging in polymer production and processing systems.	85	MT	1.80
	Alkyl Amine Ethoxylate (ATMER 163) - for			
63	neutralization of Catalyst & Co catalyst and works as anti- static agent.	107	MT	5.06
64	Anitoxidant AO 3114(1,3,5- Tris(3,5-di-tert-butyl-4- hydroxy benzyl)-s-triazine- 2,4,6-(1H,3H,5H)trione) - specialized vis- breaking chemical used for speci fic PP grade	28	MT	1.33
	Non-Aromatic catalyst batch mineral oil (MINERAL OIL) - used			
65	for diluting Donor in order to have better accuracy of the flow measure and also used for flushing in TEAL area.	70	MT	1.45
	HDPE consumable polymerization Catalyst - used for			
66	polymerization reaction for production of specific grade of High density polyethylene from Ethylene	8	MT	21.60
	Antioxidant (AO-1330) - prevents polymer from			
67	degradation caused by exposure to heat, ultraviolet radiation (UV) and mechanical shear	46	MT	4.8
	Desiccant for ethylene guard bed (Fixed bed for ethylene purification) - used for removal of Carbon monoxide, carbon			
68	dioxide, moisture from Ethylene feed in Swing unit to Ultra low levels.	63	MT	3.35
69	ST65692 (Biphenyl) -approved additive Packages required for manufacturing of Servo Duotherm S required at Panipat Refinery	60	МТ	1.20
70	Mixed Butylated Phenol Antioxidant (ST4064) - used in blending in many lubricants	87.3	MT	1.66
	Hydrogenated Terphenyl (ST58606) -approved additive			
71	Packages required for manufacturing of Servotherm	304	МТ	9.09

		SHT 32 required by IOCL Refinery.			
72		TEAL	18	MT	0.72
73		Cast Air Preheater Module / Cast & Glass Air Preheater Modules / Glass Air Pre-Heater Modules	1	No	1.18
74	M 1 . 1	Cutter Blades of Extruder	1600	No	2.19
75	Mechanical Stores	Hydrogen Tubular Reformer Catalyst Tubes	36	No	3.61
76		Rotary Tight Shut off Valve	4	No	0.60
77	Chemicals, Catalyst & additives	CD (Di- ethyl aluminum chloride)	30	MT	1.12
78	Chemicals, Catalyst & additives	CJ (Di- ethyl aluminum ethoxide)	30	МТ	2.56
79	Chemicals, Catalyst & additives	GMS-90	250	MT	3.3
80	Chemicals, Catalyst & additives	Base FCC catalyst for INDMAX Unit.	1170	MT	34.5
81	Chemicals, Catalyst & additives	DMDS	665	MT	21.81
82	Chemicals, Catalyst & additives	RM 68 Master batch	110	MT	9.52
83	Equipment	Feed Filter Bank	2	No	22.00
84	Chemicals, Catalyst & additives	MIBK (METHYL ISOBUTYL KETONE)	700	MT	20
85	Mechanical Stores	Radiant Coils	2	Set	34.78
86	Chemicals, Catalyst & additives	Hydrogenation Catalyst (Activated Alumina impregnated with Cobalt and Molybdenum Oxides).	52.3	М3	2.54
87	Chemicals, Catalyst & additives	Liquid oxidation catalyst for FCC Indmax Unit	555	Kg	0.75
88	Lab equipment	Fully Automated Ball on Cylinder Lubricity Evaluator (BOCLE)	2	No.	1.79
89	Lab equipment	Trace Nitrogen Sulphur Analyser	1	No.	1.21
90	Chemicals, Catalyst & additives	Hydro treating catalyst for DHDS Unit	56	МТ	6.04
91		ISO-Octane	48	MT	1.06
92	Chemicals, Catalyst & additives	Mineral Oil (White Oil)	205	MT	5.64
93	Chemicals, Catalyst & additives	Methanol	14400	MT	63.13
94	Chemicals, Catalyst & additives	Poly Propylene Catalyst	7.5	MT	24.90
95	Chemicals, Catalyst & additives	PD/ 2,4 Pentane dione	220	MT	10.98
96	Service	Assay analysis of Fresh & Spent catalyst	2	No.	0.63
97	Service	Benchmarking Study	1	No.	0.44
98	Equipment	Slide Valve Actuators for RFCCU	1	No.	6.65
99	Equipment	Coke cutting system for delayed Coker unit	4	Nos.	1.47
100	Chemicals, Catalyst & additives	ISOM Catalyst for MSQ Unit-BR Inert Ceramic Ball	22000 Kg + 0.8 M ³		27.23
101	Chemicals, Catalyst & additives	BENSAT Catalyst- BR and Inert ceramic Ball	1434 Kg + 0.5 M ³		2.23

102	Lab equipment	Total Chloride, Nitrogen and Sulphur Analyser	1	No.	0.87
103	Lab equipment	Automated High Frequency Reciprocating Rig Lubricity Evaluator (HFRR) Lubricity Apparatus	1	No.	1.14
104	Chemicals, Catalyst & additives	BENSAT Catalyst	2.308	MT	2.72
105	Specialty Service	Assessment of Coke drums bulge severity based on Laser profile data at Gujarat Refinery.	1	No.	0.22
	Pro	ocurement Projected _ Capex a Repair & Maint - Pipelines	nd		
Sl. No.	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores
1	Strainer (Nos)		7	Nos.	0.12
2	Transfer Pump (Nos)		2	Nos.	0.15
3	ACDB Panel (Nos)		25	Nos.	3.18
4	API 6D Ball Valves (Nos)			Nos.	
5	API 6D Valves (Nos)			Nos.	
6	Ball Valve (Nos)		164	Nos.	8.61
7	Basket Strainer (Nos)		3	Nos.	1.00
8	Control valve (Nos)		4	Nos.	1.00
9	EEE (Nos)			Nos.	
10	Emergency evacuation equipment (Nos)		4	Nos.	2.00
11	Engine Spares		Lot	Lot	14.70
12	ER Probe(Nos)			Nos.	1.04
13	F/F PUMP, Jockey pumps, water filling pumps(Nos)		7	Nos.	0.70
14	Fire Fighting Pipes (km)			Km	
15	Fire Fighting Pump (Nos)		1	Nos.	1.00
16	Flow Tee (Nos)			Nos.	
17	Globe Valve (Nos)		4	Nos.	1.00
18	Heavy duty access Mats				
19	High Mast(Nos)		10	Nos.	3.03
20	HOT crane (Nos)		2	Nos.	1.00
21	HT Capacitor Panel(Nos)		2	Nos.	0.29
22	HT Panel(Nos)		2	Nos.	2.89
23	HT/LT/Control cables(km)		85	Km	0.58
24	Instrumentation, Control & SCADA System (Nos)		3	Nos.	1.49
25	Insulating coupling (Nos)		20	Nos.	1.00

26	Jockey pump (Nos)	1	Nos.	1.00
27	LT DG(Nos)	27	Nos.	0.64
28	LT Panel(Nos)	2	Nos.	0.00
29	Mainline pumping Unit (Nos)	8	Nos.	23.00
30	Marine Hoses for SPM		Nos.	9.00
31	Mechanical Pipe End connector+ Standard/Long seal Leak clamps+ Encapsulating Leak Clamps		Nos.	1.05
32	Metering skid assembly (consisiting of Filtration, Metering and Pressure Reduction units) of various sizes for providing connectivity to CGD Entities from Gas pipelines and augmentation of existing facilities (Nos)	4	Nos.	1.01
33	Metering Skid Ph-III(Nos)			
34	Metering Skid(Nos)			
35	Misc. fire fighting equipment (Nos)	1	Nos.	2.00
36	NRPL Mainline pumping unit Replacement		Nos.	20.00
37	Other Marine Spares		Nos.	6.30
38	pipe fitting(Nos)	14000	Nos.	1.87
39	Pipe (km)	6.8	Nos.	6.12
40	Remote operated Valve (Nos)	2	Nos.	1.00
41	Scrapper Barrel	5	Nos.	1.00
42	Separator Filter (Nos)		Nos.	
43	Small size (<4") misc. valve (Nos)		Nos.	1.00
44	SRV (Nos)	1	Nos.	0.05
45	Station pipes(km)	13.3	Nos.	13.74
46	Steel Pipe (KM)	550	Km	519.00
47	Steel Plate (MT)	569	Nos.	5.80
48	sump pump and tank (Nos)		Nos.	
49	Swing check valve (Nos)	5	Nos.	1.00
50	Telecom System (comprising of DC power, Networking system, CCTV system, Telephone system, OFC, HDPE, etc.)(Nos)	3	Nos.	75.80
51	Transformer(Nos)	4	Nos.	24.88
52	Vadinar SPM Replacement project 1. Buoy & accessaries 2. Concrete Coated Pipe	Lot	Nos.	500.00
53	Valves	Lot	Lot	4.00
54	VALVES of all types(Nos)	332	Nos.	3.48
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55	VFD (Nos)		6	Nos.	20.00				
56	Coke cutting system for delayed Coker unit		4	Nos.	1.46				
57									
	Procurement Projected _ Marketing - LPG Group								
Sl. No.	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procuremen t in Rs/Crores				
1	LPG Pump		6	Nos.	3.7				
2	LPG Compressor		9	Nos.	2.84				
3	Air Compressor		6	Nos.	0.8				
4	Air Dryer		3	Nos.	0.45				
5	DG Set		6	Nos.	2.22				
6	Fire Engine		6	Nos.	1.35				
7	Valve change without Evacuation Machine		6	Nos.	1.4				
8	LPG Loading arm		16	Nos.	0.44				
9	Carousel		8	Nos.	23.6				
10	Computers		50	Nos.	0.25				
11	Additive dosing machines		30	Nos.	5.4				
12	Carousal Cards in Nos.		380	Nos.	2.66				
13	Mech Seals (Refurbishing) Nos.for LPG Pump		95	Nos.	2.85				
14	Mech Seals New in Nos. for LPG Pump		25	Nos.	2.00				
15	Valves / Flanges / Gaskets / Spares in Nos.		300	Nos.	7.50				
16	Cables (Control / Power) in RMs		30000	Nos.	0.45				
17	Pressure / Temp Transmitters/Gauges in Nos.		200	Nos.	2.00				
18	Fire Engine / DG / DC Batteries in Nos.		3300	Nos.	4.95				
19	Conveyor Chain in RM		40000	Nos.	4.80				
20	Air Ends of Screw Compressors		40	Nos.	2.00				
21	Spares (Filters & Accessories) Air Comp in Nos.		500	Nos.	1.25				
22	LPG Vap Comp Seals / valves / Plates		300	Nos.	0.90				
23	Lights and Fixtures / Bulbs / glands / JBs / Switches		10000	Nos.	1.00				
24	Relays / Fuses		5000	Nos.	1.00				
25	Printer Cartridges		600	Nos.	0.30				
26	Sprockets / Cylinders / Shafts / wea / connec		20000	Nos.	4.00				
27	Misc Spares /Car (sensors / connectors / cables etc)		200	Nos.	2.00				

CI		Broad		Accounting	Estimated Value of			
	Procurement of LPG Cylinders & P Regulator							
35	Centering Arms of carousals		2500	Nos.	0.30			
34	Load cells for weigh bridges / weighing scales / carousals		1000	Nos.	2.5			
33	CCTV spares / modules		100	Nos.	1.5			
32	Fire / SCADA / GMS Panel Spares /	MIMIC / sensors / transmitter	300	Nos.	1.5			
31	Spares for Level gauges / transmitters		300	Nos.	3			
30	Diesel / Fire Engine Spares / filters / glands		700	Nos.	4.9			
29	Structural steel for Conv / Misc Works in MT		420	Nos.	1.60			
28	TLD / TLF Spares		800	Nos.	2.00			

specification procurement Sl. Unit Quantity **Description of item** in Rs/Crores No. **Parameters** 14.2 Kg Cylinders (Including New & 1 8400000 1070.69 Nos. Replacement) 19 Kg Cylinders (Including New & 2 900000 Nos. 140.04 Replacement) 47.5 Kg Cylinders (Including New & 3 50000 19.26 Nos. Replacement) 5 Kg Cylinders (Including New & 4 1500000 Nos. 130.01 Replacement) 5 425 KG Cylinders 2000 Nos. 13.17 6 5000000 72.44 **Pressure Regulators** Nos. 7 **Self Closing Valve** 20000000 168.00 Nos.

Procurement Projected _ Marketing - Lubes

Sl. No.	Description of item	Broad specification Parameters / Alternate	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores
1	Synthetic base oil Poly alfa olefin 6 CST		460	MT	12.18
2	ST5014 (Lithium Hydroxide Monohydrate)		275	MT	15.79
3	ST56058 (PIB 1000)		2140	MT	21.78
4	Synthetic base oil Poly alfa olefin 100 CST, PAO 100(ST 55580)		228.5	МТ	8.17
5	PIB of higher molecular wt.(ST 56032/ST 56036)		208.8	MT	3.33
6	Synthetic base oil Poly alfa olefin 4 CST, PAO 40(ST 55578)		255.1016	MT	8.39
7	1245	1244	14.44	MTs	0.60
8	1410	1414	267.12	MTs	6.68
9	1415	1415/1417/1418	240.24	MTs	5.10
10	1419		1.05	MTs	0.02
11	1504		10.50	MTs	0.40
12	1539	1244	5.45	MTs	0.27

	15/5	1527	272.04	MT.	
13	1567	1526	273.84	MTs	7.56
14	1604	1490	1,413.93	MTs	27.76
15	1623	1617	1,501.50	MTs	33.06
16	1658	1659	3,150.00	MTs	67.47
17	1660	1678	828.45	MTs	18.24
18	1685	1617/1772+4574	11.06	MTs	0.31
19	1708		5.04	MTs	0.37
20	1722		4.54	MTs	0.24
21	1724		147.82	MTs	3.68
22	1734	1732	847.34	MTs	17.68
23	2010		10.29	MTs	0.20
24	2034		25.63	MTs	0.33
25	2120	2118	16.17	MTs	1.04
26	2130	2098	10.50	MTs	1.03
27	3002		1,873.46	MTs	26.15
28	3006		9.18	MTs	0.09
29	3008		102.54	MTs	1.37
30	3010		32.72	MTs	0.72
31	3012		481.79	MTs	5.16
32	3028		28.91	MTs	0.89
33	3039		3.57	MTs	0.03
34	3066		5.85	MTs	0.39
35	3084		41.66	MTs	2.06
36	3088		0.53	MTs	0.01
37	3090		11.97	MTs	0.31
38	3098		7.09	MTs	0.97
39	3514		1,365.00	MTs	18.34
40	3544		180.60	MTs	1.89
41	3554		98.02	MTs	1.69
42	3558		128.10	MTs	2.06
43	3570		158.38	MTs	2.09
44	3572		28.98	MTs	0.21
oxdot					V.21

45	3574		1,575.00	MTs	15.80
46	3575		123.89	MTs	1.36
47	3580		0.53	MTs	0.87
48	4025		5.25	MTs	0.22
49	4027		1.05	MTs	0.02
50	4047		0.13	MTs	0.02
51	4058		4.66	MTs	1.32
52	4064		153.28	MTs	2.83
53	4096		77.28	MTs	1.75
54	4098		4.70	MTs	0.20
55	4529	4542	199.50	MTs	10.48
56	4543		6.30	MTs	1.89
57	4556		21.95	MTs	3.96
58	4587		0.27	MTs	0.01
59	5012		4.73	MTs	0.02
60	5014		299.41	MTs	20.67
61	5016		2.63	MTs	0.01
62	5021		5.25	MTs	0.06
63	5028		1.89	MTs	0.07
64	5044		163.80	MTs	1.55
65	5060		113.64	MTs	0.77
66	5067		52.50	MTs	1.39
67	5080		0.84	MTs	0.02
68	5082	5076	157.50	MTs	3.75
69	5516		1.58	MTs	0.01
70	5522		141.56	MTs	4.17
71	5523		0.34	MTs	0.03
72	5534		2.36	MTs	0.10
73	5560		4.97	MTs	0.05
74	6001		3.68	MTs	0.21
75	6011		96.84	MTs	3.01
76	6012		123.85	MTs	3.59

	6017	6038/6102	7.32	MTs	
77	6051		383.85	MTs	0.18
78		4000			17.03
79	6084	6082	97.02	MTs	1.24
80	6100	6037	213.33	MTs	9.01
	6102	6038/6017	443.76	MTs	
81	6202		10.50	MTs	6.31
82	6210		5.04	MTs	0.30
83	6218		1.05	MTs	0.31
84					0.04
85	6548		18.38	MTs	0.78
86	6552		48.69	MTs	2.33
87	6554		1.29	MTs	0.07
	6566		53.10	MTs	
88	6590		0.38	MTs	1.92
89	7014		0.53	MTs	0.03
90	7024		0.42	MTs	0.02
91					0.11
92	7029		0.42	MTs	0.02
93	8002		36.12	MTs	2.14
	8014		48.30	MTs	
94	8038	80381	4.93	MTs	1.56
95	8052		1.58	MTs	0.31
96	8072		0.53	MTs	0.02
97					0.01
98	8075		29.40	MTs	0.40
99	8089		14.70	MTs	1.06
	8102		0.63	MTs	0.01
100	8121	8133/8120	661.71	MTs	
101	8138		29.55	MTs	11.18
102	8153		0.21	MTs	1.13
103					0.01
104			4.19	MTs	0.02
105	8194		63.00	MTs	1.57
	8528		0.53	MTs	
106	8540		1.58	MTs	0.90
107	8560		7.78	MTs	0.17
108					0.07

	40621	4062	47.28	MTs	
109					1.60
110	55901	5590	2.27	MTs	0.09
111	56036	56032	264.60	MTs	3.44
112	56058		2,551.50	MTs	29.60
113	65548		0.84	MTs	0.02
114	65562		128.10	MTs	1.54
115	65646	65684/65682	94.50	MTs	1.74
	65654	65684/65682	50.40	MTs	
116	1050		23.81	MTs	0.91
117	1256		0.39	MTs	2.75
118	1300		2.33	MTs	0.01
119	1304		28.55	MTs	0.13
120	1350		108.87	MTs	1.02
121	1414		163.76	MTs	3.37
122	1418	1296	13.06	MTs	4.33
123	1426	1270	10.58	MTs	0.55
124					0.27
125	1427		45.28	MTs	1.15
126	1431		2.25	MTs	0.10
127	1436		3.44	MTs	0.21
128	1442		1.25	MTs	0.08
129	1453		43.70	MTs	1.80
130	1468		175.64	MTs	5.51
131	1475		1,390.60	MTs	30.78
132	1477		6.51	MTs	0.21
	1478		11.53	MTs	
133	1482		44.57	MTs	0.27
134	1490	1604	96.25	MTs	1.54
135	1492	1474	377.23	MTs	2.19
136	1496		4.27	MTs	12.57
137	1500		17.55	MTs	0.34
138	1505		77.40	MTs	0.63
139	1512		1.70	MTs	2.21
140	1312		1./0	141 1 2	0.05

1.4.1	1516		22.09	MTs	0.62
141	1527	1242	12.60	MTs	0.63
143	1541		2.74	MTs	0.08
144	1545	1599/1613	368.21	MTs	7.67
145	1546		574.56	MTs	12.64
146	1552	1554	675.57	MTs	17.36
147	1560		62.19	MTs	1.94
148	1573		63.89	MTs	2.26
149	1574		23.84	MTs	0.87
150	1585		1.24	MTs	0.07
151	1586		77.41	MTs	2.23
152	1587		99.88	MTs	3.53
153	1589		61.08	MTs	2.37
154	1596		2.19	MTs	0.06
155	1597	1774/1772	7.73	MTs	0.46
156	1617	1774/1772	1,365.00	MTs	25.66
157	1619	1410	401.87	MTs MTs	0.44
158	1632	1410	35.73	MTs	8.68
159	1642		706.65	MTs	2.15
160	1644		327.35	MTs	21.08
161	1652	1658	525.00	MTs	12.08
162	1659	1658	1,017.50	MTs	11.50
163	1662	1030	21.31	MTs	19.86
164	1664		11.34	MTs	1.03
165	1672		3.97	MTs	0.71
166	1674		761.46	MTs	0.20
167	1676		1,005.14	MTs	35.27
168	1678	1660	333.45	MTs	25.96
169	1682		148.26	MTs	8.49
170	1684		285.98	MTs	4.70
171	1694	1660	637.79	MTs	7.79
172					14.42

173	1700		0.85	MTs	0.04
174	1710	1712/1714	210.00	MTs	6.50
175	1718		1.64	MTs	0.10
176	1728		17.13	MTs	0.78
177	1730		1.60	MTs	0.08
178	2006		58.37	MTs	3.43
179	2014		0.72	MTs	0.08
180	2046		3.34	MTs	0.14
181	2061		43.09	MTs	2.92
182	2064		4.78	MTs	0.40
183	2065		31.50	MTs	2.16
184	2067		4.52	MTs	1.01
185	2068		2.49	MTs	0.40
186	2082		1.30	MTs	0.11
187	2116		203.13	MTs	12.33
188	2117		168.93	MTs	7.44
189	2124		106.65	MTs	6.34
190	2146		8.62	MTs	1.44
191	2152	2158	4.83	MTs	1.64
192	2154		62.76	MTs	4.91
193	2160		641.04	MTs	41.73
194	2170		1.79	MTs	0.17
195	2176		6.27	MTs	0.49
196	2182		0.22	MTs	0.02
197	3001		13.24	MTs	1.12
198	3080		5.58	MTs	0.44
199	3082		0.62	MTs	0.05
200	4540		5.96	MTs	0.21
201	4552		1.00	MTs	0.07
202	4554	4528	54.53	MTs	2.24
203	4562	4528	38.16	MTs	1.69
204	4569		1.91	MTs	0.26
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	4598		19.72	MTs	
205	4598		19.72	IVI I S	0.98
206	4600		1.33	MTs	0.14
207	4602		4.61	MTs	0.38
208	6000	6114	367.50	MTs	11.81
209	6008		24.00	MTs	1.57
210	6028		247.58	MTs	3.65
211	6030		8.51	MTs	0.42
212	6032		60.14	MTs	3.09
213	6037	6100	491.40	MTs	23.39
214	6038		1,150.21	MTs	16.44
215	6039		1.55	MTs	0.11
216	6063		325.56	MTs	18.24
217	6078		15.35	MTs	1.14
218	6092		1,919.80	MTs	36.04
219	6110		3.41	MTs	0.24
220	6204		10.48	MTs	0.42
221	6212		29.23	MTs	1.79
222	6556		17.55	MTs	0.85
223	6558		105.00	MTs	6.77
224	6562		5.88	MTs	0.36
225	6594		6.57	MTs	0.38
226	6596		1.40	MTs	0.12
227	6598		102.11	MTs	5.42
228	7012		1.22	MTs	0.13
229	7022		15.35	MTs	1.84
230	7040		2.31	MTs	0.51
231	8026		1.69	MTs	0.15
232	8027		4.53	MTs	0.83
233	8040		3.32	MTs	0.22
234	8082		18.85	MTs	1.23
235	8180		13.86	MTs	1.04
236	20041	2004/20042	29.40	MTs	2.11

	56038		12.75	MTs	
237	30030		12.73	MITS	0.36
238	56040		1.56	MTs	0.10
239	65630		17.01	MTs	1.43
240	80381		1.04	MTs	0.07
241	1233	1236/1231	98.70	MTs	3.74
242	1236		0.66	MTs	0.03
243	1274		2.07	MTs	0.19
244	1515		157.50	MTs	5.42
245	1544		6.78	MTs	0.24
246	1551	1507/1534	23.66	MTs	1.00
247	1553	1599+3001/1543+4601	122.03	MTs	2.94
248	1557		7.78	MTs	0.26
249	1575	1738/1770	8.47	MTs	0.24
250	1594	1516	19.75	MTs	0.66
251	1608	2002	0.21	MTs	0.01
252	1638	1647	134.40	MTs	3.53
253	1643	1617/1585+1621	336.00	MTs	5.48
254	1668	1547	51.24	MTs	1.82
	1683		0.59	MTs	
255	1740		882.00	MTs	0.04
256	1746		365.94	MTs	41.98
257	1748		96.16	MTs	8.17
258 259	1750		30.00	MTs	3.11
	1766		73.08	MTs	1.18
260	2050		70.27	MTs	1.72
	2066		35.51	MTs	1.17
262	2092		18.20	MTs	2.85
263	2098		7.28	MTs	1.00
264	2136		37.80	MTs	0.88
265	2184		75.61	MTs	3.35
266	3014		279.50	MTs	4.59
267	3022		2.10	MTs	3.43
268					0.01

102-99						
102.99 MTs	269	3030		48.18	MTs	0.43
271 3086 1.05 MTs 0.01 2.89 2.89 2.24 3.102 2.54.56 MTs 0.62 2.89 2.27 3.15 MTs 0.62 2.27 3.15 MTs 0.04 2.27 3.15 MTs 0.04 2.27 3.15 MTs 0.04 2.26		3074		102.90	MTs	
254.56 MTs 2.89		3086		1.05	MTs	
26.88 MTs		3102		254.56	MTs	
3522 3.15		3520		26.88	MTs	
275		3522		3.15	MTs	
276		4010		560.70	MTs	
277		4053		60.48	MTs	
100 13.23 MTs 0.03 13.23 MTs 0.24 14.00 13.23 MTs 0.24 14.00 MTs 14.00		4072		0.61	MTs	
13.23 MTs 0.24		4074		0.21	MTs	
280		4100		13.23	MTs	
281		4535		42.00	MTs	
282 4558 60.48 MTS 2.27 283 4595 0.76 MTS 0.10 284 4597 134.66 MTS 6.02 285 4614 0.42 MTS 0.02 286 5004 2.63 MTS 0.02 287 5011 52.05 MTS 1.26 288 5050 5.25 MTS 0.13 289 5052 5.25 MTS 0.14 289 5053 8.40 MTS 0.80 290 5064 39.26 MTS 2.22 291 5074 4.20 MTS 0.03 292 5074 4.20 MTS 0.03 293 5082 5076 106.85 MTS 2.00 294 5514 3.78 MTS 0.04 295 6025 6012/6015 156.49 MTS 3.97 296 6074 200.76 MTS 8.36 298 6096 54.39 MTS 1.57 299 6104 39.32 MTS 1.57 299 6108 85.81 MTS	281	4550		0.21	MTs	
283	282	4558		60.48	MTs	
134.66	283	4595		0.76	MTs	
285	284	4597		134.66	MTs	
286 5004 2.63 MTs 0.02	285	4614		0.42	MTs	
1.26	286	5004		2.63	MTs	0.02
288 0.13 289 5052 5.25 MTs 290 8.40 MTs 0.80 291 39.26 MTs 2.22 291 5074 4.20 MTs 0.03 292 5082 5076 106.85 MTs 2.00 293 5084 3.19 MTs 0.07 294 3.78 MTs 0.04 295 6025 6012/6015 156.49 MTs 296 6074 200.76 MTs 3.97 297 6096 54.39 MTs 1.57 298 1.57 6104 39.32 MTs 1.57 6108 85.81 MTs	287	5011		52.05	MTs	1.26
289 0.14 0.14 0.80 0	288	5050		5.25	MTs	0.13
290 39.26 MTs 2.22	289	5052		5.25	MTs	0.14
291	290					0.80
292 5082 5076 106.85 MTs 2.00	291					2.22
293	292					0.03
294	293		5076			2.00
295 0.04 296 6025 6012/6015 156.49 MTs 297 200.76 MTs 298 8.36 298 1.57 6104 39.32 MTs 299 1.57 6108 85.81 MTs	294					0.07
296 3.97 6074 200.76 MTs 297 8.36 6096 54.39 MTs 298 1.57 6104 39.32 MTs 299 1.57 6108 85.81 MTs	295					0.04
297 8.36 6096 54.39 MTs 1.57 6104 39.32 MTs 299 1.57 6108 85.81 MTs	296		6012/6015			3.97
298 1.57 6104 39.32 MTs 299 1.57 6108 85.81 MTs	297					8.36
299 1.57 6108 85.81 MTs	298					1.57
	299					1.57
	300	6108		85.81	MTs	1.17

301	6200	6037	1.18	MTs	0.06
302	6214		26.25	MTs	1.17
303	6216		189.00	MTs	3.49
304	6544		25.52	MTs	1.20
305	6546		6.30	MTs	0.30
306	6550		0.37	MTs	0.02
307	6560		0.77	MTs	0.04
308	6588		267.44	MTs	3.43
309	8086		4.62	MTs	0.37
310	8108		0.53	MTs	0.15
311	8118		2.75	MTs	0.57
312	8176		6.05	MTs	0.57
313	8594		3.15	MTs	0.12
314	8598		1.18	MTs	0.07
315	56060		16.19	MTs	0.56
316	63552		282.03	MTs	9.43
317	65538		262.27	MTs	2.15
318	65550		262.50	MTs	3.65
319	65568		0.84	MTs	0.03
320	65584		55.23	MTs	1.70
321	65642		1.90	MTs	0.07
322	65644		1.49	MTs	0.05
323	65694		90.09	MTs	1.61
324	65706		18.14	MTs	1.85
325	1052		3.36	MTs	0.22
326	1206	108	9.88	MTs	0.60
327	1244	1245	210.00	MTs	10.25
328	1306		1.29	MTs	0.05
	1543	1599/1613	2,079.00	MTs	40.87
329	1647	1668	142.29	MTs	
330	1673		17.18	MTs	4.02
331	1711		86.73	MTs	0.63
332					2.53

333	1732		604.79	MTs	15.57
334	1738		12.60	MTs	0.37
335	1742		14.71	MTs	0.34
336	1744		2.78	MTs	0.12
337	2042		0.20	MTs	0.02
338	2101	2100	190.99	MTs	9.82
339	2134	2131	378.00	MTs	15.29
340	4565	4568	201.67	MTs	9.53
341	6082	6084	197.72	MTs	2.59
342	55570		472.50	MTs	19.68
343	55578		262.50	MTs	11.56
344	55580		210.00	MTs	9.60
344	55552		189.00	MTs	7.87
346	55572		210.00	MTs	
346	55576		199.50	MTs	9.30
	8145	8144	63.00	MTs	8.81
348	1752	1756/1758	52.50	MTs	3.17 1.94
350	6102	6038	3,150.00	MTs	56.23
350	6006	6118	3,150.00	MTs	
351	1768	1770	52.50	MTs	54.35
	8162	81621/81622/81623	105.00	MTs	1.62
353	2007	20071	3.15	MTs	4.00
354	1764	1666/1756	52.50	MTs	0.28
355		rocurement Projected _BD	<u> </u>		2.19
Sl. No.	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores
1	Testing for MRS rating, Slow Crack Growth (SCG), Rapid Crack Propagation (RCP), Pigment Dispersion, Weatherability		1	No.	1.00
2	Color Spectrophotometer (Based on reflectance)		1	No.	0.3
	Proc	curement Projected _Pipelines			
Sl.	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement

No.				in Rs/Crores
1	Marine Hoses	179	Nos.	65.37

FINANCIAL YEAR 2025-26

Capex Procurement Projected _ Refineries

		Refineries	1		T -1 - 1
Sl. No	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores
1	Vessels/Drums/Tanks		99	Nos.	108.06
2	Pumps		275	Nos.	138.08
3	Reactors		10	Nos.	240.00
4	Column/Column Internals/Column Modification		22	Nos.	108.69
5	Heat Ex/Air coolers/Fin Fan Coolers		130	Nos.	142.66
6	Filters		-	Nos.	-
7	Instrumentation items (DCS, PLC, Analyser,,sensors,, Flowmeter,Transmitter etc.)		LOT	LOT	100.00
8	Instrument Cables		LOT	LOT	25.00
9	Electrical Items (Transformer, Switchboard,Switch gears, HV/MV Boards,Motors,Hoist,PFIC Panel,VFD,Genset)		LOT	LOT	70.00
10	Electrical Cables		LOT	LOT	50.00
11	Compressors/Blowers/Fans		14	Nos.	180.00
12	Heaters & Stacks		2	Nos.	69.61
13	Bulk(Pipe/Fittings/Flanges/Valve)		LOT	LOT	90.00
14	Package Items(HVAC,ETP,Refigeration,Cooling Tower,DI Guard,Chlorine Injection,Chemical Injection,Side Stream Filter,Ehylene BOG,TEG Barelling,Flare,Communication Mgmt System,Nitrogen Cooling System,Control Monitoring System,Ambience Air Monitoring system,PCK metering Skid,Cathodic Protectin System,FDAS system,CCTV,Custody Transfer Metering Skid,Clean Agent System)		LOT	LOT	433.11
15	Fire Fighting system/equipment/package, Foam Concentrate, Manual & Remote Operated High Volume Longe Range Monitor with Accessories		LOT	LOT	40.00
16	Incinerator & Instr. Components		-	Nos.	-
17	Mech items :EOT Crane,Forklift,Weigh Bridge,Industrial Lift,Belt & Screw conveyors/Dock leveller		-	Nos.	-
18	Steam Turbine		-	Nos.	-
19	Rotary Valves/Safety Valves/Control Valves/On-off Valves/Emergency Vent		-	Nos.	-

	Valves/Shutdown Valves				
20	Mixers & Agitators		-	Nos.	-
21	Driers		-	Nos.	-
22	Separators		-	Nos.	-
23	Boiler		-	Nos.	-
24	Lab Equipment		-	Nos.	-
25	Pig Launcher & Pig Receiver		-	Nos.	-
26	Marine Loading Arm		-	Nos.	-
27	Inert Ceramic balls		-	LOT	-
28	Sample Coolers (PI) & Sample Bombs (PE)		-	Nos.	-
29	Mounded Bullet		-	Nos.	-
30	Spare Components (Compressor/Pumps/Feed Coalescer)		-	Nos.	-
31	Miscellaneous items (including FR approved project)		LOT	LOT	692.25
32	Desalter System		2	Set	20.00
33	Hybrid Vacuum Ejector Package		1	Package	69.00
34	CENTRIFUGAL COMPRESSOR SPP		1	Nos.	70.00
35	Steam turbine driven (single stream) Air Blower package (412-K-1001)' along with accessories, auxiliaries, control panel(s), all instrumentation and controls, mandatory spares, commissioning spares and special tools & tackles.		1	Nos.	160.00
36	CLO Filter package		1	Package	59.00
37	Catalyst Metering Unit Package along with Catalyst transfer syringes		1	Package	12.00
38	Slurry Pumps: Main Fractionator Bottom Pumps – 2 Nos. CLO Product Pumps – 2 Nos.		1	Package	53.10
39	Licensor selection for compounded HDPE Unit at Panipat		1	No.	195
40	Bale Moisture Analyzer		1	No.	1.60
41	Dewatering Screens		2	No.	2.14
42	Bale Film wrapper		1	Package	9
43	Sulphur Pastillator And Handling System		1	Package	155
44	Baler Package		1	Package	82
	Pro	curement Projected - For Re Maintenance of Refineries			
Sl. No	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores

_		1			
1	Pump Spares			Lot	51
2	Mechanical Seal Spares			Lot	59
3	Bearings			Lot	5
4	Turbine Spares			Lot	122
5	Steam Engine Spares			Lot	1
6	Furnace Spares			Lot	15
7	Compressor Spares			Lot	64
8	Fan & Blower Spares			Lot	7
9	Agitator & Mixer Spares			Lot	2
10	ETP,LPG Plant Equipment Spares			Lot	12
11	Air Conditioner Spares			Lot	2
12	Heat Exchanger Spares			Lot	48
13	Column/ Reactor Spares			Lot	36
14	Pipe & Pipe Fittings			Lot	133
15	Gear Box Spares			Lot	9
16	Motor Spares			Lot	4
17	Transformer, Battery, Switch Gear, Cable, Lamp etc. Spares			Lot	84
18		Liquid oxidation Catalyst for spent caustic regeneration	1.5	MT	2.18
19		Anti Oxidant (AO 1010) Pentaerythritol tetrakis(3- (3,5-di-tert- butyl-4- hydroxyphenyl)propionate)	980	MT	38.24
20		Anti Oxidant AO 168/ AO9	1565	MT	40
21		A01076 (Octadecyl β – (3,5-di- tert -butyl-4- hydroxy phenyl)- propionate	110	MT	4.35
22		ATF Merox Catalyst - Pre impregnated activated charcoal	36	M3	0.81
23		Benzene hydrogenation catalyst for ISOM unit	2.1	MT	2.55
24		CAB catalyst	18	MT	2.98
25		CAB-2 catalyst (Blend of vanadium oxytrichloride & titanium tetrachloride 50/50)	35	МТ	5.25
26		Carbon Monoxide (CO) promoter catalyst additive for FCC Unit	16	МТ	5.87
27		Catalyst for DCU LPG Merox Unit	547	L	0.28
28		Hindered amine light stabilizer(HALS) -	9	MT	0.93

		Chimassorb 944			
29		Claus Catalyst (Al based)	151.2	м3	1.45
30		Claus Catalyst charge for Sulphur Recovery Unit (SRU)	22	М3	0.71
31		Chloride guard adsorbent for Continuous Catalytic Reforming Unit (CCRU) stabilizer feed	30.5	MT	0.9
32		2-Hydroxy-4-n- octoxybenzophenone (Cyasorb 531/ UV-1)	6	MT	0.75
33		Cyclo-Hexyl Methyl Methoxysilane (DONOR C)	33	MT	3.35
34		Di-ICyclo-Pentyl-Di- Methoxy-Silane (DONOR D)	3	MT	1.21
35		Slip additives (Erucamide)	125	MT	5.34
36		Ethylene drying and CO2 removal bed (Adsorbant)	8	MT	0.37
37		Ethylene drying and CO2 removal bed (Foxed) for PP Unit	3	MT	0.43
38		Fluidized Catalytic Cracking Catalyst	4435	MT	145.95
39		Grease (VASELINE)	27	MT	0.72
40		Hydrotreating and Hydrocracking catalyst for Hydrocracking unit	320	MT	80.25
41		Hydrotreating Catalyst for DHDT unit	478	MT	80.4
42		ISOM catalyst	24	MT	35
43		Liquid oxidation Catalyst for spent caustic regeneration	1.59	MT	2.18
44		Low temp. hydrogenation catalyst (Tail Gas Treatment Unit)	21.57	MT	1.77
45		Molecular sieves-desiccant (sodium-potassium-alumino silicate)	47.6	MT	1.25
46		Optical brightener	1	MT	0.62
47	Chemicals, Catalyst &	PEPQ (Phosphorous trichloride, reaction products with 1,1- biphenyl and 2,4-bis(1,1- dimethylethyl)phenol) (secondary antioxidant)	186	МТ	19.80
48	additives	Peroxide-101 (2, 5 Dimethyl-2,5-di (tert-butyl- peroxy) henaxe)	92	MT	8.91
49		PG/Pelargonic acid/ C8- C10 fatty acid	330	MT	9.5
50		PP Catalyst. A composition of Magnesium Chloride and 1,2 Benzenedicarboxylic	7.5		24.20

51	PPA (Polymer Processing Additive)	40	MT	5.29
52	Propylene drying and CO2 removal bed for PP unit (Fixed bed)	9	MT	0.24
53	Silica gel-desiccant (Compound of Silicon dioxide)	187	MT	4.30
54	T Fuel & U-Fuel for analysis of Cetane number	3690	Ltr	0.955
55	UV stabilizer 622	150	MT	8.80
56	ZN-180M (Avant CATALYST) or equivalent	240	Kg	0.75
57	ZSM-5 catalyst	100	MT	8.74
58	Primary Reference Fuel (PRF) {ISO-Octane & n heptane}	2840	Kg	0.41
59	ATF (Aviation Turbine fuel) Merox catalyst – Pre impregnated activated charcoal	36	M3	0.81
60	DSTDP (distearyl thiodipropionate) - acts as a secondary antioxidant for PP polymers.	100	МТ	3.54
61	Speciality Grease - Mixture of higher paraffin hydrocarbon used as catalyst protection in Spheripol PP technology for production of Polypropylene.	15	MT	0.40
62	Magnesium Aluminium Hydroxide Carbonate Hydrate (DHT 4A/Hycite 713) -used in reaction for acid scavenging in polymer production and processing systems.	100	МТ	2.12
63	Alkyl Amine Ethoxylate (ATMER 163) - for neutralization of Catalyst & Co catalyst and works as anti- static agent.	107	MT	5.31
64	Anitoxidant AO 3114(1,3,5- Tris(3,5-di-tert-butyl-4- hydroxy benzyl)-s-triazine- 2,4,6-(1H,3H,5H)trione) - specialized vis- breaking chemical used for speci fic PP grade	28	МТ	1.33
65	Non-Aromatic catalyst batch mineral oil (MINERAL OIL) - used for diluting Donor in order to have better accuracy of the flow measure and also used for flushing in TEAL area.	70	МТ	1.45
66	HDPE consumable polymerization Catalyst - used for polymerization reaction for production of	8	MT	21.60

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		specific grade of High density polyethylene from Ethylene			
67		Antioxidant (A0-1330) - prevents polymer from degradation caused by exposure to heat, ultraviolet radiation (UV) and	52	MT	5.42
68		mechanical shear Desiccant for ethylene guard bed (Fixed bed for ethylene purification) - used for removal of Carbon monoxide, carbon dioxide, moisture from Ethylene feed in Swing unit to Ultra low levels.	63	МТ	3.35
69		ST65692 (Biphenyl) - approved additive Packages required for manufacturing of Servo Duotherm S required at Panipat Refinery	60	МТ	1.20
70		Mixed Butylated Phenol Antioxidant (ST4064) - used in blending in many lubricants	87.3	МТ	1.66
71		Hydrogenated Terphenyl (ST58606) -approved additive Packages required for manufacturing of Servotherm SHT 32 required by IOCL Refinery.	304	МТ	9.09
72		TEAL	21	MT	0.84
73	Mechanical Stores	Cast Air Preheater Module / Cast & Glass Air Preheater Modules / Glass Air Pre-Heater Modules	1	No	1.18
74		Cutter Blades of Extruder	1600	No	2.19
75		Hydrogen Tubular Reformer Catalyst Tubes	36	No	3.61
76		Rotary Tight Shut off Valve	4	No	0.60
77	Chemicals, Catalyst & additives	CD (Di- ethyl aluminum chloride)	34.8	MT	1.27
78	Chemicals, Catalyst & additives	CJ (Di- ethyl aluminum ethoxide)	34.8	MT	2.97
79	Chemicals, Catalyst & additives	Base FCC catalyst for INDMAX Unit.	1170	MT	34.5
80	Chemicals, Catalyst & additives	DMDS	665	MT	22.90
81	Chemicals, Catalyst & additives	RM 68 Master batch	110	MT	10
82	Chemicals, Catalyst & additives	MIBK (METHYL ISOBUTYL KETONE)	700	МТ	21
83	Chemicals, Catalyst & additives	Liquid oxidation catalyst for FCC Indmax Unit	555	Kg	0.79
84	Chemicals, Catalyst & additives	FCC Catalyst – Paradip Refinery	5364	MT	138.40
85	Chemicals, Catalyst & additives	Hydro treating catalyst for DHDS Unit	56	MT	6.34

86		ISO-Octane	48	MT	1.11
87	Chemicals, Catalyst & additives	Mineral Oil (White Oil)	205	MT	5.92
88	Chemicals, Catalyst & additives	Methanol	14400	МТ	66.29
89	Chemicals, Catalyst & additives	Poly Propylene Catalyst	7.5	МТ	26.15
90	Chemicals, Catalyst & additives	PD/ 2,4 Pentane dione	220	MT	11.53
91	Service	Assay analysis of Fresh & Spent catalyst	2	No.	0.70
92	Chemicals, Catalyst & additives	OHCU Catalysts	732.6	M ³	199.2
93	Equipment	Radiant Coil for SRT Heater	1	Set	13.42
94	Chemicals, Catalyst & additives	Silica MB	441	MT	5.82
95	Chemicals, Catalyst & additives	RFCCU catalyst	5600	MT	190
96	Chemicals, Catalyst & additives	Static Dissipater Additive	13.578	MT	8.5
97	Chemicals, Catalyst & additives	Nucleating Agent (HPNA)	50	MT	9.0
98	Chemicals, Catalyst & additives	Mono 2 Ethyl Hexyl Amine	18	MT	0.79
99	Chemicals, Catalyst & additives	CRU Catalyst	9.8	MT	14.24
100	Chemicals, Catalyst & additives	Claus Catalyst	125.7 m3	MT	1.60
101	Information technology	Process simulation software	1	No.	3.75

Procurement Projected _ Capex and Repair & Maint - Pipelines

Sl. No	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores
	Strainer (Nos)			Nos.	
	Transfer Pump (Nos)			Nos.	
	ACDB Panel (Nos)			Nos.	
	API 6D Ball Valves (Nos)			Nos.	
	API 6D Valves (Nos)			Nos.	
	Ball Valve (Nos)			Nos.	
	Basket Strainer (Nos)			Nos.	
	Control valve (Nos)			Nos.	
	EEE (Nos)			Nos.	
	Emergency evacuation equipment (Nos)			Nos.	
	Engine Spares			Lot	15.50
	ER Probe(Nos)			Nos.	
	F/F PUMP, Jockey pumps, water filling pumps(Nos)			Nos.	
	Fire Fighting Pipes (km)			Km	

Fire Fighting Pump (Nos)	Nos.	
Flow Tee (Nos)	Nos.	
Globe Valve (Nos)	Nos.	
Heavy duty access Mats	Nos.	
High Mast(Nos)	Nos.	
HOT crane (Nos)	Nos.	
HT Capacitor Panel(Nos)	Nos.	
HT Panel(Nos)	Nos.	
HT/LT/Control cables(km)	Km	
Instrumentation, Control & SCADA System (Nos)	Nos.	
Insulating coupling (Nos)	Nos.	
Jockey pump (Nos)	Nos.	
LT DG(Nos)	Nos.	
LT Panel(Nos)	Nos.	
Mainline pumping Unit (Nos)	Nos.	
Marine Hoses for SPM	Lot	30.00
Mechanical Pipe End connector+ Standard/Long seal Leak clamps+ Encapsulating Leak Clamps	Lot	1.10
Metering skid assembly (consisiting of Filtration, Metering and Pressure Reduction units) of various sizes for providing connectivity to CGD Entities from Gas pipelines and augmentation of existing facilities (Nos)		
Metering Skid Ph-III(Nos)		
Metering Skid(Nos)		
Misc. fire fighting equipment (Nos)		
NRPL Mainline pumping unit Replacement	Lot	118.00
Other Marine Spares	Lot	15.14
pipe fitting(Nos)	Nos.	
Pipe (km)	Nos.	
Remote operated Valve (Nos)	Nos.	
Scrapper Barrel	Nos.	
Separator Filter (Nos)	Nos.	
Small size (<4") misc. valve (Nos)	Nos.	
SRV (Nos)	Nos.	

Station pipes(km)		Nos.	
Steel Pipe (KM)		Km	
Steel Plate (MT)		Nos.	
sump pump and tank (Nos)		Nos.	
Swing check valve (Nos)		Nos.	
Telecom System (comprising of DC power, Networking system, CCTV system, Telephone system, OFC, HDPE, etc.)(Nos)		Nos.	
Transformer(Nos)		Nos.	
Vadinar SPM Replacement project 1. Buoy & accessaries 2. Concrete Coated Pipe		Nos.	
Valves		Lot	4.00
VALVES of all types(Nos)		Nos.	
VFD (Nos)		Nos.	

Procurement Projected _ Marketing - LPG

	Group						
Sl. No	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores		
	LPG Pump		2	Nos.	1.36		
	LPG Compressor		3	Nos.	1.04		
	Air Compressor		2	Nos.	0.29		
	Air Dryer		1	Nos.	0.17		
	DG Set		2	Nos.	0.81		
	Fire Engine		3	Nos.	0.75		
	Valve change without Evacuation Machine		2	Nos.	0.51		
	LPG Loading arm		16	Nos.	0.48		
	Carousel		2	Nos.	6.49		
	Computers		50	Nos.	0.25		
	Additive dosing machines		0	Nos.	0		
	Carousal Cards in Nos.		400	Nos.	2.80		
	Mech Seals (Refurbishing) Nos.for LPG Pump		100	Nos.	3.00		
	Mech Seals New in Nos. for LPG Pump		25	Nos.	2.00		
	Valves / Flanges / Gaskets / Spares in Nos.		330	Nos.	8.25		
	Cables (Control / Power) in RMs		33000	Nos.	0.50		
	Pressure / Temp Transmitters/Gauges in Nos.		220	Nos.	2.20		
	Fire Engine / DG / DC Batteries in Nos.		3600	Nos.	5.40		
	Conveyor Chain in RM		44000	Nos.	5.28		

	Air Ends of Screw Compressors		44	Nos.	2.20
	Spares (Filters & Accessories) Air Comp in Nos.		550	Nos.	1.38
	LPG Vap Comp Seals / valves / Plates		330	Nos.	0.99
	Lights and Fixtures / Bulbs / glands / JBs / Switches		12000	Nos.	1.20
	Relays / Fuses		5500	Nos.	1.10
	Printer Cartridges		650	Nos.	0.33
	Sprockets / Cylinders / Shafts / v tubing / conn		24000	Nos.	4.80
	Misc Spares /Car (sensors / connectors / cables etc)		210	Nos.	2.10
	TLD / TLF Spares		880	Nos.	2.20
	Structural steel for Conv / Misc Works in MT		450	Nos.	1.71
	Diesel / Fire Engine Spares / filters / glands		720	Nos.	5.04
	Spares for Level gauges / transmitters		330	Nos.	3.3
	Fire / SCADA / GMS Panel Spattransmitt		320	Nos.	1.6
	CCTV spares / modules		110	Nos.	1.65
	Load cells for weigh bridges / weighing scales / carousals		1100	Nos.	2.75
	Centering Arms of carousals		2500	Nos.	0.30
	Procur	rement of LPG Cylinders & P	Regulator		
Sl. No	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores

Sl. No	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores
	14.2 Kg Cylinders (Including New & Replacement)		7300000	Nos.	936.85
	19 Kg Cylinders (Including New & Replacement)		800000	Nos.	140.04
	47.5 Kg Cylinders (Including New & Replacement)		50000	Nos.	19.26
	5 Kg Cylinders (Including New & Replacement)		1000000	Nos.	86.67
5	425 KG Cylinders		2000	Nos.	13.17
6	Pressure Regulators		4000000	Nos.	57.95

	Procurement Projected _ Marketing - Lubes							
Sl. No	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores			
1	Synthetic base oil Poly alfa olefin 6 CST		500	MT	13.24			
2	ST5014 (Lithium Hydroxide Monohydrate)		300	MT	18.09			
3	ST56058 (PIB 1000)		2247	MT	24.01			
4	Synthetic base oil Poly alfa olefin 100 CST, PAO 100(ST 55580)		228.5	MT	8.58			
5	PIB of higher molecular wt.(ST 56032/ST 56036)		264	MT	4.21			
6	Synthetic base oil Poly alfa olefin 4 CST, PAO 40(ST 55578)		275.63	MT	9.85			

	Pro	curement Projected _Pipelin	ies		
Sl. No.	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores
_					

FINANCIAL YEAR 2026-27 Capex Procurement Projected _ Refineries

Sl. No.	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores
1	Vessels/Drums/Tanks		-	Nos.	-
2	Pumps		-	Nos.	-
3	Reactors		-	Nos.	-
4	Column/Column Internals/Column Modification		-	Nos.	-
5	Heat Ex/Air coolers/Fin Fan Coolers		-	Nos.	-
6	Filters		-	Nos.	-
7	Instrumentation items (DCS, PLC, Analyser,,sensors,, Flowmeter,Transmitter etc.)		LOT	LOT	40.00
8	Instrument Cables		LOT	LOT	10.00
9	Electrical Items (Transformer, Switchboard,Switch gears, HV/MV Boards,Motors,Hoist,PFIC Panel,VFD,Genset)		-	LOT	-
10	Electrical Cables		LOT	LOT	5.00
11	Compressors/Blowers/Fans		-	Nos.	-
12	Heaters & Stacks		-	Nos.	-
13	Bulk(Pipe/Fittings/Flanges/Valve) Package		LOT	LOT	30.00
14	Items (HVAC,ETP,Refigeration,Cooling Tower,DI Guard,Chlorine Injection,Chemical Injection,Side Stream Filter,Ehylene BOG,TEG Barelling,Flare,Communication Mgmt Sytem,Nitrogen Cooling System,Control Monitoring System,Ambience Air Monitoring system,PCK metering Skid,Cathodic Protectin System,FDAS system,CCTV,Custody Transfer Metering Skid,Clean Agent System) Fire Fighting		LOT	LOT	150.00
15	system/equipment/package, Foam Concentrate, Manual & Remote Operated High Volume Longe Range Monitor with Accessories		LOT	LOT	20.00
16	Incinerator & Instr. Components		-	Nos.	-
17	Mech items :EOT Crane,Forklift,Weigh Bridge,Industrial Lift,Belt & Screw conveyors/Dock leveller		-	Nos.	-
18	Steam Turbine		-	Nos.	-
19	Rotary Valves/Safety Valves/Control Valves/On-off Valves/Emergency Vent Valves/Shutdown Valves		-	Nos.	-
20	Mixers & Agitators		-	Nos.	-
21	Driers		-	Nos.	-
22	Separators		-	Nos.	-
23	Boiler		-	Nos.	-
24	Lab Equipment		-	Nos.	-
25	Pig Launcher & Pig Receiver		-	Nos.	-
26	Marine Loading Arm		_	Nos.	-

29 30	Bombs (PE) Mounded Bullet Spare Components		-	Nos.	-			
30	(Compressor/Pumps/Feed Coalescer)		_	LOT	-			
31	Miscellaneous items (including FR approved project)		LOT	LOT	176.75			
	Procurement Projected - For Repair &							
		Maintance of Refineries			- 1 1 1 1			
Sl.	Description of item	Broad specification	Quantity	Accounting Unit	Estimated Value of procurement			
No		Parameters			in Rs/Crores			

	Maintance of Refineries								
Sl. No	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores				
1	Pump Spares			Lot	52				
2	Mechanical Seal Spares			Lot	61				
3	Bearings			Lot	5				
4	Turbine Spares			Lot	125				
5	Steam Engine Spares			Lot	1				
6	Furnace Spares			Lot	15				
7	Compressor Spares			Lot	65				
8	Fan & Blower Spares			Lot	7				
9	Agitator & Mixer Spares			Lot	2				
10	ETP,LPG Plant Equipment Spares			Lot	13				
11	Air Conditioner Spares			Lot	2				
12	Heat Exchanger Spares			Lot	49				
13	Column/ Reactor Spares			Lot	37				
14	Pipe & Pipe Fittings			Lot	137				
15	Gear Box Spares			Lot	10				
16	Motor Spares			Lot	4				
17	Transformer, Battery, Switch Gear, Cable, Lamp etc. Spares			Lot	86				
18		Liquid oxidation Catalyst for spent caustic regeneration	1.5	MT	2.18				
19		Anti Oxidant (AO 1010) Pentaerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)	980	МТ	40.15				
20		Anti Oxidant AO 168/ AO9	1565	MT	42				
21		A01076 (Octadecyl β – (3,5-di- tert -butyl-4-hydroxy phenyl)-propionate	110	MT	4.57				
22		ATF Merox Catalyst - Pre impregnated activated charcoal	36	M3	0.81				
23		Benzene hydrogenation catalyst for ISOM unit	2.1	МТ	2.55				
24		CAB catalyst	18	MT	3.13				
25		CAB-2 catalyst (Blend of vanadium oxytrichloride & titanium	35	МТ	5.51				
26		tetrachloride 50/50) Carbon Monoxide (CO)	16	MT	5.87				
27		promoter catalyst additive for FCC Unit	F 47	ī	0.20				
		Catalyst for DCU LPG Merox Unit	547	L	0.28				
28		Hindered amine light stabilizer(HALS) -	9	MT	0.93				

		Chimassorb 944			
29		Claus Catalyst (Al based)	151.2	М3	1.45
30		Claus Catalyst charge for Sulphur Recovery Unit (SRU)	22	М3	0.71
31		Chloride guard adsorbent for Continuous Catalytic Reforming Unit (CCRU) stabilizer feed	30.5	МТ	0.9
32		2-Hydroxy-4-n- octoxybenzophenone (Cyasorb 531/ UV-1)	6	MT	0.75
33		Cyclo-Hexyl Methyl Methoxysilane (DONOR C)	33	MT	3.52
34		Di-ICyclo-Pentyl-Di- Methoxy-Silane (DONOR D)	3	MT	1.21
35		Slip additives (Erucamide)	125	MT	5.61
36		Ethylene drying and CO2 removal bed (Adsorbant)	8	MT	0.37
37		Ethylene drying and CO2 removal bed (Foxed) for PP Unit	3	MT	0.43
38		Fluidized Catalytic Cracking Catalyst	4435	MT	153.25
39		Grease (VASELINE)	27	MT	0.72
40		Hydrotreating and Hydrocracking catalyst for Hydrocracking unit	320	MT	80.25
41	Chemicals, Catalyst & additives	Hydrotreating Catalyst for DHDT unit	478	MT	80.4
42		ISOM catalyst	24	MT	35
43		Liquid oxidation Catalyst for spent caustic regeneration	1.59	MT	2.18
44		Low temp. hydrogenation catalyst (Tail Gas Treatment Unit)	21.57	MT	1.77
45		Molecular sieves-desiccant (sodium-potassium- alumino silicate)	47.6	МТ	1.25
46		Optical brightener	1	MT	0.62
47		PEPQ (Phosphorous trichloride, reaction products with 1,1-biphenyl and 2,4-bis(1,1-dimethylethyl)phenol) (secondary antioxidant)	186	MT	19.80
48		Peroxide-101 (2, 5 Dimethyl-2,5-di (tert- butyl-peroxy) henaxe)	92	MT	8.91
49		PG/Pelargonic acid/ C8- C10 fatty acid	330	МТ	9.5
50		PP Catalyst. A composition of Magnesium Chloride and 1,2 Benzenedicarboxylic acid, 1,2	7.5	MT	24.20

	Bis[2-			
	cholro-1-			
	(chloromethyle)ethyl]			
51	ester. PPA (Polymer Processing	40	MT	5.29
31	Additive)	40	141 1	3.27
52	Propylene drying and CO2	9	MT	0.24
	removal bed for PP unit		IVI I	
53	(Fixed bed) Silica gel-desiccant	187	MT	4.30
33	(Compound of Silicon	107	1/1 1	7.30
	dioxide)			
54	T Fuel & U-Fuel for	3690	Ltr	1.003
55	analysis of Cetane number	150	MT	0.00
56	UV stabilizer 622 ZN-180M (Avant	150 240	Kg	8.80 0.75
30	CATALYST) or equivalent	240	Ng	0.73
57	ZSM-5 catalyst	100	MT	8.74
58	Primary Reference Fuel	2840	Kg	0.44
	(PRF) {ISO-Octane & n			
	heptane} ATF (Aviation Turbine	2.1		0.01
59	fuel) Merox catalyst – Pre	36	м3	0.81
	impregnated			
	activated charcoal			
60	DSTDP (distearyl thiodipropionate) - acts as	100	MT	3.72
	a secondary		IVI I	
	antioxidant for PP			
	polymers.			
(1	Speciality Grease - Mixture	15		0.40
61	of higher paraffin hydrocarbon used as	15	MT	0.40
	catalyst protection in		1.11	
	Spheripol PP technology			
	for production			
	of Polypropylene. Magnesium Aluminium			2.22
62	Hydroxide Carbonate	100		
	Hydrate (DHT 4A/Hycite		MT	
	713) - used in reaction for			
	acid scavenging in polymer			
	production and			
	processing systems.			
63	Alkyl Amine Ethoxylate (ATMER 163) - for	107	MT	5.58
	neutralization of		141 1	
	Catalyst & Co catalyst and			
	works as anti- static agent.			
	Anitoxidant A0			
64	3114(1,3,5-Tris(3,5-di-	28		1.33
	tert-butyl-4-hydroxy benzyl)-s-triazine-2,4,6-		MT	
	(1H,3H,5H)trione) -			
	specialized vis- breaking			
	chemical used for speci fic			
	PP grade Non-Aromatic catalyst			
65	batch mineral oil (MINERAL	70		1.45
	OIL) - used for		MT	
	diluting Donor in order to			
	have better accuracy of the flow measure and also			
1	used for flushi ng in TEAL			

		area.			
66		HDPE consumable polymerization Catalyst - used for	8	МТ	21.60
		polymerization reaction for production of specific grade of High density polyethylene from Ethylene			
67		Antioxidant (A0-1330) - prevents polymer from degradation caused by exposure to heat, ultraviolet radiation (UV) and mechanical shear	52	MT	5.70
68		Desiccant for ethylene guard bed (Fixed bed for ethylene purification) - used for removal of Carbon monoxide, carbon dioxide, moisture from Ethylene feed in Swing unit to Ultra low levels.	63	MT	3.35
69		ST65692 (Biphenyl) - approved additive Packages required for manufacturing of Servo Duotherm S required at Panipat Refinery	60	MT	1.20
70		Mixed Butylated Phenol Antioxidant (ST4064) - used in blending in many lubricants	87.3	МТ	1.66
71		Hydrogenated Terphenyl (ST58606) -approved additive Packages required for manufacturing of Servotherm SHT 32 required by IOCL Refinery.	304	MT	9.09
72		TEAL	21	MT	0.88
73	Mechanical Stores	Cast Air Preheater Module / Cast & Glass Air Preheater Modules / Glass Air Pre-Heater Modules	1	No	1.18
74 75		Cutter Blades of Extruder	1600 36	No	2.19
75		Hydrogen Tubular Reformer Catalyst Tubes Rotary Tight Shut off	36	No No	3.61
77	Chemicals, Catalyst & additives	Valve CD (Di- ethyl aluminum	34.8	MT	1.33
78	Chemicals, Catalyst & additives	chloride) CJ (Di- ethyl aluminum	34.8	MT	3.12
	-	ethoxide)			
79 80	Chemicals, Catalyst & additives Chemicals, Catalyst & additives	GMS-90 Base FCC catalyst for INDMAX Unit.	250 1170	MT MT	3.3
81	Chemicals, Catalyst & additives	DMDS	665	MT	24.05
82	Chemicals, Catalyst & additives	RM 68 Master batch	110	MT	10.5

83	Chemicals, Catalyst & additives	MIBK (METHYL	700	MT	22.05
		ISOBUTYL KETONE)			
84	Mechanical Stores	Radiant Coils	2	Set	38.26
85	Chemicals, Catalyst & additives	Hydrogenation Catalyst (Activated Alumina impregnated with Cobalt and Molybdenum Oxides).	52.3	M3	2.79
86	Chemicals, Catalyst & additives	Liquid oxidation catalyst for FCC Indmax Unit	555	Kg	0.83
87	Chemicals, Catalyst & additives	Hydro treating catalyst for DHDS Unit	56	MT	6.66
88		ISO-Octane	48	MT	1.17
89	Chemicals, Catalyst & additives	Mineral Oil (White Oil)	205	MT	6.22
90	Chemicals, Catalyst & additives	Methanol	14400	MT	69.60
91	Chemicals, Catalyst & additives	Poly Propylene Catalyst	7.5	MT	27.45
92	Chemicals, Catalyst & additives	PD/ 2,4 Pentane dione	220	MT	12.11
93	Service	Assay analysis of Fresh & Spent catalyst	2	No.	0.71
94	Chemicals, Catalyst & additives	Nucleating Agent (HPNA)	50	MT	9.5
95	Chemicals, Catalyst & additives	Mono 2 Ethyl Hexyl Amine	18	MT	0.83

Procurement Projected _ Capex and Repair & Maint - Pipelines

	Repair & Maint - Pipelines								
Sl. No	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores				
	Strainer (Nos)			Nos.	•				
	Transfer Pump (Nos)			Nos.					
	ACDB Panel (Nos)			Nos.					
	API 6D Ball Valves (Nos)			Nos.					
	API 6D Valves (Nos)			Nos.					
	Ball Valve (Nos)			Nos.					
	Basket Strainer (Nos)			Nos.					
	Control valve (Nos)			Nos.					
	EEE (Nos)			Nos.					
	Emergency evacuation equipment (Nos)			Nos.					
	Engine Spares			Lot	15.50				
	ER Probe(Nos)			Nos.					
	F/F PUMP, Jockey pumps, water filling pumps(Nos)			Nos.					
	Fire Fighting Pipes (km)			Km					
	Fire Fighting Pump (Nos)			Nos.					
	Flow Tee (Nos)			Nos.					
	Globe Valve (Nos)			Nos.					
	Heavy duty access Mats			Lot					
	High Mast(Nos)			Nos.					
	HOT crane (Nos)			Nos.					
	HT Capacitor Panel(Nos)			Nos.					
	HT Panel(Nos)			Nos.					
	HT/LT/Control cables(km)			Km					
	Instrumentation, Control & SCADA System (Nos)			Nos.					
	Insulating coupling (Nos)			Nos.					
	Jockey pump (Nos)			Nos.					
	LT DG(Nos)			Nos.					
	LT Panel(Nos)			Nos.					
	Mainline pumping Unit (Nos)			Nos.					
	Marine Hoses for SPM			Nos.	30.00				
	Mechanical Pipe End connector+ Standard/Long seal Leak			Nos.	3.95				
	clamps+ Encapsulating Leak Clamps								

Metering skid assembly (consisiting of Filtration, Metering and Pressure Reduction units) of various sizes for providing connectivity to CGD Entities from Gas pipelines and augmentation of existing facilities (Nos)	Nos.	
Metering Skid Ph-III(Nos)	Nos.	
Metering Skid(Nos)	Nos.	
Misc. fire fighting equipment (Nos)	Nos.	
NRPL Mainline pumping unit Replacement	Nos.	70.00
Other Marine Spares	Nos.	9.32
pipe fitting(Nos)	Nos.	
Pipe (km)	Nos.	_
Remote operated Valve (Nos)	Nos.	
Scrapper Barrel	Nos.	
Separator Filter (Nos)	Nos.	
Small size (<4") misc. valve (Nos)	Nos.	
SRV (Nos)	Nos.	
Station pipes(km)	Nos.	
Steel Pipe (KM)	Km	
Steel Plate (MT)	Nos.	
sump pump and tank (Nos)	Nos.	
Swing check valve (Nos)	Nos.	
Telecom System (comprising of DC power, Networking system, CCTV system, Telephone system, OFC, HDPE, etc.)(Nos)	Nos.	
Transformer(Nos)	Nos.	
Vadinar SPM Replacement project		
1. Buoy & accessaries		
2. Concrete Coated Pipe	Nos.	
Valves	Lot	4.00
VALVES of all types(Nos)	Nos.	
VFD (Nos)	Nos.	

Procurement Projected _ Marketing - LPG Group

Sl. No	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores
1	LPG Pump		5	Nos.	3.7
2	LPG Compressor		3	Nos.	1.09
	Air Compressor		4	Nos.	0.61
	Air Dryer		2	Nos.	0.35
	DG Set		1	Nos.	0.38
	Fire Engine		3	Nos.	0.52
	Valve change without Evacuation Machine		3	Nos.	0.8
	LPG Loading arm		16	Nos.	0.5
	Carousel		1	Nos.	3.39
	Computers		0	Nos.	0
	Additive dosing machines		0	Nos.	0
	Carousal Cards in Nos.		400	Nos.	2.80
	Mech Seals (Refurbishing) Nos.for LPG Pump		100	Nos.	3.00
	Mech Seals New in Nos. for LPG Pump		25	Nos.	2.00
	Valves / Flanges / Gaskets / Spares in Nos.		330	Nos.	8.25

	Cables (Control / Power) in RMs		33000	Nos.	0.50
	Pressure / Temp		220	Nos.	2.20
	Transmitters/Gauges in Nos.				
	Fire Engine / DG / DC Batteries in		3600	Nos.	5.40
	Nos.				
	Conveyor Chain in RM		44000	Nos.	5.28
	Air Ends of Screw Compressors		44	Nos.	2.20
	Spares (Filters & Accessories) Air		550	Nos.	1.38
	Comp in Nos.		550	1100.	1100
	LPG Vap Comp Seals / valves /		330	Nos.	0.99
	Plates		550	1100.	0.77
	Lights and Fixtures / Bulbs / glands /		12000	Nos.	1.20
	JBs / Switches		12000	11001	1.20
	Relays / Fuses		5500	Nos.	1.10
	Printer Cartridges		650	Nos.	0.33
	Sprockets / Cylinders / Shafts /		24000	Nos.	4.80
	wearing strips / Pneumatic tubing /		21000	11001	1.00
	connectors				
	Misc Spares /Car (sensors /		210	Nos.	2.10
	connectors / cables etc)				
	TLD / TLF Spares		880	Nos.	2.20
	Structural steel for Conv / Misc Works		450	Nos.	1.71
	in MT				_
	Diesel / Fire Engine Spares / filters /		720	Nos.	5.04
	glands				
	Spares for Level gauges / transmitters		330	Nos.	3.3
	Fire / SCADA / GMS Panel Spares /		320	Nos.	1.6
	MIMIC / sensors / transmitter				
	CCTV spares / modules		110	Nos.	1.65
	Load cells for weigh bridges /		1100	Nos.	2.75
	weighing scales / carousals				
	Centering Arms of carousals		2500	Nos.	0.30
	Proc	<mark>curement of LPG Cylinder</mark>	s & P		
	Pro	curement of LPG Cylinder Regulator	s & P		
		Regulator			
Sl.	Description of item	Regulator Broad specification	Quantity	Accounting	of procurement
No.	Description of item	Regulator	Quantity	Unit	of procurement in Rs/Crores
No. 1	Description of item 14.2 Kg Cylinders (Including New &	Regulator Broad specification			of procurement
No.	Description of item 14.2 Kg Cylinders (Including New & Replacement)	Regulator Broad specification	Quantity 6300000	Unit Nos.	of procurement in Rs/Crores 803.02
No. 1	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New &	Regulator Broad specification	Quantity	Unit	of procurement in Rs/Crores
No. 1 2	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement)	Regulator Broad specification	Quantity 6300000 800000	Nos.	of procurement in Rs/Crores 803.02 140.04
No. 1 2 3	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New &	Regulator Broad specification	Quantity 6300000	Unit Nos.	of procurement in Rs/Crores 803.02
No. 1 2 3 4	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement)	Regulator Broad specification	Quantity 6300000 800000 50000	Nos. Nos.	of procurement in Rs/Crores 803.02 140.04 19.26
No. 1 2 3 4 5	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New &	Regulator Broad specification	Quantity 6300000 800000	Nos.	of procurement in Rs/Crores 803.02 140.04
No. 1 2 3 4 5	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement)	Regulator Broad specification	Quantity 6300000 800000 50000 10000000	Nos. Nos. Nos.	of procurement in Rs/Crores 803.02 140.04 19.26 86.67
No. 1 2 3 4 5	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders	Regulator Broad specification	Quantity 6300000 800000 50000 10000000 3000	Nos. Nos. Nos. Nos. Nos.	of procurement in Rs/Crores 803.02 140.04 19.26 86.67
No. 1 2 3 4 5	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators	Regulator Broad specification	Quantity 6300000 800000 50000 1000000 3000 3500000	Nos. Nos. Nos. Nos. Nos. Nos. Nos.	of procurement in Rs/Crores 803.02 140.04 19.26 86.67 19.76 50.70
No. 1 2 3 4 5	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators Self Closing Valve	Regulator Broad specification Parameters	Quantity 6300000 800000 50000 1000000 3000 3500000 20800000	Nos. Nos. Nos. Nos. Nos.	of procurement in Rs/Crores 803.02 140.04 19.26 86.67
No. 1 2 3 4 5	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators Self Closing Valve	Regulator Broad specification	Quantity 6300000 800000 50000 1000000 3000 3500000 20800000	Nos. Nos. Nos. Nos. Nos. Nos. Nos. Nos.	of procurement in Rs/Crores 803.02 140.04 19.26 86.67 19.76 50.70 175.00
No. 1 2 3 4 5	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators Self Closing Valve	Regulator Broad specification Parameters ment Projected _ Marketin	Quantity 6300000 800000 50000 1000000 3000 3500000 20800000	Nos. Nos. Nos. Nos. Nos. Accounting	of procurement in Rs/Crores 803.02 140.04 19.26 86.67 19.76 50.70 175.00 Estimated
No. 1 2 3 4 5 6 7	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators Self Closing Valve	Regulator Broad specification Parameters ment Projected _ Marketin Broad specification	Quantity 6300000 800000 50000 10000000 3000 3500000 20800000 1g - Lubes	Nos. Nos. Nos. Nos. Nos. Nos. Nos. Nos.	of procurement in Rs/Crores 803.02 140.04 19.26 86.67 19.76 50.70 175.00 Estimated Value of
No. 1 2 3 4 5 6 7	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators Self Closing Valve	Regulator Broad specification Parameters ment Projected _ Marketin	Quantity 6300000 800000 50000 1000000 3000 3500000 20800000	Nos. Nos. Nos. Nos. Nos. Accounting	of procurement in Rs/Crores 803.02 803.02 140.04 19.26 86.67 19.76 50.70 175.00 Estimated Value of procurement
No. 1 2 3 4 5 6 7	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators Self Closing Valve Procure	Regulator Broad specification Parameters ment Projected _ Marketin Broad specification	Quantity 6300000 800000 50000 1000000 3000 3500000 20800000 ng - Lubes Quantity	Nos. Nos. Nos. Nos. Nos. Accounting Unit	of procurement in Rs/Crores 803.02 140.04 19.26 86.67 19.76 50.70 175.00 Estimated Value of procurement in Rs/Crores
No. 1 2 3 4 5 6 7	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators Self Closing Valve Procure Description of item Synthetic base oil Poly alfa olefin 6	Regulator Broad specification Parameters ment Projected _ Marketin Broad specification	Quantity 6300000 800000 50000 10000000 3000 3500000 20800000 1g - Lubes	Nos. Nos. Nos. Nos. Nos. Accounting	of procurement in Rs/Crores 803.02 803.02 140.04 19.26 86.67 19.76 50.70 175.00 Estimated Value of procurement
No. 1 2 3 4 5 6 7	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators Self Closing Valve Procure Description of item Synthetic base oil Poly alfa olefin 6 CST	Regulator Broad specification Parameters ment Projected _ Marketin Broad specification	Quantity 6300000 800000 50000 10000000 30000 208000000 1g - Lubes Quantity 520	Nos. Nos. Nos. Nos. Nos. Nos. Accounting Unit	of procurement in Rs/Crores 803.02 140.04 19.26 86.67 19.76 50.70 175.00 Estimated Value of procurement in Rs/Crores 13.77
No. 1 2 3 4 5 6 7	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators Self Closing Valve Procure Description of item Synthetic base oil Poly alfa olefin 6 CST ST5014 (Lithium Hydroxide	Regulator Broad specification Parameters ment Projected _ Marketin Broad specification	Quantity 6300000 800000 50000 1000000 3000 3500000 20800000 ng - Lubes Quantity	Nos. Nos. Nos. Nos. Nos. Accounting Unit	of procurement in Rs/Crores 803.02 140.04 19.26 86.67 19.76 50.70 175.00 Estimated Value of procurement in Rs/Crores
No. 1 2 3 4 5 6 7 Sl. No 1 2	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators Self Closing Valve Procure Description of item Synthetic base oil Poly alfa olefin 6 CST ST5014 (Lithium Hydroxide Monohydrate)	Regulator Broad specification Parameters ment Projected _ Marketin Broad specification	Quantity 6300000 800000 50000 1000000 3000 3500000 20800000 1000000 1000000 1000000 1000000 1000000	Nos. Nos. Nos. Nos. Nos. Nos. Nos. Mos. Mos. Mos. Mos. Mos. Mos. Mos. M	of procurement in Rs/Crores 803.02 140.04 19.26 86.67 19.76 50.70 175.00 Estimated Value of procurement in Rs/Crores 13.77 18.99
No. 1 2 3 4 5 6 7 Sl. No 1 2 3	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators Self Closing Valve Procure Description of item Synthetic base oil Poly alfa olefin 6 CST ST5014 (Lithium Hydroxide Monohydrate) ST56058 (PIB 1000)	Regulator Broad specification Parameters ment Projected _ Marketin Broad specification	Quantity 6300000 800000 50000 1000000 3000 3500000 20800000 1000000 1000000 1000000 1000000 1000000	Nos. Nos. Nos. Nos. Nos. Nos. Nos. Nos.	of procurement in Rs/Crores 803.02 140.04 19.26 86.67 19.76 50.70 175.00 Estimated Value of procurement in Rs/Crores 13.77 18.99 26.47
No. 1 2 3 4 5 6 7 Sl. No 1 2	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators Self Closing Valve Procurer Description of item Synthetic base oil Poly alfa olefin 6 CST ST5014 (Lithium Hydroxide Monohydrate) ST56058 (PIB 1000) Synthetic base oil Poly alfa olefin 100	Regulator Broad specification Parameters ment Projected _ Marketin Broad specification	Quantity 6300000 800000 50000 1000000 3000 3500000 20800000 1000000 1000000 20800000 3500000 3500000 3500000 3500000 3500000 3500000 3500000 300	Nos. Nos. Nos. Nos. Nos. Nos. Nos. Mos. Mos. Mos. Mos. Mos. Mos. Mos. M	of procurement in Rs/Crores 803.02 140.04 19.26 86.67 19.76 50.70 175.00 Estimated Value of procurement in Rs/Crores 13.77 18.99
No. 1 2 3 4 5 6 7 Sl. No 1 2 3 4	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators Self Closing Valve Procure Description of item Synthetic base oil Poly alfa olefin 6 CST ST5014 (Lithium Hydroxide Monohydrate) ST56058 (PIB 1000) Synthetic base oil Poly alfa olefin 100 CST, PAO 100(ST 55580)	Regulator Broad specification Parameters ment Projected _ Marketin Broad specification	Quantity 6300000 800000 50000 1000000 3000 3500000 20800000 1g - Lubes Quantity 520 300 2359 228.5	Nos. Nos. Nos. Nos. Nos. Nos. Nos. Nos.	of procurement in Rs/Crores 803.02 140.04 19.26 86.67 19.76 50.70 175.00 Estimated Value of procurement in Rs/Crores 13.77 18.99 26.47 9.00
No. 1 2 3 4 5 6 7 Sl. No 1 2 3	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators Self Closing Valve Procure Description of item Synthetic base oil Poly alfa olefin 6 CST ST5014 (Lithium Hydroxide Monohydrate) ST56058 (PIB 1000) Synthetic base oil Poly alfa olefin 100 CST, PAO 100(ST 55580) PIB of higher molecular wt.(ST	Regulator Broad specification Parameters ment Projected _ Marketin Broad specification	Quantity 6300000 800000 50000 1000000 3000 3500000 20800000 1000000 1000000 1000000 1000000 1000000	Nos. Nos. Nos. Nos. Nos. Nos. Nos. Nos.	of procurement in Rs/Crores 803.02 140.04 19.26 86.67 19.76 50.70 175.00 Estimated Value of procurement in Rs/Crores 13.77 18.99 26.47
No. 1 2 3 4 5 6 7 Sl. No 1 2 3 4	Description of item 14.2 Kg Cylinders (Including New & Replacement) 19 Kg Cylinders (Including New & Replacement) 47.5 Kg Cylinders (Including New & Replacement) 5 Kg Cylinders (Including New & Replacement) 425 KG Cylinders (Including New & Replacement) 425 KG Cylinders Pressure Regulators Self Closing Valve Procure Description of item Synthetic base oil Poly alfa olefin 6 CST ST5014 (Lithium Hydroxide Monohydrate) ST56058 (PIB 1000) Synthetic base oil Poly alfa olefin 100 CST, PAO 100(ST 55580)	Regulator Broad specification Parameters ment Projected _ Marketin Broad specification	Quantity 6300000 800000 50000 1000000 3000 3500000 20800000 1g - Lubes Quantity 520 300 2359 228.5	Nos. Nos. Nos. Nos. Nos. Nos. Nos. Nos.	803.02 140.04 19.26 86.67 19.76 50.70 175.00 Estimated Value of procurement in Rs/Crores 13.77 18.99 26.47 9.00

289.41

ΜT

10.28

Synthetic base oil Poly alfa olefin 4 CST, PAO 40(ST 55578)

	Proci	ırement Projected _Pipeline	e <mark>s</mark>		
Sl. No	Description of item	Broad specification Parameters	Quantity	Accounting Unit	Estimated Value of procurement in Rs/Crores
1	Marine Hoses		60	Nos.	24

FINANCIAL YEAR 2027 - 28 Capex Procurement Projected _ Refineries

Sl. No.	Description of item	Broad specification Parameters	Quantit y	g Unit	Estimated Value of procurem ent in Rs/Crores
1	Vessels/Drums/Tanks		-	No s.	-
2	Pumps		-	No s.	-
3	Reactors		-	No s.	-
4	Column/Column Internals/Column Modification		-	No s.	-
5	Heat Ex/Air coolers/Fin Fan Coolers		-	No s.	-
6	Filters		-	No s.	-
7	Instrumentation items (DCS, PLC, Analyser,,sensors,, Flowmeter,Transmitter etc.)		-	LO T	-
8	Instrument Cables		-	LO T	-
9	Electrical Items (Transformer, Switchboard,Switch gears, HV/MV Boards,Motors,Hoist,PFIC Panel,VFD,Genset)		-	LO T	-
10	Electrical Cables		-	LO T	-
11	Compressors/Blowers/Fans		-	No s.	-
12	Heaters & Stacks		-	No s.	-
13	Bulk(Pipe/Fittings/Flanges/Valve)		1	LO T	-
14	Package Items(HVAC,ETP,Refigeration,Cooling Tower,DI Guard,Chlorine Injection,Chemical Injection,Side Stream Filter,Ehylene BOG,TEG Barelling,Flare,Communication Mgmt Sytem,Nitrogen Cooling System,Control Monitoring System,Ambience Air Monitoring system,PCK metering Skid,Cathodic Protectin System,FDAS system,CCTV,Custody Transfer Metering Skid,Clean Agent System)		-	LO T	-
15	Fire Fighting system/equipment/package, Foam Concentrate, Manual & Remote Operated High Volume Longe Range Monitor with Accessories		-	LO T	-
16	Incinerator & Instr. Components		-	No s.	-
17	Mech items :EOT Crane,Forklift,Weigh Bridge,Industrial Lift,Belt & Screw conveyors/Dock leveller		-	No s.	-
18	Steam Turbine		-	No s.	-

19	Rotary Valves/Safety Valves/Contro Valves/On-off	1	-	LO T	-
	Valves/Emergency Vent Valves/Shutdown Valves				
20	Mixers & Agitators		-	No	-
	g .			S.	
21	Driers		-	No s.	-
22	Separators		-	No s.	-
23	Boiler		-	No	-
24	Lab Equipment		-	s. No	-
25	Pig Launcher & Pig Receiver		-	s. No	-
26	Marine Loading Arm		-	s. No	-
27	Inert Ceramic balls		-	LO	-
28	Sample Coolers (PI) & Sample		-	T No	-
29	Bombs (PE) Mounded Bullet		-	s. No	-
30	Spare Components		_	s. L0	-
	(Compressor/Pumps/Feed Coalescer)			T	
31	Miscellaneous items (including FR approved project)		-	LO T	-
35	CLARIANT OleMax 101 (8mm Spheres)		62588	Kgs	49.5
	Support Balls (Ceramic/Alumina) - 12 mm Size		5460	Kgs	
36	Treater Adsorbent		1	Lot	13.2
37	Chloride Guard Bed Adsorbent		1	Lot	0.72
38	Dryer treater Adsorbent		1	Lot	9.6
	Proc	urement Projected - For Repair & Maintenance of Refineries			
					Estimated
Sl. No.	Description of item	Broad specification Parameters	Quantit y		Value of procurem ent
					in Rs/Crores
1	Pump Spares			Lot	
2	Mechanical Seal Spares			Lot	
3	Bearings			Lot	
4	Turbine Spares			Lot	
<u>5</u> 6	Steam Engine Spares Furnace Spares			Lot	
7	Compressor Spares			Lot Lot	
8	Fan & Blower Spares			Lot	
9	Agitator & Mixer Spares			Lot	
10	ETP,LPG Plant Equipment Spares			Lot	
11	Air Conditioner Spares	1		Lot	
12	Heat Exchanger Spares			Lot	
13	Column/ Reactor Spares			Lot	l .
14	Pipe & Pipe Fittings			Lot	
15	Gear Box Spares			Lot	
16	Motor Spares			Lot	
17	Transformer, Battery, Switch Gear, Cable, Lamp etc. Spares			Lot	88
18	-, - F	Liquid oxidation Catalyst for spent	1.5	МТ	2.13

Liquid oxidation Catalyst for spent

18

1.5 MT

2.18

		caustic regeneration			
19		Anti Oxidant (AO 1010)			
		Pentaerythritol tetrakis(3-(3,5-di-tert-	980	MT	42.16
		butyl-4-hydroxyphenyl)propionate)			
20		Anti Oxidant AO 168/ AO9	1565		44.11
21		A01076 (Octadecyl β – (3,5-di- tert -	110		4.80
		butyl-4-hydroxy phenyl)-		MT	
		propionate			
22		ATF Merox Catalyst - Pre impregnated	36	M3	0.81
		activated charcoal	0.4	3.4m	0.55
23		Benzene hydrogenation catalyst for	2.1	MT	2.55
2.4		ISOM unit	10	3.600	2.20
24		CAB catalyst	35	MT	3.29 5.79
25		CAB-2 catalyst (Blend of vanadium oxytrichloride & titanium	33	MT	5.75
				IVI I	
		tetrachloride 50/50)			
26		Carbon Monoxide (CO) promoter	16	MT	5.87
		catalyst additive for FCC Unit	10	IVI I	3.07
27		Catalyst for DCU LPG Merox Unit	547	ī	0.28
28		Hindered amine light stabilizer(HALS)		MT	0.93
20		- Chimassorb 944	,	141 1	0.75
29		Claus Catalyst (Al based)	151.2	143	1.45
		, , ,			
30		Claus Catalyst charge for Sulphur	22	M3	0.71
		Recovery Unit (SRU)			
31		Chloride guard adsorbent for	20 5	MT	0.0
		Continuous Catalytic Reforming	30.5	MT	0.9
22		Unit (CCRU) stabilizer feed		ME	0.75
32		2-Hydroxy-4-n-octoxybenzophenone	6	MT	0.75
22		(Cyasorb 531/ UV-1)	22	MT	2.00
33		Cyclo-Hexyl Methyl Methoxysilane (DONOR C)	33	IVI I	3.69
34		Di-ICyclo-Pentyl-Di-Methoxy-Silane	2	MT	1.21
34		(DONOR D)	3	IVI I	1.21
35		Slip additives (Erucamide)	125	MT	5.89
36		Ethylene drying and CO2 removal bed		MT	0.37
30		(Adsorbant)	Ü	141 1	0.57
37		Ethylene drying and CO2 removal bed	3	MT	0.43
37		(Foxed) for PP Unit	3	1.11	0.10
38		Fluidized Catalytic Cracking Catalyst	4435	МТ	160.91
39		Grease (VASELINE)		MT	0.72
40		Hydrotreating and Hydrocracking	320	MT	80.25
		catalyst for Hydrocracking unit			
41		Hydrotreating Catalyst for DHDT unit	478	MT	80.4
42		ISOM catalyst	24	MT	35
43		Liquid oxidation Catalyst for spent		MT	2.18
		caustic regeneration			
44		Low temp. hydrogenation catalyst			1.77
7.7		(Tail Gas Treatment Unit)	21.57	MT	1.77
4.5	Chemicals, Catalyst &				4.05
45	additives	Molecular sieves-desiccant (sodium-	47.6	MT	1.25
1.6	additives	potassium-alumino silicate)			0.63
46		Optical brightener	1	MT	0.62
		PEPQ			
47		(Phosphorous trichloride, reaction			19.80
		products with 1,1-biphenyl and 2,4-			
		bis(1,1-dimethylethyl)phenol)	186	MT	
		(secondary antioxidant)			
48		Peroxide-101 (2, 5 Dimethyl-2,5-di			8.91
		(tert-butyl-peroxy) henaxe)	92	MT	
		PG/Pelargonic acid/ C8-C10 fatty acid	330		

	PP Catalyst.		1	<u> </u>
	A composition of Magnesium Chloride			
50	and 1,2 Benzenedicarboxylic acid,	7.5		24.20
	1,2 Bis[2-cholro-1-		МТ	
	(chloromethyle)ethyl] ester.			
51	PPA (Polymer Processing Additive)	40	MT	5.29
52	Propylene drying and CO2 removal bed for PP unit (Fixed bed)	9	МТ	0.24
53	Silica gel-desiccant (Compound of Silicon dioxide)	187	МТ	4.30
54	T Fuel & U-Fuel for analysis of Cetane number	3690	Ltr	1.008
55	UV stabilizer 622	150	MT	8.80
56	ZN-180M (Avant CATALYST) or	240		0.75
	equivalent		Ü	
57	ZSM-5 catalyst		MT	8.74
58	Primary Reference Fuel (PRF) {ISO-	2840	Kg	0.46
	Octane & n heptane}			
59	ATF (Aviation Turbine fuel) Merox	36		0.81
	catalyst – Pre impregnated		M3	
	activated charcoal DSTDP (distearyl thiodipropionate) -			
60	acts as a secondary	100	MT	3.90
	antioxidant for PP polymers.			
	Speciality Grease - Mixture of higher			
61	paraffin hydrocarbon used as catalyst	15		0.40
	protection in Spheripol PP technology		MT	
	for production			
	of Polypropylene.	100		0.00
(2)	Magnesium Aluminium Hydroxide	100		2.33
62	Carbonate Hydrate (DHT 4A/Hycite 713) -used in reaction for acid		MT	
	scavenging in polymer		IVI I	
	production and processing systems.			
63	Alkyl Amine Ethoxylate (ATMER 163	107		5.86
03) - for neutralization of	107	MT	3.00
	Catalyst & Co catalyst and works as			
	anti- static agent.			
	Anitoxidant AO 3114(1,3,5-Tris(3,5-			
64	di-tert-butyl-4-hydroxy benzyl)-s-	28		1.33
	triazine-2,4,6-(1H,3H,5H)trione) -) / (T)	
	specialized vis- breaking chemical		MT	
	used for speci fic PP grade Non-Aromatic catalyst batch mineral oil			
65	(MINERAL OIL) - used for	70		1.45
	diluting Donor in order to have better	, 0	MT	1110
	accuracy of the flow measure and also			
	used for flushi ng in TEAL area.			
	HDPE consumable polymerization			
66	Catalyst - used for	8		21.60
	polymerization reaction for production of specific grade of High		MT	
	density polyethylene from Ethylene			
	Antioxidant (A0-1330) -prevents			5.98
67	polymer from degradation	52		0.50
	caused by exposure to heat, ultraviolet		MT	
	radiation (UV) and mechanical shear			
	Desiccant for ethylene guard bed			
68	(Fixed bed for ethylene purification) -	63		3.35
	used for removal of Carbon monoxide, carbon dioxide, moisture from			
	carbon dioxide, moisture from Ethylene feed in Swing unit to Ultra		MT	
	low			
	levels.			
_			_	

Tequired at Panipat Refinery	69		ST65692 (Biphenyl) -approved additive Packages required for manufacturing of Servo Duotherm S	60	МТ	1.20
Hydrogenated Terphenyl (ST58606) - approved additive Packages required for manufacturing of Servotherm SHT 32 required by 10CL Refinery.	70		required at Panipat Refinery Mixed Butylated Phenol Antioxidant (ST4064) - used in blending	87.3	МТ	1.66
TEAL	71		Hydrogenated Terphenyl (ST58606) - approved additive Packages required for manufacturing of Servotherm SHT 32 required by	304		9.09
Mechanical Glass Air Pre-Heater Modules Glass Air Pre-Heater Modules Cutter Blades of Extruder 1600 No 2.19 Hydrogen Tubular Reformer Catalyst 36 No 3.61 Tubes Rotary Tight Shut off Valve 4 No 0.60 0	72			21	MT	0.88
Type	73		Glass Air Preheater Modules /	1	No	1.18
Tubes	74	Stores				2.19
77 Chemicals, Catalyst & additives	75			36	No	3.61
The The	76		, c	1		0.60
79 Chemicals, Catalyst & additives Base FCC catalyst for INDMAX Unit. 1170 MT 34.5 11 Chemicals, Catalyst & additives DMDS 665 MT 25.25 22 Chemicals, Catalyst & additives DMDS 665 MT 25.25 32 Chemicals, Catalyst & additives RM 68 Master batch 110 MT 11.02 33 Chemicals, Catalyst & additives MIBK (METHYL ISOBUTYL KETONE) 700 MT 23.15 36 Chemicals, Catalyst & additives Liquid oxidation catalyst for FCC 555 Kg 0.87 37 Chemicals, Catalyst & additives Hydro treating catalyst for DHDS Unit 56 MT 6.99 38 Chemicals, Catalyst & additives Hydro treating catalyst for DHDS Unit 56 MT 6.99 48 Chemicals, Catalyst & additives Mineral Oil (White Oil) 205 MT 6.53 49 Chemicals, Catalyst & additives Poly Catalyst Poly Propylene Catalyst 7.5 MT 28.82 50 Chemicals, Catalyst & additives Poly Propylene Catalyst 7.5 MT 2.71 50 Service Assay analysis of Fresh & Spent 2 No. 0.75 60 Chemicals, Catalyst & additives Poly Propylene Catalyst 7.5 MT 2.71 61 Service Assay analysis of Fresh & Spent 2 No. 0.75 62 Chemicals, Catalyst & additives RFCCU catalyst 7.5 MT 2.71 63 Chemicals, Catalyst & additives RFCCU catalyst 7.5 MT 7.5 74 Chemicals, Catalyst & additives RFCCU catalyst 7.5 MT 7.5 75 Chemicals, Catalyst & additives RFCCU catalyst 7.5 MT 7.5 76 Chemicals, Catalyst & additives RFCCU catalyst 7.5 MT 7.5 77 Chemicals, Catalyst & additives RFCCU catalyst 7.5 MT 7.5 78 Chemicals, Catalyst & Additives 8.5 Moos 1.5 Moos 1.5 78 ACDB Panel (Nos) Nos 1.5 Moos 1.5		•				
80 Chemicals, Catalyst & additives Base FCC catalyst for INDMAX Unit. 1170 MT 34.5 81 Chemicals, Catalyst & additives RM 68 Master batch 1110 MT 11.02 82 Chemicals, Catalyst & additives RM 68 Master batch 1110 MT 11.02 83 Chemicals, Catalyst & additives MIBK (METHYL ISOBUTYL KETONE) 700 MT 23.15 700 MT			, ,			3.27
81 Chemicals, Catalyst & additives DMDS RM 68 Master batch 110 MT 11.02	79	Chemicals, Catalyst & additives	GMS-90	250	MT	3.3
RM 68 Master batch	80	Chemicals, Catalyst & additives	Base FCC catalyst for INDMAX Unit.	1170	MT	34.5
R3 Chemicals, Catalyst & additives	81	Chemicals, Catalyst & additives	DMDS	665	MT	25.25
Remicals, Catalyst & additives	82	Chemicals, Catalyst & additives	RM 68 Master batch	110	MT	11.02
Indmax Unit	83	Chemicals, Catalyst & additives	MIBK (METHYL ISOBUTYL KETONE)	700	MT	23.15
Source	87	Chemicals, Catalyst & additives		555	Kg	0.87
90 Chemicals, Catalyst & additives	88	Chemicals, Catalyst & additives	Hydro treating catalyst for DHDS Unit	1		6.99
91 Chemicals, Catalyst & additives	89		ISO-Octane			1.23
Chemicals, Catalyst & additives						6.53
Schemicals, Catalyst & additives		-				
Service						
Service	95	Chemicals, Catalyst & additives		220	MT	12.71
Catalyst Catalyst	96	Service		2	No.	0.75
Chemicals, Catalyst & additives RFCCU catalyst S600 MT 209			<u> </u>			
99 Chemicals, Catalyst & additives Nucleating Agent (HPNA) 50 MT 9.92 100 Chemicals, Catalyst & additives Mono 2 Ethyl Hexyl Amine 18 MT 0.87 Procurement Projected Capex and Repair & Maint - Pipelines						
Chemicals, Catalyst & additives Mono 2 Ethyl Hexyl Amine 18 MT 0.87						
Procurement Projected Capex and Repair & Maint - Pipelines Parameters Quantity y Parameters Paramet						
SI. Description of item Parameters Quantity Parameters Quantity	100			18	MT	0.87
Sl. No. Description of item Parameters Quantity Parameters Parameters Quantity Parameters Parameters Parameters Quantity Parameters Parameter					1	
SI. No. Parameters Quantit y ent in Rs/Crores 1 Strainer (Nos) Nos. 2 Transfer Pump (Nos) Nos. 3 ACDB Panel (Nos) Nos. 4 API 6D Ball Valves (Nos) Nos. 5 API 6D Valves (Nos) Nos. 6 Ball Valve (Nos) Nos. 7 Basket Strainer (Nos) Nos. 8 Control valve (Nos) Nos. 9 EEE (Nos) Nos. 10 Emergency evacuation equipment (Nos)						
No. y ent in Rs/Crores 1 Strainer (Nos) Nos. 2 Transfer Pump (Nos) Nos. 3 ACDB Panel (Nos) Nos. 4 API 6D Ball Valves (Nos) Nos. 5 API 6D Valves (Nos) Nos. 6 Ball Valve (Nos) Nos. 7 Basket Strainer (Nos) Nos. 8 Control valve (Nos) Nos. 9 EEE (Nos) Nos. 10 Emergency evacuation equipment (Nos) Nos. 11 (Nos) Nos.					0	
Strainer (Nos)		Description of item	Parameters	Quantit		-
Strainer (Nos) Nos. Transfer Pump (Nos) Nos. ACDB Panel (Nos) Nos. API 6D Ball Valves (Nos) Nos. Ball Valve (Nos) Nos. Basket Strainer (Nos) Nos. Control valve (Nos) Nos. EEE (Nos) Nos. Emergency evacuation equipment (Nos) Nos.	No.			y		
1 Strainer (Nos) Nos. 2 Transfer Pump (Nos) Nos. 3 ACDB Panel (Nos) Nos. 4 API 6D Ball Valves (Nos) Nos. 5 API 6D Valves (Nos) Nos. 6 Ball Valve (Nos) Nos. 7 Basket Strainer (Nos) Nos. 8 Control valve (Nos) Nos. 9 EEE (Nos) Nos. 10 Emergency evacuation equipment (Nos) Nos. 11 (Nos) Nos.						
2 Transfer Pump (Nos) Nos. 3 ACDB Panel (Nos) Nos. 4 API 6D Ball Valves (Nos) Nos. 5 API 6D Valves (Nos) Nos. 6 Ball Valve (Nos) Nos. 7 Basket Strainer (Nos) Nos. 8 Control valve (Nos) Nos. 9 EEE (Nos) Nos. 10 Emergency evacuation equipment (Nos) Nos.	4	Ct. : (N.)		-	NT.	KS/Crores
ACDB Panel (Nos) API 6D Ball Valves (Nos) Nos. API 6D Valves (Nos) Nos. Ball Valve (Nos) Nos. Basket Strainer (Nos) Nos. Control valve (Nos) Nos. EEE (Nos) Nos. Nos. Nos. Nos. Nos. Nos. Nos.				1		
API 6D Ball Valves (Nos) API 6D Valves (Nos) Ball Valve (Nos) Basket Strainer (Nos) Control valve (Nos) EEE (Nos) Emergency evacuation equipment (Nos) Nos. Nos. Nos. Nos. Nos. Nos.				1		
5 API 6D Valves (Nos) Nos. 6 Ball Valve (Nos) Nos. 7 Basket Strainer (Nos) Nos. 8 Control valve (Nos) Nos. 9 EEE (Nos) Nos. 10 Emergency evacuation equipment (Nos) Nos. 11 (Nos)				1		
Ball Valve (Nos) Basket Strainer (Nos) Control valve (Nos) EEE (Nos) Emergency evacuation equipment (Nos) Nos. Nos. Nos. Nos.				-		
7 Basket Strainer (Nos) Nos. 8 Control valve (Nos) Nos. 9 EEE (Nos) Nos. 10 Emergency evacuation equipment Nos. 11 (Nos)	l l			-		
8 Control valve (Nos) 9 EEE (Nos) 10 Emergency evacuation equipment (Nos) 11 (Nos)						
9 EEE (Nos) Nos. 10 Emergency evacuation equipment Nos. 11 (Nos)						
10 Emergency evacuation equipment Nos. (Nos)	l l					
11 (Nos)				1		
					Nos.	
		Engine Spares			Lot	15.50

_				
12	ER Probe(Nos)		Nos.	
13	F/F PUMP, Jockey pumps, water		Nos.	
14	filling pumps(Nos)			
15	Fire Fighting Pipes (km)		Km	
16	Fire Fighting Pump (Nos)		Nos.	
17	Flow Tee (Nos)		Nos.	
18	Globe Valve (Nos)		Nos.	
19	Heavy duty access Mats		Lot	
20	High Mast(Nos)		Nos.	
21	HOT crane (Nos)		Nos.	
22	HT Capacitor Panel(Nos)		Nos.	
23	HT Panel(Nos)		Nos.	
24	HT/LT/Control cables(km)		Km	
25 26	Instrumentation, Control & SCADA System (Nos)		Nos.	
27	Insulating coupling (Nos)		Nos.	
28	Jockey pump (Nos)		Nos.	
29	LT DG(Nos)		Nos.	
30	LT Panel(Nos)		Nos.	
31	Mainline pumping Unit (Nos)		Nos.	
31	Marine Hoses for SPM		Nos.	48.00
	Mechanical Pipe End connector+			
32	Standard/Long seal Leak		Nos.	1.22
32	clamps+ Encapsulating Leak Clamps			
33	Metering skid assembly			
34	(consisiting of Filtration, Metering			
35	and Pressure Reduction units) of			
36	various sizes for providing		Nos.	
37	connectivity to CGD Entities from Gas pipelines and			
38	augmentation of existing facilities			
39	(Nos)			
40	Metering Skid Ph-III(Nos)		Nos.	
41	Metering Skid(Nos)		Nos.	
	Misc. fire fighting equipment (Nos)		Nos.	
43	NRPL Mainline pumping unit		Nos.	
44	Replacement			
45	Other Marine Spares		Nos.	11.30
46	pipe fitting(Nos)		Nos.	
47	Pipe (km)		Nos.	
48	Remote operated Valve (Nos)		Nos.	
49	Scrapper Barrel		Nos.	
	Separator Filter (Nos)		Nos.	
50	Small size (<4") misc. valve (Nos)		Nos.	
	SRV (Nos)		Nos.	
51	Station pipes(km)		Nos.	
	Steel Pipe (KM)		Km	
52	Steel Plate (MT)		Nos.	
	sump pump and tank (Nos)		Nos.	
53	Swing check valve (Nos)		Nos.	
54	Telecom System (comprising of DC			
55	power, Networking system, CCTV			
	system, Telephone system, OFC,		Nos.	
	HDPE, etc.)(Nos)			
56	Transformer(Nos)		Nos.	
57	Vadinar SPM Replacement project			
	1. Buoy & accessaries			
	2. Concrete Coated Pipe		Nos.	
58	Valves		Lot	4.00
59	VALVES of all types(Nos)		Nos.	
60	VFD (Nos)		Nos.	
61	Anti chafe Chain	20	Nos.	21.00

SI. No. No. Parameters Quantit y e e e	alue of rocurem nt
SI. No. Description of item Parameters Quantity Viv. Property Viv. Property Viv. Property Viv. Property Viv. Property Viv. Viv. Property Viv. Vi	alue of rocurem nt
SI. No. Description of item Parameters Quantity y properties Quantity y properties Quantity y properties Quantity properties Quantity y properties Quantity Pr	alue of rocurem nt
LPG Pump	Rs/Crores
LPG Compressor	6.24
Air Compressor	1.51
Air Dryer 0 Nos.	0.8
DG Set 1 Nos.	0
6 Fire Engine 4 Nos. 7 Valve change without Evacuation 5 Nos. 8 Machine 32 Nos. 9 LPG Loading arm 32 Nos. 10 Carousel 1 Nos. 2 Additive dosing machines 0 Nos. 2 Additive dosing machines 0 Nos. 2 Carousal Cards in Nos. 400 Nos. 14 LPG Pumpal 100 Nos. 15 Mech Seals (Refurbishing) Nos. for LPG 25 Nos. 16 Pump 25 Nos. 17 Valves / Flanges / Gaskets / Spares in Nos. 3300 Nos. 19 Cables (Control / Power) in RMs 3300 Nos. 20 Pressure / Temp 220 Nos. 21 Pressure / Temp 220 Nos. 23 Fire Engine / DG / DC Batteries in 3600 Nos. 24 Nos. Conveyor Chain in RM 4400 Nos. <td>0.39</td>	0.39
7 Valve change without Evacuation 5 Nos. 8 Machine 32 Nos. 9 LPG Loading arm 32 Nos. 10 Carousel 1 Nos. 2 Computers 0 Nos. 4dditive dosing machines 0 Nos. Carousal Cards in Nos. 400 Nos. Mech Seals (Refurbishing) Nos.for 100 Nos. LPG Pump 25 Nos. Mech Seals New in Nos. for LPG 25 Nos. Pump 25 Nos. Valves / Flanges / Gaskets / Spares in Nos. 3300 Nos. 20 0 3300 Nos. 21 Pressure / Temp 220 Nos. 22 Transmitters/Gauges in Nos. 3600 Nos. 23 Fire Engine / DG / DC Batteries in 3600 Nos. 25 Conveyor Chain in RM 4400 Nos.	0.73
LPG Loading arm 32 Nos.	1.4
Computers	1.04
Computers	3.54
Additive dosing machines Carousal Cards in Nos. Mech Seals (Refurbishing) Nos.for LPG Pump Mech Seals New in Nos. for LPG Pump Valves / Flanges / Gaskets / Spares in Nos. Cables (Control / Power) in RMs Transmitters/Gauges in Nos. Pressure / Temp Transmitters/Gauges in Nos. Fire Engine / DG / DC Batteries in Nos. Conveyor Chain in RM Additive dosing machines 0 Nos. 400 Nos. 100 Nos. 25 Nos. 330 Nos. 330 Nos. 0 27 Pressure / Temp 220 Nos. 3600 Nos. 4400 Nos.	0
Carousal Cards in Nos. 400 Nos.	0
Mech Seals (Refurbishing) Nos.for 100 Nos. 150	2.80
Mech Seals New in Nos. for LPG Pump 25 Nos.	3.00
18 in Nos. 3300 Nos. 19 Cables (Control / Power) in RMs 3300 Nos. 20 0 21 Pressure / Temp 220 Nos. 22 Transmitters/Gauges in Nos. 3600 Nos. 23 Fire Engine / DG / DC Batteries in Nos. 3600 Nos. 24 Nos. 4400 Nos. 25 Conveyor Chain in RM 4400 Nos.	2.00
20 0 0 1 1 1 1 1 1	8.25
Transmitters/Gauges in Nos. Fire Engine / DG / DC Batteries in Nos. Nos. Conveyor Chain in RM Transmitters/Gauges in Nos. 3600 Nos. 4400 Nos.	0.50
24 Nos. 25 Conveyor Chain in RM 4400 Nos.	2.20 5.40
	5.28
26 0	3.20
27 Air Ends of Screw Compressors 45 Nos.	2.25
Spares (Filters & Accessories) Air Comp in Nos. 550 Nos.	1.38
30 Plates 330 Nos. 330 Nos.	0.99
32 Lights and Fixtures / Builbs / glands 1200 Nos. 1200 Nos.	1.20
ikelays / ruses 3300 Nos.	1.10
r Tiller Cartriages 050 Nos.	0.33
connectors 0	4.80
Misc Spares /Car (sensors / 210 Nos. connectors / cables etc)	2.10
TLD / TLF Spares 880 Nos.	2.20
Structural steel for Conv / Misc 450 Nos. Works in MT	1.71
Diesel / Fire Engine Spares / filters / glands 720 Nos.	5.04
Spares for Level gauges / 330 Nos. transmitters	3.3
Fire / SCADA / GMS Panel Spares / MIMIC / sensors / transmitter 320 Nos.	1.6
CCTV spares / modules 110 Nos. Load cells for weigh bridges / 1100 Nos.	1.65 2.75
Weighing scales / carousals Centering Arms of carousals 2500 Nos.	

Procurement of LPG Cylinders & P Regulator

		Broad specification		Accountin g Unit	Estimated Value of
Sl.	Description of item	Parameters	Quantit		procurem
No.	Description of item	r arameters	y		ent
NO.			y		in
					Rs/Crores
1	14.2 Kg Cylinders (Including New &		630000	Nos.	803.
1	Replacement)		0	NOS.	02
2	19 Kg Cylinders (Including New &		80000	Nos.	140.
	Replacement)		0		04
3	47.5 Kg Cylinders (Including New &		4000	Nos.	15.4
	Replacement)		0		1
4	5 Kg Cylinders (Including New &		150000	Nos.	130.
	Replacement)		0		01
5	425 KG Cylinders		5000	Nos.	32.9
					3
6	Pressure Regulators		350000	Nos.	50.7
	_		0		0
7	Self-Closing Valve		212000	Nos.	178.
			00		00
	Proc	urement Projected _ Marketing -			
		Lubes	T		<u> </u>
					Estimated
		Broad specification Parameters		g Unit	Value of
Sl.	Description of item		Quantit		procurem
No.			y		ent
					in
					Rs/Crores
1	Synthetic base oil Poly alfa olefin 6 CST		550	MT	14.56
2	ST5014 (Lithium Hydroxide		325	MT	21.60
	Monohydrate)				
3	ST56058 (PIB 1000)		2477	MT	29.18
4	Synthetic base oil Poly alfa olefin		280	MT	11.51
	100 CST, PAO 100(ST 55580)				
5	PIB of higher molecular wt.(ST		291	MT	4.64
	56032/ST 56036)				
	Synthetic base oil Poly alfa olefin 4		303.88	MT	11.52
6	CST, PAO 40(ST 55578)			IvI I	11.52

Procurement Projected _Pipelines

Sl.

No.

Description of item

Marine Hoses

Broad specification Parameters

Accountin Estimated

Value of

procureme nt in

Rs/Crores

40

g Unit

Nos.

Quantit

100

FINANCIAL YEAR 2025 - 26

Capex Procurement Projected _ Refineries

	Сарс	x Procurement Projected _ Refinerie	<u> </u>	I	T 1
Sl. No.	Description of item	Broad specification Parameters	Quan tity	Accoun ting Unit	Estimated Value of procurement in Rs/Crores
1	Vessels/Drums/Tanks		324	Nos.	240
2	Pumps		659	Nos.	386
3	Reactors		28	Nos.	168
4	Column/Column Internals/Column Modification		79	Nos.	368
5	Heat Ex/Air coolers/Fin Fan Coolers		473	Nos.	623
6	Filters		11	Nos.	3
7	Instrumentation items (DCS, PLC, Analyser,,sensors, Flowmeter,Transmitter etc.)		LOT	LOT	125
8	Instrument Cables		LOT	LOT	2
	Electrical Items (Transformer, Switchboard,Switch gears, HV/MV Boards,Motors,Hoist,PFIC Panel,VFD,Genset)		LOT	LOT	104
10	Electrical Cables		LOT	LOT	10
11	Compressors/Blowers/Fans		31	Nos.	350
12	Heaters & Stacks		14	Nos.	257
13	Bulk(Pipe/Fittings/Flanges/Valve)		LOT	LOT	144
14	Package Items (HVAC,ETP,Refigeration,Co oling Tower,DI Guard,Chlorine Injection,Chemical Injection,Side Stream Filter,Ehylene BOG,TEG Barelling,Flare,Communication Mgmt Sytem,Nitrogen Cooling System,Control Monitoring System,Ambience Air Monitoring system,PCK metering Skid,Cathodic Protectin System,FDAS system,CCTV,Custody Transfer Metering Skid,Clean Agent System)		LOT	LOT	731
15	Fire Fighting system/equipment/package, Foam Concentrate, Manual & Remote Operated High Volume Longe Range Monitor with Accessories		LOT	LOT	24
16	Incinerator & Instr. Components		13	Nos.	28
17	Mech items :EOT Crane,Forklift,Weigh Bridge,Industrial Lift,Belt & Screw conveyors/Dock leveller		17	Nos.	10
18	Steam Turbine			Nos.	
19	Rotary Valves/Safety Valves/Control Valves/On-off Valves/Emergency Vent Valves/Shutdown Valves		LOT	LOT	75
20	Mixers & Agitators		80	Nos.	19
21	Driers		3	Nos.	2

22	Separators		5	Nos.	4
23	Boiler		1	Nos.	6
24	Lab Equipment		34	Nos.	11
25	Pig Launcher & Pig Receiver		2	Nos.	1
26	Marine Loading Arm		1	Nos.	9
27	Inert Ceramic balls		LOT	LOT	1
28	Sample Coolers (PI) & Sample Bombs (PE)		54	Nos.	1
29	Mounded Bullet			Nos.	
30	Spare Components (Compressor/Pumps/Feed Coalescer)		LOT	LOT	24
31	Miscellaneous items (including FR approved project)		LOT	LOT	547
	Procurement Pr	ojected - For Repair & Maintenance o	of Refine	eries	
Sl. No.	Description of item	Broad specification Parameters	Quan tity	Accoun ting Unit	Estimated Value of procurement in Rs/Crores
1	Pump Spares			Lot	57.6
2	Mechanical Seal Spares			Lot	67.2
3	Bearings			Lot	6
4	Turbine Spares			Lot	139.2
5	Steam Engine Spares			Lot	1.2
6	Furnace Spares			Lot	16.8
7	Compressor Spares			Lot	73.2
8	Fan & Blower Spares			Lot	8.4
9	Agitator & Mixer Spares			Lot	2.4
10	ETP,LPG Plant Equipment Spares			Lot	14.4
11	Air Conditioner Spares			Lot	2.4
12	Heat Exchanger Spares			Lot	55.2
13	Column/ Reactor Spares			Lot	40.8
14	Pipe & Pipe Fittings			Lot	152.4
15	Gear Box Spares			Lot	10.8
16	Motor Spares			Lot	4.8
17	Transformer, Battery, Switch Gear, Cable, Lamp etc. Spares		Lot	Lot	96
18		Liquid oxidation Catalyst for spent caustic regeneration	1.5	МТ	2.616
19		Anti Oxidant (AO 1010) Pentaerythritol tetrakis(3-(3,5-ditert-butyl-4-hydroxyphenyl)propionate)	980	МТ	44.26
20		Anti Oxidant AO 168/ AO9	1565	MT	46.31
21		A01076 (Octadecyl β – (3,5-di- tert - butyl-4-hydroxy phenyl)-propionate	110	МТ	5.04
22	Chemicals, Catalyst & additives	ATF Merox Catalyst - Pre impregnated activated charcoal	36	М3	0.972
23		Benzene hydrogenation catalyst for ISOM unit	2.1	МТ	3.06
24		CAB catalyst	18	MT	3.45
25		CAB-2 catalyst (Blend of vanadium oxytrichloride & titanium tetrachloride 50/50)	35	MT	6.08
26		Carbon Monoxide (CO) promoter catalyst additive for FCC Unit	16	МТ	7.044

Catalyst for DCU LPG Merox Unit

27

0.336

547 L

28	Hindered amine light	9	МТ	1.116
29	stabilizer(HALS) - Chimassorb 944 Claus Catalyst (Al based)	151.2	M3	1.74
	Claus Catalyst (Al based) Claus Catalyst charge for Sulphur			
30	Recovery Unit (SRU)	22	М3	0.852
31	Chloride guard adsorbent for Continuous Catalytic Reforming Unit (CCRU) stabilizer feed	30.5	MT	1.08
32	2-Hydroxy-4-n- octoxybenzophenone (Cyasorb 531/ UV-1)	6	MT	0.9
33	Cyclo-Hexyl Methyl Methoxysilane (DONOR C)	33	МТ	3.88
34	Di-ICyclo-Pentyl-Di-Methoxy-Silane (DONOR D)	3	MT	1.452
35	Slip additives (Erucamide)	125	MT	6.18
36	Ethylene drying and CO2 removal bed (Adsorbant)	8	МТ	0.444
37	Ethylene drying and CO2 removal bed (Foxed) for PP Unit	3	MT	0.516
38	Fluidized Catalytic Cracking Catalyst	4435	MT	168.96
39	Grease (VASELINE)	27	MT	0.864
40	Hydrotreating and Hydrocracking catalyst for Hydrocracking unit	320	МТ	96.3
41	Hydrotreating Catalyst for DHDT unit	478	МТ	96.48
42	ISOM catalyst	24	MT	42
43	Liquid oxidation Catalyst for spent caustic regeneration	1.59	МТ	2.616
44	Low temp. hydrogenation catalyst (Tail Gas Treatment Unit)	21.57	МТ	2.124
45	Molecular sieves-desiccant (sodium- potassium-alumino silicate)	47.6	MT	1.5
46	Optical brightener	1	MT	0.744
47	PEPQ (Phosphorous trichloride, reaction products with 1,1-biphenyl and 2,4-bis(1,1-dimethylethyl)phenol) (secondary antioxidant)	186	MT	23.76
48	Peroxide-101 (2, 5 Dimethyl-2,5-di (tert-butyl-peroxy) henaxe)	92	MT	10.692
49	PG/Pelargonic acid/ C8-C10 fatty acid	330	МТ	10.56
50	PP Catalyst. A composition of Magnesium Chloride and 1,2 Benzenedicarboxylic acid, 1,2 Bis[2-cholro-1- (chloromethyle)ethyl] ester.	7.5	МТ	29.04
51	PPA (Polymer Processing Additive)	40	MT	6.348
52	Propylene drying and CO2 removal bed for PP unit (Fixed bed)	9	МТ	0.288
53	Silica gel-desiccant (Compound of Silicon dioxide)	187	МТ	5.16
54	T Fuel & U-Fuel for analysis of Cetane number	3690	Ltr	1.059
55	UV stabilizer 622	150	MT	10.56
56	ZN-180M (Avant CATALYST) or equivalent	240	Kg	0.9
57	ZSM-5 catalyst	100	MT	10.488
58	Primary Reference Fuel (PRF) {ISO-Octane & n heptane}	2840	Kg	0.475
59	ATF (Aviation Turbine fuel) Merox catalyst – Pre impregnated activated charcoal	36	М3	0.972

60		DSTDP (distearyl thiodipropionate) - acts as a secondary antioxidant for PP polymers.	100	МТ	4.10
61		Speciality Grease - Mixture of higher paraffin hydrocarbon used as catalyst protection in Spheripol PP technology for production of Polypropylene.	15	МТ	0.48
62		Magnesium Aluminium Hydroxide Carbonate Hydrate (DHT 4A/Hycite 713) -used in reaction for acid scavenging in polymer production and processing systems.	100	MT	2.45
63		Alkyl Amine Ethoxylate (ATMER 163) - for neutralization of Catalyst & Co catalyst and works as antistatic agent.	107	МТ	6.15
64		Antioxidant AO 3114(1,3,5-Tris(3,5-di-tert-butyl-4-hydroxy benzyl)-s-triazine-2,4,6-(1H,3H,5H)trione) - specialized vis- breaking chemical used for speci fic PP grade	28	МТ	1.596
65		Non-Aromatic catalyst batch mineral oil (MINERAL OIL) - used for diluting Donor in order to have better accuracy of the flow measure and also used for flushing in TEAL area.	70	МТ	1.74
66		HDPE consumable polymerization Catalyst - used for polymerization reaction for production of specific grade of High density polyethylene from Ethylene	8	МТ	25.92
67		Antioxidant (AO-1330) -prevents polymer from degradation caused by exposure to heat, ultraviolet radiation (UV) and mechanical shear	52	МТ	6.28
68		Desiccant for ethylene guard bed (Fixed bed for ethylene purification) - used for removal of Carbon monoxide, carbon dioxide, moisture from Ethylene feed in Swing unit to Ultra low levels.	63	МТ	4.02
69		ST65692 (Biphenyl) -approved additive Packages required for manufacturing of Servo Duotherm S required at Panipat Refinery	60	МТ	1.44
70		Mixed Butylated Phenol Antioxidant (ST4064) - used in blending in many lubricants	87.3	МТ	1.992
71		Hydrogenated Terphenyl (ST58606) - approved additive Packages required for manufacturing of Servotherm SHT 32 required by IOCL Refinery.	304	МТ	10.908
72		Cast Air Preheater Module / Cast & Glass Air Preheater Modules / Glass Air Pre-Heater Modules	1	No	1.416
73	Mechanical Stores	Cutter Blades of Extruder	1600	No	2.628
74		Hydrogen Tubular Reformer Catalyst Tubes	36	No	4.332
75		Rotary Tight Shut off Valve	4	No	0.72
76		Benchmarking study for P-25 Project		No	2.4
77		License, Know-How, Process package, Catalyst(s), Proprietary equipment (if any) for production of Polyester Melt			214.8

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		for continuous polymerization Unit along with project management consultancy services		Lot	
78		Lining up of agency for platinum/palladium umpire analysis on	12	Lot	0.108
79	Specialty Services	limited global tender basis. Loss On Ignition (%) and Platinum content (%) testing in Continuous Catalytic Reformer (CCR) fresh catalyst	1	No	0.048
80		Maintenance of Welded Type Plate combine feed Exchanger of CRU	1	No	2.052
81		Off the shelf "Online e-Modules on Leadership Competencies"	1000	No	1.104
82		Supply of Basic Design and Engineering Package (BDEP), Catalyst(s), Proprietary items and assistance services for quality Revamp of BS-VI FCC GDS at Gujarat Refinery	1	Lot	25.94
83		Supply of License, Basic Engineering and Design package and equipment and services	1	Lot	128.64
84		Assay analysis of spent catalyst - required to quantify precious metal i.e. Palladium content in Spent catalyst for settlement of quantity of recovery of precious metal from spent catalyst.	1	Lot	0.144
85	Chemicals, Catalyst & Additives	TEAL	21	MT	0.93
86	Chemicals, Catalyst & additives	CD (Di- ethyl aluminum chloride)	34.8	МТ	1.47
87	Chemicals, Catalyst & additives	CJ (Di- ethyl aluminum ethoxide)	34.8	МТ	3.44
88	Chemicals, Catalyst & additives	GMS-90	250	МТ	3.8
89	Chemicals, Catalyst & additives	Base FCC catalyst for INDMAX Unit.	1170	МТ	34.5
90	Chemicals, Catalyst & additives	DMDS	665	МТ	26.51
91	Chemicals, Catalyst & additives	RM 68 Master batch	110	МТ	11.58
92	Chemicals, Catalyst & additives	MIBK (METHYL ISOBUTYL KETONE)	700	МТ	24.31
93	Mechanical Stores	Radiant Coils	2	Set	42.08
94	Chemicals, Catalyst & additives	Hydrogenation Catalyst (Activated Alumina impregnated with Cobalt and Molybdenum Oxides).	52.3	М3	3.07
95	Chemicals, Catalyst & additives	Liquid oxidation catalyst for FCC Indmax Unit	555	Kg	0.92
96	Chemicals, Catalyst & additives	Hydro treating catalyst for DHDS Unit	56	MT	7.34
97		ISO-Octane	48	MT	1.29
98		Steel Conveyor Belt	1	No.	1.83
99	Chemicals, Catalyst & additives	Mineral Oil (White Oil)	205	MT	6.86
100	Chemicals, Catalyst & additives	Methanol	14400	МТ	76.73
101	Chemicals, Catalyst & additives	Poly Propylene Catalyst	7.5	МТ	30.27

				1	1
102	Chemicals, Catalyst & additives	PD/ 2,4 Pentane dione	220	MT	13.35
103	Service	Assay analysis of Fresh & Spent catalyst	1	No.	0.80
104	Chemicals, Catalyst & additives	Nucleating Agent (HPNA)	50	МТ	10.42
105	Chemicals, Catalyst & additives	Mono 2 Ethyl Hexyl Amine	18	MT	0.91
	P	rocurement Projected _ Capex and			
		Repair & Maint - Pipelines		I	n
	Description of item		•	Accounti ng Unit	Estimated Value of procurement in Rs/Crores
1	Strainer (Nos)				
	Transfer Pump (Nos)				
3	ACDB Panel (Nos)		147	Nos.	19.27
4	API 6D Ball Valves (Nos)		644	Nos.	26.63
5	API 6D Valves (Nos)		147	Nos.	9.35
6	Ball Valve (Nos)		102 7	Nos.	72.60
7	Basket Strainer (Nos)		60	Nos.	8.53
8	Control valve (Nos)		75	Nos.	14.76
9	EEE (Nos)		15.0 0	Nos.	6.13
10	Emergency evacuation		74	Nos.	
	equipment (Nos)				23.98
11	Engine Spares		Lot	Lot	16.80
12	ER Probe(Nos)		59	Nos.	7.67
	F/F PUMP, Jockey pumps, water filling pumps(Nos)				0.00
	Fire Fighting Pipes (km)		0.17	Km	
4.5	The Filtrice Decoration		5	N.T.	0.07
	Fire Fighting Pump (Nos)		3	Nos.	0.60
	Flow Tee (Nos)		99	Nos.	12.38
	Globe Valve (Nos)			Nos.	1.22
18	Heavy duty access Mats		Lot	Lo t	6.23
19	High Mast(Nos)		80	Nos.	9.59
20	HOT crane (Nos)		8	Nos.	10.73
21	HT Capacitor Panel(Nos)		5	Nos.	0.76
22	HT Panel(Nos)		5	Nos.	10.38
23	HT/LT/Control cables(km)		830	Km	1.82
24	Instrumentation, Control & SCADA System (Nos)		10	Nos.	13.81
25	Insulating coupling (Nos)		556	Nos.	4.60
	Jockey pump (Nos)		2	Nos.	0.05
	LT DG(Nos)		185	Nos.	4.55
	LT Panel(Nos)		38	Nos.	6.00
	Mainline pumping Unit (Nos)		22	Nos.	67.81
	Marine Hoses for SPM			Nos.	96.00
31	Mechanical Pipe End connector+ Standard/Long seal Leak			Nos.	4.1
	clamps+ Encapsulating Leak Clamps				
32	Metering skid assembly (consisiting of Filtration, Metering and Pressure		4		9.1
	Reduction units) of various sizes for providing connectivity to CGD Entities from Gas pipelines and augmentation of existing			Nos.	

	facilities (Nos)			
33	Metering Skid Ph-III(Nos)	8	Nos.	43.04
34	Metering Skid(Nos)	4	Nos.	27.85
35	Misc. fire fighting equipment (Nos)	47	Nos.	27.90
36	NRPL Mainline pumping unit Replacement			
37	Other Marine Spares		Nos.	10.18
38	pipe fitting(Nos)	00	Nos.	1.62
39	Pipe (km)	146. 1	Nos.	134.03
40	Remote operated Valve (Nos)	23	Nos.	1.92
41	Scrapper Barrel	72	Nos.	12.46
42	Separator Filter (Nos)	2	Nos.	3.24
43	Small size (<4") misc. valve (Nos)	103	Nos.	5.18
44	SRV (Nos)	1	Nos.	0.17
45	Station pipes(km)	2.3	Nos.	3.53
46	Steel Pipe (KM)	207 8	Km	2352.00
47	Steel Plate (MT)	168 0	Nos.	10.92
48	sump pump and tank (Nos)	1	Nos.	0.16
49	Swing check valve (Nos)	100	Nos.	2.62
50	Telecom System (comprising of DC power, Networking system, CCTV system, Telephone system, OFC, HDPE, etc.)(Nos)	10	Nos.	113.34
51	Transformer(Nos)	10	Nos.	74.52
52	Vadinar SPM Replacement project 1. Buoy & accessaries 2. Concrete Coated Pipe		Nos.	
53	Valves	Lot	Lot	5
54	VALVES of all types(Nos)		Nos.	
55	VFD (Nos)	15	Nos.	24.00
56	Anti-Chafe Chains for Vadinar	14	No	0.97
57	Subsea Hoses for Paradip SPM-I	 2	No	0.84

Procurement Projected _ Marketing - LPG Group

		Broad specification			Estimated Value of
Sl. No.	Description of item	Parameters	Quanti ty	Accounti ng Unit	procurement in Rs/Crores
1	LPG Pump		14	Nos.	10.34
2	LPG Compressor		14	Nos.	6.77
3	Air Compressor		15	Nos.	2.30
4	Air Dryer		4	Nos.	0.77
5	DG Set		7	Nos.	3.47
6	Fire Engine		14	Nos.	1.92
7	Valve change without		4	Nos.	
	Evacuation Machine				1.12
8	LPG Loading arm		16	Nos.	0.53
9	Carousel		20	Nos.	70.80
10	Computers		200	Nos.	1.20
11	Additive dosing machines		50	Nos.	10.80
12	Carousal Cards in Nos.		360	Nos.	3.02
13	Mech Seals (Refurbishing)		93	Nos.	
	Nos.for LPG Pump				3.35

14	Mech Seals New in Nos. for LPG		20	Nos.	1.02
15	Pump Valves / Flanges / Gaskets /		270	Nos.	1.92
16	Spares in Nos.		2790	Nec	8.10
16	Cables (Control / Power) in RMs		0	NOS.	0.50
17	Pressure / Temp		186	Nos.	
18	Transmitters/Gauges in Nos. Fire Engine / DG / DC Batteries		3100	Nos.	2.23
	in Nos.				5.58
19	Conveyor Chain in RM		4550 0	Nos.	6.55
	Air Ends of Screw Compressors		37	Nos.	2.22
	Spares (Filters & Accessories) Air Comp in Nos.		465	Nos.	1.39
	LPG Vap Comp Seals / valves /		279	Nos.	1.57
23	Plates Lights and Fixtures / Bulbs /		9300	Noc	1.01
23	glands / JBs / Switches		9300	NOS.	1.12
	Relays / Fuses		4650		1.12
	Printer Cartridges			Nos.	0.34
26	Sprockets / Cylinders / Shafts / connectors	wearing strips / Pneumatic tubing /	1860 0	NOS.	3.72
27	Misc Spares /Car (sensors /			Nos.	2.25
20	connectors / cables etc)		744	NI	2.23
	TLD / TLF Spares Structural steel for Conv / Misc			Nos. Nos.	2.23
29	Works in MT		400	NUS.	1.82
30	Diesel / Fire Engine Spares / filters / glands		651	Nos.	5.47
31	Spares for Level gauges /		279	Nos.	3.47
	transmitters		250		3.35
	CCTV spares / modules	es / MIMIC / sensors / transmitter	279 93	Nos. Nos.	1.395 1.67
34	Load cells for weigh bridges /			Nos.	1.07
	weighing scales / carousals		, , ,	1.00.	2.70
35	Centering Arms of carousals		2250	Nos.	0.32
		Procurement of LPG Cylinders & P Regulator			
		Regulator			Estimated
		Broad specification			Value
Sl. No.	Description of item	Parameters	Quanti	Accoun	of
			ty	ting	procureme
				Unit	nt in Rs/Crores
1	14.2 Kg Cylinders (Including		110000	Nos.	KS/ Crores
_	New & Replacement)		00		1686.32
2	19 Kg Cylinders (Including New & Replacement)		90000	Nos.	168.05
3	47.5 Kg Cylinders (Including		5000	Nos.	
4	New & Replacement) 5 Kg Cylinders (Including New &		0 200000	Nos.	23.11
4	Replacement)		0	NOS.	208.01
5	425 KG Cylinders		3000	Nos.	23.71
6	Pressure Regulators		750000 0	Nos.	130.38
7	Self Closing Valve		198000	Nos.	
			00		199.20
	P	rocurement Projected _ Marketing - Lubes			
		Lubes		Accountin	Estimated
Sl. No.	Description of item	Broad specification Parameters	Quantit	g Unit	Value of procurement
			y		in Rs/Crores

1	Synthetic base oil Poly alfa olefin 6 CST		600	MT	15.89
2	ST5014 (Lithium Hydroxide Monohydrate)		325	MT	22.68
3	ST56058 (PIB 1000)		2601	MT	32.18
4	Synthetic base oil Poly alfa olefin 100 CST, PAO 100(ST 55580)		300	MT	12.95
5	PIB of higher molecular wt.(ST 56032/ST 56036)		306	MT	4.88
	Synthetic base oil Poly alfa olefin 4 CST, PAO 40(ST 55578)		317	MT	12.85
	Pr	ocurement Projected _Pipelines			
				Accountin	Estimated Value
		Broad specification Parameters		g Unit	of procurement
Sl. No.	Description of item		Quantit		In Rs/Crores
			y		
1	Marine Hoses		60	Nos	24

FINANCIAL YEAR 2024-25

Capex Procurement Projected R&D

Plant (part) to 600 SLPH, Pressure 200 bar, temperature 500 degC 2 Asphaltene Extraction Weigh scales, Ovens, Rotary evaporators, Asphaltene extractors 3 Hydrogen Generation Plants Capacity 6 NM3/hr each, 99.999% H2 2	No. No s. No s.	0.31
systemevaporators, Asphaltene extractors3 Hydrogen Generation PlantsCapacity 6 NM3/hr each, 99.999% H22	s. No s.	0.31
	S.	
		4.34
	lot	0.70
	lot	0.20
	lot	0.57
	lot	0.31
	lot	1.04
	lot	0.58
	No	0.02
	No	0.15
	No	0.50
	No	0.03
	No	0.15
	No	0.04
	No	0.10
17 Re-circulating Chiller-0.5KW Cooling Capacity 1	No	0.22
	No	0.59
19 Solar based Hydrogen Infrastructure 1 N	Nos	7.1
based hydrogen infrastructure	No s	6.9
21 Development of oxy-steam biomass gasification process 1	Lot	4.6
22 Membrane performance evaluation test facility (release of balance 10% payment after installation and commissioning) 1 1 1 1 1 1 1 1 1	No s	0.3
23 Micropipettes 1-1000 μL 3	No s.	<0.01
	No s	0.02
25 Rotary Evaporator Max. 200 °C 1	No s	0.12
26 Analytical balance 220 g/82 g with readability of 1 0.1/0.01 mg	No s	0.07
	No s.	0.09
28 Muffle furnace 1400 °C 1	No s	0.17
29 Hot air oven 250 °C 1 1	No s	0.01
30 Vacuum oven 200 °C 1	No s	0.08
	No s.	0.03
	No s	0.01
	No s.	-
34 Integrated Gasification Plant 1	No	-

C -				S.	
35	Advanced Metallurgical Microscope		1	No	0.5
36			1	s. No	0.1
	High temperature furnace		1	S.	0.1
	Design of Experiment (DOE)	Concurrent network license for 4	_	No	
Ο.	Software	years term with warranty cover	5	S	0.13
38	MATLAB Software and associated	Perpetual named network license with	2	No	0.45
	toolboxes	1 year warranty	3	S	0.15
39	Vacuum Oven		2	No	0.26
	vacuum oven			S.	0.26
40	Scale		2	No	0.08
	Scare			S	0.00
41	Balance		2	No	0.17
40			-	S.	0.1.7
42	Magnetic Stirrer		2	No	0.06
			2	S.	
43	Over head stirrer			No	0.06
11			1	s. No	
44	Colloidal mill		1	NO S.	0.49
45			1	No	
13	Three Roll Mill			S	2.03
46			1	No	
	Online PSA		_	S	0.93
47	Lab Equipments -		04	No	0.97
	Microwave reactor			S.	
	Microwave furnace				
	Salt spray machine				
	Proc	curement Projected - For Repair &			
		Maintance			
	77 .		4	la r	0.01
	pH meter	-220 pH	1	Nos	0.01
CI	pH meter		1	Nos	0.01
Sl.	pH meter		1	Nos	0.01
No.					
No. 1	Micro Scale Reactor Unit		1	Nos.	0.01
No. 1 2	Micro Scale Reactor Unit Integrated Gasification Plant		1 1	Nos. Nos.	
No. 1 2 3	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture		1	Nos. Nos. Nos.	- - 0.3
No. 1 2 3 4	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC		1 1	Nos. Nos.	
No. 1 2 3 4	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture		1 1	Nos. Nos. Nos. Lumpsum	- - 0.3 0.09
No. 1 2 3 4 5	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and		1 1	Nos. Nos. Nos. Lumpsum	- - 0.3 0.09
No. 1 2 3 4 5	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit		1 1	Nos. Nos. Nos. Lumpsum	- - 0.3 0.09 0.35
No. 1 2 3 4 5 6 7	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure		1 1	Nos. Nos. Nos. Lumpsum Lot Lot	- - 0.3 0.09 0.35
No. 1 2 3 4 5 6 7 8 9	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument	-220 pH	1 1	Nos. Nos. Nos. Lumpsum Lot Lot Lot	- 0.3 0.09 0.35 0.76 0.01
No. 1 2 3 4 5 6 7 8 9 10	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument Spares of BET Surface area Analyzer	-220 pH	1 1	Nos. Nos. Nos. Lumpsum Lot Lot Lot Lot Lot Lot Lot Lot	- 0.3 0.09 0.35 0.76 0.01 0.01 0.04
No. 1 2 3 4 5 6 7 8 9 10 11	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument Spares of BET Surface area Analyzer TECS (AMC) of ANSYS CFD software	-220 pH	1 1	Nos. Nos. Nos. Lumpsum Lot Lot Lot Lot Lot SU	0.3 0.09 0.35 0.76 0.01 0.04 0.04 0.08
No. 1 2 3 4 5 6 7 8 9 10 11 12	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument Spares of BET Surface area Analyzer TECS (AMC) of ANSYS CFD software AMC of DCN Analyzer	-220 pH	1 1 1 1 1 1 1 1 1 1	Nos. Nos. Nos. Lumpsum Lot Lot Lot Lot Lot SU SU	- 0.3 0.09 0.35 0.76 0.01 0.01 0.04 0.04 0.08
No. 1 2 3 4 5 6 7 8 9 10 11 12	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument Spares of BET Surface area Analyzer TECS (AMC) of ANSYS CFD software AMC of DCN Analyzer	-220 pH	1 1	Nos. Nos. Nos. Lumpsum Lot Lot Lot Lot Lot SU	0.3 0.09 0.35 0.76 0.01 0.04 0.04 0.08
No. 1 2 3 4 5 6 7 8 9 10 11	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument Spares of BET Surface area Analyzer TECS (AMC) of ANSYS CFD software AMC of DCN Analyzer	-220 pH	1 1 1 1 1 1 1 1 1 1	Nos. Nos. Nos. Lumpsum Lot Lot Lot Lot Lot SU SU	- 0.3 0.09 0.35 0.76 0.01 0.01 0.04 0.04 0.08
No. 1 2 3 4 5 6 7 8 9 10 11 12	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument Spares of BET Surface area Analyzer TECS (AMC) of ANSYS CFD software AMC of DCN Analyzer	-220 pH	1 1 1 1 1 1 1 1 1 1	Nos. Nos. Nos. Lumpsum Lot Lot Lot Lot Lot SU SU	- 0.3 0.09 0.35 0.76 0.01 0.01 0.04 0.04 0.08
No. 1 2 3 4 5 6 7 8 9 10 11 12	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument Spares of BET Surface area Analyzer TECS (AMC) of ANSYS CFD software AMC of DCN Analyzer	-220 pH	1 1 1 1 1 1 1 1 1 1	Nos. Nos. Nos. Lumpsum Lot Lot Lot Lot Lot SU SU	- 0.3 0.09 0.35 0.76 0.01 0.01 0.04 0.04 0.08
No. 1 2 3 4 5 6 7 8 9 10 11 12	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument Spares of BET Surface area Analyzer TECS (AMC) of ANSYS CFD software AMC of DCN Analyzer	-220 pH	1 1 1 1 1 1 1 1 1 1	Nos. Nos. Nos. Lumpsum Lot Lot Lot Lot Lot SU SU	- 0.3 0.09 0.35 0.76 0.01 0.01 0.04 0.04 0.08
No. 1 2 3 4 5 6 7 8 9 10 11 12	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument Spares of BET Surface area Analyzer TECS (AMC) of ANSYS CFD software AMC of DCN Analyzer	-220 pH	1 1 1 1 1 1 1 1 1 1	Nos. Nos. Nos. Lumpsum Lot Lot Lot Lot Lot SU SU	- 0.3 0.09 0.35 0.76 0.01 0.01 0.04 0.04 0.08
No. 1 2 3 4 5 6 7 8 9 10 11 12	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument Spares of BET Surface area Analyzer TECS (AMC) of ANSYS CFD software AMC of DCN Analyzer	-220 pH	1 1 1 1 1 1 1 1 1 1	Nos. Nos. Nos. Lumpsum Lot Lot Lot Lot Lot SU SU	0.3 0.09 0.35 0.76 0.01 0.04 0.04 0.08 0.02
No. 1 2 3 4 5 6 7 8 9 10 11 12	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument Spares of BET Surface area Analyzer TECS (AMC) of ANSYS CFD software AMC of DCN Analyzer	-220 pH For Noise testing rig	1 1 1 1 1 1 1 1 1 1	Nos. Nos. Nos. Lumpsum Lot Lot Lot Lot Lot SU SU	0.3 0.09 0.35 0.76 0.01 0.04 0.04 0.08 0.02
No. 1 2 3 4 5 6 7 8 9 10 11 12	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument Spares of BET Surface area Analyzer TECS (AMC) of ANSYS CFD software AMC of DCN Analyzer	For Noise testing rig Financial YEAR 2025-26	1 1 1 1 1 1 1 1 1 1	Nos. Nos. Nos. Lumpsum Lot Lot Lot Lot Lot SU SU	- 0.3 0.09 0.35 0.76 0.01 0.01 0.04 0.04 0.08
No. 1 2 3 4 5 6 7 8 9 10 11 12	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument Spares of BET Surface area Analyzer TECS (AMC) of ANSYS CFD software AMC of DCN Analyzer	FINANCIAL YEAR 2025-26 Capex Procurement	1 1 1 1 1 1 1 1 1 1	Nos. Nos. Nos. Lumpsum Lot Lot Lot Lot Lot SU SU	- 0.3 0.09 0.35 0.76 0.01 0.01 0.04 0.04 0.08
No. 1 2 3 4 5 6 7 8 9 10 11 12	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument Spares of BET Surface area Analyzer TECS (AMC) of ANSYS CFD software AMC of DCN Analyzer	FINANCIAL YEAR 2025-26 Capex Procurement Projected R&D	1 1 1 1 1 1 1 1 1 1	Nos. Nos. Nos. Lumpsum Lot Lot Lot Lot Lot SU SU	- 0.3 0.09 0.35 0.76 0.01 0.04 0.04 0.08 0.02 0.02
No. 1 2 3 4 5 6 7 8 9 10 11 12	Micro Scale Reactor Unit Integrated Gasification Plant Planetary centrifugal mixture Mechanical ARC Spares of Electrolroyer and compressor unit AMC of Hydrogen Infrastructure AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument Spares of BET Surface area Analyzer TECS (AMC) of ANSYS CFD software AMC of DCN Analyzer	FINANCIAL YEAR 2025-26 Capex Procurement	1 1 1 1 1 1 1 1 1 1 1 1 1 1 0	Nos. Nos. Nos. Lumpsum Lot Lot Lot Lot Lot SU SU	

					ment in Rs/Cror es
	Heavy End Hydroprocessing Pilot Plant (part)	Capacity up to 1000 g/hr, H2 rate up to 600 SLPH, Pressure 200 bar, temperature 500 degC	1	No.	11.89
	DCS card		1	No.	0.11
	A3 Printer	Color laser printer	1	No.	0.02
	GC-FID/TCD		1	lot	0.40
	Sulfur/ Chloride		1	Lot	0.60
	GC-VUV		1	Lot	1.00
	GC-MS		1	Lot	1.00
	GPC with multiple detector		1	lot	2.00
	Up-gradation of NMR 500 MHz FT NMR		1	No	3.33
	FT-IR Spectrometer		1	NO	1.50
11	Laboratory Equipments (Muffle furnace, Vacuum Oven, pH Meter, Hot Plate, Refrigerator)		1	lot	0.15
	Particle size analyzer		1	no	0.40
	Lab furniture(syn block)		1	lot	0.95
	Density for LPG				0.12
	Hot filtration tester				0.15
	Cu strip corrosion for LPG (D1838)				0.18
	KFT				0.30
18	Dual Beam UV-Vis Spectrophotometer		1	No	0.05
19	20L Automatic Rotary Evaporation System		1	No	0.25
20	Continuous Flow Reactor System		1	No	0.20
21	Gas Distribution System Upgradation		1	No	1.2
22	Automatic Titrator with KF		1	No	0.50
23	Explosion Proof Refrigerators		4	No s	0.12
24	Explosion Proof Freezers		2	No s	0.08
25	Waste Plastic pyrolysis unit		1	No	4
	Styrene Purification Unit to convert Crude Styrene from waste to monomer grade Styrene (approx. 1- 2 TPD Continuous unit)		1	No	35
	High Pressure Autoclaves		1	No	0.78
	UTM with accessories		1	No	1.2
	Spares of Electrolroyer and compressor unit		1	Lot	0.35
	AMC of Hydrogen Infrastructure		1	Lot	0.76
	AMC of BELSORP HP instrument		1	Lot	0.01
	AMC of BET Surface area Analyzer		1	Lot	0.01
	Spares of BELSORP HP instrument		1	Lot	0.04
	Spares of BET Surface area Analyzer		1	Lot	0.04
	Solar based Hydrogen Infrastructure		1	No s.	48.23
36	Biomass Shredder		1	No s	0.02
37	Crusher		1	No s	0.02
38	Natural gas and bio-CNG reforming based hydrogen infrastructure		1	No s	39.1
39	Development of oxy-steam biomass gasification process		1	Lot	7.68
40	Micro scale reactor unit		1	No s.	4.8
11	Fume hood		1	No	0.07

				S.	
42	Liquid GC		1	No	0.6
	1			S.	
43	Integrated Gasification Plant		1	No	22
				S.	
44	Gasket fabrication machine for stack	For air cooled fuel cell air/water	1	No	0.7
		cooled		S.	
45	SOFC/ SOEC cell fabrication facility	i. Planetary Ball Milling machine 240	1	No	6
		v, 50-60 Hz, 2800 Watt		S.	
		ii. Benchtop ultrathin Coating System (
		X-Y-Z motion) for coating fuel cell			
		iii. Screen Printing machine (
		Screen Size up to 15 x 20 cm2 & Max			
		Print area 40x35cm2) iv. PLANETARY VACUUM MIXER			
		v. Overhead Stirrer – Direct Drive			
		Stirrer – ~40 Ltr			
		Gas Characterizer for fuel cell			
46	Scanning electron microscope	Gub G.: ara a con 1201 101 1001	1	no	1.2
	Planetary Mixer & Vibrating table		1	no	.02
48	,			Lu	
	Renewal of Aspen Engineering Suite	Network license for 5 years term with		mp	2.26
		SMS (AMC)		su	2.36
				m	
49	Fixed bed reactor cum adsorption		1	no	2.1
	setup				
	Multi-Channel, multi compartment		1	lot	3.0
	glove box with integrated facilities				
	of: Weighing balance				
	2. Spin Coater/Slot-die Coater/Ink-				
	Jet Coater 3.Programmed Hot Plate				
	4. Solar simulator				
	5. Vapour Deposition Setup (2)				
	6. Probe system for measurement				
	7.IV tester				
	8. Lamination unit				
50	Catalyst Slurry		1	no	2.28
	Chemisorption		1	no	1.11
52	Spray Dryer		1	no	0.61
53	Dialometer		1	no	0.89
54	Lab Scale Hydrogen Furnace (with		1	no	2.031
	Scrubber & Gas Suction)				
	Lab Scale Hydrogen Furnace (with		1	no	2.37
	Scrubber & Gas Suction)				
	Nanometals and Metal oxide		1	lot	12.77
	Synthesis Facility		1		1.00
_	SRV LEW 1		1	no	1.88
	LFW-1		1	no No	2.95
	Lab Equipments - Grease Kettle – 2Kg and 5 Kg		04	No s.	1.20
	Automatic Penetrometer			3.	
	Drop point apparatus				
	Wheel bearing leakage tester(
	variable RPM)				
	,	urement Projected - For Repair & Maintenance			
					Estimated
		Broad specification			Value
Sl.	Description of item	Parameters	Quantit	Accountin	
No.	-		y	g Unit	procure
					ment in
					Rs/Cror
					es
1	Reactors for 4 MRU		8	Nos.	0.50

2	Dryer spares		16	Nos.	0.05
3	Tescom regulator spares		5	Nos.	0.10
4	Maintenance for single cell and stack		1	Lot	0.03
	test stations				
5	Instrumentation Spares for pilot		4	Lot	-
	plant				
6	Spares parts for Fuel cell stations		1 set		0.3
7	TECS (AMC) of ANSYS CFD software		1	SU	0.085
8	AMC of DCN Analyzer		1	SU	0.025
9	AMC of MATLAB software		1	SU	0.03
10	Acrylic plates	For ASTM D 1404 Deleterious particle			
		test			

FINANCIAL YEAR 2026-27

Capex Procurement Projected R&D

		Projected R&D			
Sl. No.	Description of item	Broad specification Parameters	Quantit y	Accountin g Unit	Estimate d Value of procure ment in Rs/Cror es
1		Capacity 15 NM3 each, Diaphram type, 250 bar	2	No.	8
2	SIMDIST		1	No	0.40
	Biodiesel-Analyser		1	No	0.40
	UPLC-MS (with multiple detector)		1	lot	2.00
	HPLC with PDA/RI		1	lot	1.50
	Rotavapor		1	No	0.15
	FT-NIR Spectrometer		1	No	0.50
	ICP-OES		1	No	1.00
	Silver corrosion				0.10
	Automatic smoke point				0.20
	Vapor pressure analyzer for LPG				0.11
	Fuel analyzer for higher alcohol blended gasoline				0.16
13	Diesel analyzer				0.60
14	Abel flash point apparatus				0.18
15	Magnetic Hotplates		10	No s	0.10
16	Automatic Multipurpose Reactor System		1	No	0.20
17	Vacuum Ovens		2	No s	0.20
18	Particle Size Analyzer		1	No	0.20
	Density meter		1	No	0.10
	Twin Screw extruder with accessories		1	No	1.0
21	Solar based Hydrogen Infrastructure		1	No s.	8.03
22	Biomass gasification based hydrogen production demo plant		1	No s	20.0
23	Single cell test station for PEM fuel cell with utilities		1	No s.	2
24	PEM fuel cell system test station	Upto 10 kW	1	No s.	5
25	Universal Testing Machine (UTM)		1	No s.	1.50
26	Hydrogen determinator		1	No s	1.00
27	Sample cutting & modification		1	No	0.20

	equipment			S.	
28	Thermal conductivity measurement		1	No s.	0.60
	Molecular Modeling Software & hardware	Network license with HPC core server & customized service	1	No	2.0
	TGA with GC	a customized service	1	no	1.76
_	Lab Equipments -		04	No	1.30
	Flow pressure test equipment (DIN			S.	1.50
	Method)				
	Grease Workers (02 Nos.)				
	Oxidation stability test apparatus				
	Lincoln Ventimeter apparatus				
	Duos	unament Projected For Pancia (
	Proc	urement Projected - For Repair & Maintenance			
		Possed on selfinetion			Estimated
CI	Doggrintion of itom	Broad specification Parameters	Ouantit	Accountin	Value
No.	Description of item	rarameters	y	g Unit	procure
NO.			y	goint	ment in
					Rs/Cror
					es
	Control valve trims		8	Nos	0.10
	Other pilot plant spares like spares		1	lot	
	of pumps, compressors, heaters,				0.40
3	valves, tubing, etc. AMC of BELSORP HP instrument		1	Lot	0.40 0.01
	AMC of BET Surface area Analyzer		1	Lot Lot	0.01
	Spares of BELSORP HP instrument		1	Lot	0.01
	Spares of BET Surface area Analyzer		1	Lot	0.04
	AMC for micro gas chromatograph		1	Lot	0.02
	Spares for fuel cell station		1	Lot	0.5
9	TECS (AMC) of ANSYS CFD software		1	SU	0.09
	AMC of DCN Analyzer		1	SU	0.03
	AMC of MATLAB software	D 40004 D 4540	1	SU	0.033
12	Bearings	For ASTM D 1743 corrosion preventive test	200	Nos.	0.04
13		preventive test			
14					
15					
		FINANCIAL YEAR 2027-28			
		Capex Procurement Projected R&D			
					Estimate
61		Broad specification			d Value of procure
Sl. No.	Description of item	Parameters	_	Accountin	ment in
NO.	_	Turumeters	y	g Unit	Rs/Cror
					es
	H2 cylinder bank	250 bar H2 pressure	1	lot	0.20
	N/S Analyser		1	No	0.60
	HPLC with RI/PDA/CAD		1	lot	1.20
	FT-Raman Spectrometer TEM		1 1	lot	1.25 5.00
	Density meter		1	Lot	0.15
_	Cu corrosion apparatus				0.13
	Weighing balance (2 No. through				0.12
	GEM)				
	Pour point bath apparatus				0.22
	Refractive Index apparatus				0.15
11	Refractometer (ATF)				0.30

		Broad specification			Estimate d Value of
		Capex Procurement Projected R&D			
		FINANCIAL YEAR 2028-29			
8					
7	AMC of MATLAB software		1	SU	0.037
6	AMC of DCN Analyzer		1	SU	0.035
5	Spares of BET Surface area Analyzer		1	Lot	0.04
4	Spares of BELSORP HP instrument		1	Lot	0.04
3	AMC of BET Surface area Analyzer		1	Lot	0.01
2	cards, etc. AMC of BELSORP HP instrument		1	Lot	0.01
1	Pilot plant spares like spares of check valves, weigh scales, PLC		1	Lot	es 0.50
No.	Description of item	1 arameters	_	g Unit	procure ment in Rs/Cror
Sl.	Description of item	Maintenance Broad specification Parameters	Quantit	Accountin	Estimated Value
	Proc	urement Projected - For Repair &			
_					
	Refractometer Distilled water plant				
	Grease kettle – 10 Kg Water spray off test apparatus			S.	
	Lab Equipments -		04	No	0.90
	Freeze Dryer		2	no	3.21
	High Pressure Reactor		4	No	4.78
	ETV-ICP for Graphite		1	no no	1.17
	Three Roll Mill Homogernizer Lab Scale		1 1	lot no	2.03 1.17
	Renewal of Molecular modeling software	License with HPC core	1	No.	0.6
	Renewal of CFD Software & hardware	Perpetual network license	2	No.	2.0
23	hydraulic press		1	No s.	0.10
22	API 579 Software		1	No s.	0.50
21	C-S Analyser		1	No s.	1.00
	Fuel cell stack assembly	For 1-50 kW	1	No s.	10
	PEM fuel cell stack tests station	0-20 kW	1	No s.	15
18	PEM fuel single cell station along with utilities	0-200 Watts	3	No s.	5
	Magnetic Hotplates		3	No	0.30
16	Multi-Purpose Fixed Bed Reactor Unit		1	No	1.50
15	Benchtop Automatic Rotary Evaporation System		1	s No	0.12
	PMCC flash point Overhead Digital Stirrers		10	No	0.15 0.15
13	DMCC Clark and the				0.15

ment in

					Rs/Cror es
1	Micro Reactor Unit	Capacity up to 150 g/hr, H2 rate up to 500 SLPH, Pressure 180 bar, temperature 450 degC	2	No.	6
2	GC-FID	-			0.40
3	CHNS Analyser				0.50
	TGA-IR				0.95
	Up-gradation of Jeol NMR or New NMR		1	lot	3.33
6	Mini Flash point tester				0.16
	Micro distillation apparatus				0.39
8	WSIM analyzer				0.18
9	Viscometer-SVM				0.32
10	JFTOT				0.90
11	RSSOT analyzer				0.20
12	Oxidation Stability analyzer				0.20
13	Melting Point Apparatus		1	No	0.10
14	Rheotens		1	No	0.75
15	TGA		1	No	0.80
16	Business Analytics Software	Perpetual license with customized service	2	No	0.5
17	Renewal of MATLAB Software	Perpetual named network license with 1 year warranty	5	No.	0.2
18 19	Balls and plates for tribometer		200	Nos	0.04
	Proc	urement Projected - For Repair & Maintenance			
Sl. No.	Description of item		Quantit y	Accountin g Unit	procure ment in Rs/Cror
No. 1	Description of item Pilot plant spares of level controllers	Maintenance Broad specification Parameters	-		Value of procure ment in
No.	Description of item Pilot plant spares of level controllers, chillers, pressure gauges, etc	Maintenance Broad specification Parameters	-	g Unit	Value of procure ment in Rs/Cror es 0.50
1 2	Description of item Pilot plant spares of level controllers, chillers, pressure gauges, etc AMC of BELSORP HP instrument	Maintenance Broad specification Parameters	-	g Unit Lot	Value of procure ment in Rs/Cror es 0.50
1 2 3	Pilot plant spares of level controllers, chillers, pressure gauges, etc AMC of BELSORP HP instrument AMC of BET Surface area Analyzer	Maintenance Broad specification Parameters	-	g Unit Lot Lot	Value of procure ment in Rs/Cror es 0.50 0.01 0.01
1 2 3 4	Pilot plant spares of level controllers, chillers, pressure gauges, etc AMC of BELSORP HP instrument AMC of BET Surface area Analyzer Spares of BELSORP HP instrument	Maintenance Broad specification Parameters	-	Lot Lot Lot	Value of procure ment in Rs/Cror es 0.50 0.01 0.01 0.04
1 2 3 4	Pilot plant spares of level controllers, chillers, pressure gauges, etc AMC of BELSORP HP instrument AMC of BET Surface area Analyzer	Maintenance Broad specification Parameters	-	g Unit Lot Lot	Value of procure ment in Rs/Cror es 0.50 0.01 0.01

	FINANCIAL YEAR- 2024-25					
		LUBES ADDITIVES & S			REMENT	
	Additive	Alternate				
1	1245	1244		15.17	MTs	0.63
2	1410	1414		280.48	MTs	7.01
3	1415	1415/1417/1418		252.25	MTs	5.36
4	1419	, ,		1.10	MTs	0.02
5	1504			11.03	MTs	0.42
6	1539	1244		5.72	MTs	0.28
7	1567	1526		287.53	MTs	7.94
8	1604	1490		1,484.63	MTs	29.15
9	1623	1617		1,576.58	MTs	34.71
10	1658	1659		3,307.50	MTs	70.85
11	1660	1678		869.87	MTs	19.15
12	1685	1617/1772+4574		11.61	MTs	0.32
13	1708	1017/1772 1371		5.29	MTs	0.38
14	1722			4.77	MTs	0.25
				155.22	MTs	3.86
15	1724	1722		889.70		
16 17	1734	1732		10.80	MTs	18.57 0.21
	2010				MTs	0.21
18	2034	2110		26.92	MTs	
19	2120	2118		16.98	MTs	1.10
20	2130	2098		11.03	MTs	1.08
21	3002			1,967.14	MTs	27.46
22	3006			9.64	MTs	0.09
23	3008			107.67	MTs	1.43
24	3010			34.35	MTs	0.76
25	3012			505.88	MTs	5.42
26	3028			30.35	MTs	0.93
27	3039			3.75	MTs	0.03
28	3066			6.14	MTs	0.41
29	3084			43.74	MTs	2.16
30	3088			0.55	MTs	0.01
31	3090			12.57	MTs	0.33
32	3098			7.44	MTs	1.02
33	3514			1,433.25	MTs	19.26
34	3544			189.63	MTs	1.98
35	3554			102.92	MTs	1.78
36	3558			134.51	MTs	2.16
37	3570			166.30	MTs	2.20
38	3572			30.43	MTs	0.22
39	3574			1,653.75	MTs	16.59
40	3575			130.08	MTs	1.42
41	3580			0.55	MTs	0.91
42	4025			5.51	MTs	0.24
43	4027			1.10	MTs	0.02
44	4047			0.13	MTs	0.02
45	4058			4.90	MTs	1.38
46	4038			160.94	MTs	2.97
47	4096			81.14	MTs	1.83
47	4098			4.94	MTs	0.21
48		4540			MTs	
	4529	4542		209.48	_	11.01
50	4543			6.62	MTs	1.99
51	4556			23.04	MTs	4.15
52	4587			0.28	MTs	0.01
53	5012			4.96	MTs	0.02
54	5014			314.38	MTs	21.70
55	5016			2.76	MTs	0.02
56	5021			5.51	MTs	0.06
57	5028			1.98	MTs	0.07

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58	5044		171.99	MTs	1.63
59	5060		119.32	MTs	0.81
60	5067		55.13	MTs	1.46
61	5080		0.88	MTs	0.02
62	5082	5076	165.38	MTs	3.94
63	5516		1.65	MTs	0.01
64	5522		148.64	MTs	4.38
65	5523		0.35	MTs	0.03
66	5534		2.48	MTs	0.10
67	5560		5.21	MTs	0.06
68	6001		3.86	MTs	0.22
69	6011		101.68	MTs	3.16
70	6012		130.04	MTs	3.77
71	6017	6038/6102	7.68	MTs	0.18
72	6051		403.05	MTs	17.88
73	6084	6082	101.87	MTs	1.30
74	6100	6037	224.00	MTs	9.46
75	6102	6038/6017	465.94	MTs	6.63
76	6202		11.03	MTs	0.32
77	6210		5.29	MTs	0.32
78	6218		1.10	MTs	0.04
79	6548		19.29	MTs	0.82
80	6552		51.13	MTs	2.45
81	6554		1.35	MTs	0.07
82	6566		55.76	MTs	2.01
83	6590		0.40	MTs	0.03
84	7014		0.55	MTs	0.02
85	7011		0.44	MTs	0.12
86	7024		0.44	MTs	0.02
87	8002		37.93	MTs	2.25
88	8014		50.72	MTs	1.64
89	8038	80381	5.17	MTs	0.33
90	8052	00301	1.65	MTs	0.03
91	8072		0.55	MTs	0.03
92	8075		30.87	MTs	0.42
93	8089		15.44	MTs	1.11
94	8102		0.66	MTs	0.01
95	8121	8133/8120	694.80	MTs	11.74
96		8133/8120	31.02		
97	8138		0.22	MTs	1.18
	8153			MTs	0.01
98	8171		4.40	MTs	0.02
99	8194		66.15	MTs	1.65
100	8528		0.55	MTs	0.94
101	8540		1.65	MTs	0.18
102	8560	40.00	8.17	MTs	0.07
103	40621	4062	49.65	MTs	1.68
104	55901	5590	2.38	MTs	0.10
105	56036	56032	277.83	MTs	3.61
106	56058		2,679.08	MTs	31.08
107	65548		0.88	MTs	0.02
108	65562		134.51	MTs	1.62
109	65646	65684/65682	99.23	MTs	1.83
110	65654	65684/65682	52.92	MTs	0.95
111	1050		25.00	MTs	2.88
112	1256		0.41	MTs	0.01
			2.45	MTs	0.14
113	1300				
113 114	1304		29.98	MTs	1.07
113 114 115	1304 1350		29.98 114.31	MTs	1.07 3.54
113 114	1304	1296	29.98		1.07

118	1426		11.11	MTs	0.29
119	1427		47.55	MTs	1.21
120	1431		2.36	MTs	0.10
121	1436		3.62	MTs	0.22
122	1442		1.31	MTs	0.08
123	1453		45.88	MTs	1.89
124	1468		184.43	MTs	5.78
125	1475		1,460.13	MTs	32.32
126	1477		6.84	MTs	0.22
127	1478		12.11	MTs	0.28
128	1482		46.80	MTs	1.62
129	1490	1604	101.07	MTs	2.30
130	1492	1474	396.10	MTs	13.20
131	1496		4.48	MTs	0.36
132	1500		18.43	MTs	0.67
133	1505		81.27	MTs	2.32
134	1512		1.79	MTs	0.05
135	1516		23.20	MTs	0.66
136	1527	1242	13.23	MTs	1.01
137	1541		2.87	MTs	0.09
138	1545	1599/1613	386.62	MTs	8.06
139	1546		603.29	MTs	13.27
140	1552	1554	709.35	MTs	18.23
141	1560		65.30	MTs	2.04
142	1573		67.08	MTs	2.37
143	1574		25.03	MTs	0.91
144	1585		1.30	MTs	0.07
145	1586		81.29	MTs	2.34
146	1587		104.87	MTs	3.71
147	1589		64.13	MTs	2.49
148	1596		2.30	MTs	0.06
149	1597		8.12	MTs	0.48
150	1617	1774/1772	1,433.25	MTs	26.95
151	1618		10.64	MTs	0.47
152	1619	1410	421.97	MTs	9.11
153	1632		37.52	MTs	2.26
154	1642		741.99	MTs	22.14
155	1644		343.71	MTs	12.68
156	1652	1658	551.25	MTs	12.07
157	1659	1658	1,068.37	MTs	20.85
158	1662		22.38	MTs	1.08
159	1664		11.90	MTs	0.74
160	1672		4.17	MTs	0.21
161	1674		799.53	MTs	37.03
162	1676		1,055.40	MTs	27.25
163	1678	1660	350.12	MTs	8.92
164	1682		155.67	MTs	4.94
165	1684		300.28	MTs	8.18
166	1694	1660	669.68	MTs	15.14
167	1700		0.89	MTs	0.04
168	1710	1712/1714	220.50	MTs	6.82
169	1718		1.72	MTs	0.10
170	1728		17.99	MTs	0.82
171	1730		1.68	MTs	0.09
172	2006		61.29	MTs	3.60
173	2014		0.75	MTs	0.08
174	2046		3.51	MTs	0.15
175	2061		45.25	MTs	3.07
176	2064		5.02	MTs	0.42
177	2065		33.08	MTs	2.27
,,	2000		55.00	1.110	2.27

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178	2067		4.74	MTs	1.06
179	2068		2.62	MTs	0.42
180	2082		1.37	MTs	0.12
181	2116		213.28	MTs	12.94
182	2117		177.38	MTs	7.81
183	2124		111.99	MTs	6.66
184	2146		9.05	MTs	1.51
185	2152	2158	5.07	MTs	1.72
186	2154		65.90	MTs	5.16
187	2160		673.10	MTs	43.81
188	2170		1.88	MTs	0.18
189	2176		6.59	MTs	0.51
190	2182		0.23	MTs	0.02
191	3001		13.90	MTs	1.18
192	3080		5.86	MTs	0.46
193	3082		0.65	MTs	0.05
194	4540		6.26	MTs	0.22
195	4552		1.05	MTs	0.07
196	4554	4528	57.26	MTs	2.35
197	4562	4528	40.06	MTs	1.78
198	4569	1320	2.00	MTs	0.27
199	4598		20.70	MTs	1.03
200	4600		1.40	MTs	0.15
200	4600		4.84	MTs	0.15
202	6000	6114	385.88	MTs	12.40
202	6008	0114	25.20	MTs	
					1.65
204	6028		259.96	MTs	3.83
205	6030		8.93	MTs	0.44
206	6032	(100	63.15	MTs	3.25
207	6037	6100	515.97	MTs	24.56
208	6038		1,207.72	MTs	17.27
209	6039		1.63	MTs	0.12
210	6063		341.84	MTs	19.15
211	6078		16.11	MTs	1.20
212	6092		2,015.79	MTs	37.85
213	6110		3.58	MTs	0.25
214	6204		11.00	MTs	0.44
215	6212		30.69	MTs	1.88
216	6556		18.43	MTs	0.89
217	6558		110.25	MTs	7.11
218	6562		6.17	MTs	0.38
219	6594		6.90	MTs	0.40
220	6596		1.47	MTs	0.12
221	6598		107.21	MTs	5.69
222	7012		1.28	MTs	0.14
223	7022		16.12	MTs	1.93
224	7040		2.43	MTs	0.53
225	8026		1.77	MTs	0.15
226	8027		4.75	MTs	0.87
227	8040		3.49	MTs	0.23
228	8082		19.79	MTs	1.29
229	8180		14.55	MTs	1.10
230	20041	2004/20042	30.87	MTs	2.21
231	56038	2001/20012	13.38	MTs	0.38
232	56040		1.64	MTs	0.10
233	65630		17.86	MTs	1.50
234	80381	1226/1221	1.10	MTs	0.07
235	1233	1236/1231	103.64	MTs	3.92
236	1236		0.69	MTs	0.03 0.20
237	1274		2.17	MTs	

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238	1515		165.38	MTs	5.70
239	1544	122211221	7.12	MTs	0.25
240	1551	1507/1534	24.84	MTs	1.05
241	1553	1599+3001/1543+460 1	128.13	MTs	3.08
242	1557	1	8.17	MTs	0.27
243	1575	1738/1770	8.89	MTs	0.25
244	1594	1516	20.74	MTs	0.69
245	1608	2002	0.22	MTs	0.02
246	1638	1647	141.12	MTs	3.70
247	1643	1617/1585+1621	352.80	MTs	5.75
248	1668	1547	53.80	MTs	1.91
249	1683		0.62	MTs	0.04
250	1740		926.10	MTs	44.08
251	1746		384.24	MTs	8.57
252	1748		100.97	MTs	3.26
253	1750		31.51	MTs	1.24
254	1766		76.73	MTs	1.81
255	2050		73.78	MTs	1.23
256	2066		37.29	MTs	3.00
257	2092		19.11	MTs	1.05
258	2098		7.64	MTs	0.92
259	2136		39.69	MTs	3.52
260	2184		79.39	MTs	4.82
261	3014		293.47	MTs	3.60
262	3022		2.21	MTs	0.02
263	3030		50.59	MTs	0.45
264	3074		108.05	MTs	1.49
265	3086		1.10	MTs	0.01
266	3102		267.29	MTs	3.03
267	3520		28.22	MTs	0.65
268	3522		3.31	MTs	0.04
269	4010		588.74	MTs	2.77
270	4053		63.50	MTs	4.26
271	4072		0.64	MTs	0.08
272	4074		0.22	MTs	0.03
273	4100		13.89	MTs	0.25
274	4535		44.10	MTs	7.78
275	4550		0.22	MTs	0.08
276	4558		63.50	MTs	2.38
277	4595		0.79	MTs	0.10
278	4597		141.40	MTs	6.32
279	4614		0.44	MTs	0.02
280	5004		2.76	MTs	0.02
281	5011		54.66	MTs	1.32
282	5050		5.51 5.51	MTs	0.14
283	5052		8.82	MTs	0.14
284 285	5053 5064		41.23	MTs MTs	0.84 2.33
286	5064		41.23	MTs	0.04
287	5074	5076	112.19	MTs	2.10
288	5084	3070	3.35	MTs	0.08
289	5514		3.97	MTs	0.08
290	6025	6012/6015	164.32	MTs	4.16
291	6074	0012/0013	210.79	MTs	8.78
292	6096		57.11	MTs	1.65
293	6104		41.29	MTs	1.65
294	6108		90.10	MTs	1.23
295	6200	6037	1.24	MTs	0.06
296	6214	337	27.56	MTs	1.23
_, _			27.00	1 1 1 1 0	1 2.20

297	6216			198.45	MTs	3.66
298	6544			26.80	MTs	1.26
299	6546			6.62	MTs	0.31
300	6550			0.39	MTs	0.02
301	6560			0.81	MTs	0.04
302	6588			280.81	MTs	3.60
303	8086			4.85	MTs	0.39
304	8108			0.55	MTs	0.16
305	8118			2.88	MTs	0.60
306	8176			6.35	MTs	0.60
307	8594			3.31	MTs	0.12
308	8598			1.24	MTs	0.07
309	56060			17.00	MTs	0.58
310	63552			296.13	MTs	9.90
311	65538			275.38	MTs	2.26
312	65550			275.63	MTs	3.84
313	65568			0.88	MTs	0.03
314	65584			57.99	MTs	1.79
315	65642			1.99	MTs	0.07
316	65644			1.56	MTs	0.06
317	65694			94.59	MTs	1.69
318	65706			19.05	MTs	1.94
319	1052			3.53	MTs	0.23
320	1206	108		10.38	MTs	0.63
321	1244	1245		220.50	MTs	10.76
322	1306	1215		1.35	MTs	0.05
323	1543	1599/1613		2,182.95	MTs	42.91
324	1647	1668		149.41	MTs	4.22
325	1673	1000		18.04		0.67
	1711			91.07	MTs MTs	2.66
326						
327	1732			635.02	MTs	16.34
328	1738			13.23	MTs	0.39
329	1742			15.44	MTs	0.36
330	1744			2.92	MTs	0.12
331	2042	2122		0.21	MTs	0.02
332	2101	2100		200.54	MTs	10.32
333	2134	2131		396.90	MTs	16.06
334	4565	4568		211.76	MTs	10.01
335	6082	6084		207.60	MTs	2.72
336	55570			496.13	MTs	20.66
337	55578			275.63	MTs	12.14
338	55580			220.50	MTs	10.08
339	55552			198.45	MTs	8.27
340	55572			220.50	MTs	9.76
341	55576			209.48	MTs	9.25
342	8145	8144		66.15	MTs	3.33
343	1752	1756/1758		55.13	MTs	2.03
344	6102	6038		3,307.50	MTs	59.04
345	6006	6118		3,307.50	MTs	57.07
346	1768	1770		55.13	MTs	1.71
347	8162	81621/81622/81623		110.25	MTs	4.20
348	2007	20071		3.31	MTs	0.30
349	1764	1666/1756		55.13	MTs	2.30
			NCIAL YEAR- 202			
		LUBES ADDITIVES & S			EMENT	
	Additive	Alternate				
1	1245	1244		15.92	MTs	0.66
2	1410	1414		294.50	MTs	7.36
3	1415	1415/1417/1418		264.86	MTs	5.63
4	1419	-120/211//1110		1.16	MTs	0.03
Т	1117	l]	1.10	1.113	0.00

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5	1504	1214	11.58	MTs	0.44
6	1539	1244	6.01	MTs	0.29
7	1567	1526	301.91	MTs	8.34
8	1604	1490	1,558.86	MTs	30.61
9	1623	1617	1,655.40	MTs	36.44
10	1658	1659	3,472.88	MTs	74.39
11	1660	1678	913.37	MTs	20.11
12	1685	1617/1772+4574	12.19	MTs	0.34
13	1708		5.56	MTs	0.40
14	1722		5.01	MTs	0.26
15	1724		162.98	MTs	4.05
16	1734	1732	934.19	MTs	19.50
17	2010		11.34	MTs	0.22
18	2034		28.26	MTs	0.36
19	2120	2118	17.83	MTs	1.15
20	2130	2098	11.58	MTs	1.13
21	3002		2,065.49	MTs	28.83
22	3006		10.12	MTs	0.10
23	3008		113.05	MTs	1.51
24	3010		36.07	MTs	0.80
25	3012		531.18	MTs	5.69
26	3028		31.87	MTs	0.98
27	3039		3.94	MTs	0.03
28	3066		6.45	MTs	0.43
29	3084		45.93	MTs	2.27
30	3088		0.58	MTs	0.01
31	3090		13.20	MTs	0.35
32	3098		7.81	MTs	1.07
33	3514		1,504.91	MTs	20.22
34	3544		199.11	MTs	2.08
35	3554		108.06	MTs	1.86
36	3558		141.23	MTs	2.27
37	3570		174.62	MTs	2.31
38	3572		31.95	MTs	0.23
39	3574		1,736.44	MTs	17.42
40	3575		136.59	MTs	1.50
41	3580		0.58	MTs	0.96
42	4025		5.79	MTs	0.25
43	4027		1.16	MTs	0.02
44	4047		0.14	MTs	0.02
45	4058		5.14	MTs	1.45
46	4064		168.99	MTs	3.12
47	4096		85.20	MTs	1.93
48	4098		5.19	MTs	0.22
49	4529	4542	219.95	MTs	11.56
50	4543	1072	6.95	MTs	2.09
51	4556		24.19	MTs	4.36
52	4587		0.30	MTs	0.01
53	5012		5.21	MTs	0.01
54	5012		330.10	MTs	22.78
55	5014		2.89	MTs	0.02
56	5016		5.79	MTs	0.02
56	5021		2.08	MTs	0.07
58			180.59		1.71
	5044			MTs	
59	5060		125.28	MTs	0.85
60	5067		57.88	MTs	1.53
61	5080	5076	0.93	MTs	0.02
62	5082	5076	173.64	MTs	4.13
63	5516		1.74	MTs	0.01
64	5522		156.07	MTs	4.60

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65	5523		0.37	MTs	0.03
66	5534		2.60	MTs	0.11
67	5560		5.48	MTs	0.06
68	6001		4.05	MTs	0.23
69	6011		106.76	MTs	3.32
70	6012		136.54	MTs	3.95
71	6017	6038/6102	8.07	MTs	0.19
72	6051		423.20	MTs	18.77
73	6084	6082	106.96	MTs	1.36
74	6100	6037	235.20	MTs	9.94
75	6102	6038/6017	489.24	MTs	6.96
76	6202		11.58	MTs	0.33
77	6210		5.56	MTs	0.34
78	6218		1.16	MTs	0.04
79	6548		20.26	MTs	0.86
80	6552		53.68	MTs	2.57
81	6554		1.42	MTs	0.07
82	6566				2.11
82			58.55 0.42	MTs	
	6590			MTs	0.03
84	7014		0.58	MTs	0.02
85	7024		0.46	MTs	0.13
86	7029		0.46	MTs	0.02
87	8002		39.82	MTs	2.36
88	8014		53.25	MTs	1.72
89	8038	80381	5.43	MTs	0.35
90	8052		1.74	MTs	0.03
91	8072		0.58	MTs	0.01
92	8075		32.41	MTs	0.44
93	8089		16.21	MTs	1.17
94	8102		0.69	MTs	0.01
95	8121	8133/8120	729.54	MTs	12.33
96	8138		32.58	MTs	1.24
97	8153		0.23	MTs	0.01
98	8171		4.62	MTs	0.03
99	8194		69.46	MTs	1.74
100	8528		0.58	MTs	0.99
101	8540		1.74	MTs	0.19
102	8560		8.58	MTs	0.07
103	40621	4062	52.13	MTs	1.77
104	55901	5590	2.50	MTs	0.10
105	56036	56032	291.72	MTs	3.79
106	56058		2,813.03	MTs	32.64
107	65548		0.93	MTs	0.03
108	65562		141.23	MTs	1.70
109	65646	65684/65682	104.19	MTs	1.92
110	65654	65684/65682	55.57	MTs	1.00
111	1050	03007/03002	26.25	MTs	3.03
112	1256		0.44	MTs	0.01
113	1300		2.57	MTs	0.14
114	1304		31.48	MTs	1.12
115	1350		120.03	MTs	3.71
116	1414	4006	180.54	MTs	4.78
117	1418	1296	14.40	MTs	0.60
118	1426		11.66	MTs	0.30
119	1427		49.93	MTs	1.27
			2.48	MTs	0.11
120	1431				
121	1436		3.80	MTs	0.23
121 122	1436 1442		1.38	MTs	0.08
121	1436				

125		i I	1	1 1	
	1475		1,533.14	MTs	33.93
126	1477		7.18	MTs	0.23
127	1478		12.71	MTs	0.30
128	1482	1601	49.14	MTs	1.70
129	1490	1604	106.12	MTs	2.41
130	1492	1474	415.90	MTs	13.86
131	1496		4.71	MTs	0.38
132	1500		19.35	MTs	0.70
133	1505		85.33	MTs	2.44
134	1512		1.88	MTs	0.05
135	1516		24.36	MTs	0.69
136	1527	1242	13.89	MTs	1.06
137	1541		3.02	MTs	0.09
138	1545	1599/1613	405.95	MTs	8.46
139	1546		633.45	MTs	13.93
140	1552	1554	744.82	MTs	19.14
141	1560		68.56	MTs	2.14
142	1573		70.44	MTs	2.49
143	1574		26.28	MTs	0.96
144	1585		1.37	MTs	0.07
145	1586		85.35	MTs	2.46
146	1587		110.12	MTs	3.89
147	1589		67.34	MTs	2.61
148	1596		2.42	MTs	0.06
149	1597		8.52	MTs	0.50
150	1617	1774/1772	1,504.91	MTs	28.30
151	1618		11.17	MTs	0.49
152	1619	1410	443.06	MTs	9.57
153	1632		39.39	MTs	2.37
154	1642		779.09	MTs	23.24
155	1644		360.90	MTs	13.31
156	1652	1658	578.81	MTs	12.67
157	1659	1658	1,121.79	MTs	21.89
158	1662		23.50	MTs	1.13
159	1664		12.50	MTs	0.78
160	1672		4.38	MTs	0.22
161	1674		839.51	MTs	38.88
162	1676		1,108.17	MTs	28.62
163	1678	1660	367.63	MTs	9.36
164	1682		163.46	MTs	5.18
165	1684		315.30	MTs	8.59
166	1694	1660	703.17	MTs	15.90
167	1700	1=10/1=11	0.94	MTs	0.04
168	1710	1712/1714	231.53	MTs	7.16
169	1718		1.81	MTs	0.11
170	1728		18.89	MTs	0.86
171	1730		1.77	MTs	0.09
172	2006		64.35	MTs	3.78
173	2014		0.79	MTs	0.08
174	2046		3.68	MTs	0.15
175	2061		47.51	MTs	3.22
176	2064		5.27	MTs	0.44
177	2065		34.73	MTs	2.38
178	2067		4.98	MTs	1.11
179	2068		2.75	MTs	0.44
180	2082		1.44	MTs	0.12
181	2116		223.95	MTs	13.59
182	2117		186.25	MTs	8.20
			1 44	1 3 600	
183 184	2124 2146		117.58 9.51	MTs MTs	6.99 1.59

1 405 1	2452	2450	500	Lvm	4.00
185	2152	2158	5.32	MTs	1.80
186	2154		69.20	MTs	5.41
187	2160		706.75	MTs	46.00
188	2170		1.97	MTs	0.19
189	2176		6.92	MTs	0.54
190	2182		0.25	MTs	0.02
191	3001		14.60	MTs	1.24
192	3080		6.16	MTs	0.48
193	3082		0.68	MTs	0.06
194	4540		6.58	MTs	0.23
195	4552	1700	1.11	MTs	0.07
196	4554	4528	60.12	MTs	2.47
197	4562	4528	42.07	MTs	1.87
198	4569		2.10	MTs	0.29
199	4598		21.74	MTs	1.08
200	4600		1.47	MTs	0.16
201	4602		5.08	MTs	0.42
202	6000	6114	405.17	MTs	13.02
203	6008		26.46	MTs	1.74
204	6028		272.96	MTs	4.02
205	6030		9.38	MTs	0.46
206	6032		66.31	MTs	3.41
207	6037	6100	541.77	MTs	25.79
208	6038		1,268.11	MTs	18.13
209	6039		1.71	MTs	0.12
210	6063		358.93	MTs	20.11
211	6078		16.92	MTs	1.26
212	6092		2,116.58	MTs	39.74
213	6110		3.76	MTs	0.26
214	6204		11.55	MTs	0.46
215	6212		32.23	MTs	1.97
216	6556		19.35	MTs	0.93
217	6558		115.76	MTs	7.47
218	6562		6.48	MTs	0.40
219	6594		7.24	MTs	0.42
220	6596		1.54	MTs	0.13
221	6598		112.57	MTs	5.98
222	7012		1.35	MTs	0.14
223	7022		16.92	MTs	2.03
224	7040		2.55	MTs	0.56
225	8026		1.86	MTs	0.16
226	8027		4.99	MTs	0.92
227	8040		3.66	MTs	0.25
228	8082		20.78	MTs	1.36
229	8180		15.28	MTs	1.15
230	20041	2004/20042	32.41	MTs	2.32
231	56038		14.05	MTs	0.40
232	56040		1.72	MTs	0.11
233	65630		18.75	MTs	1.58
234	80381		1.15	MTs	0.07
235	1233	1236/1231	108.82	MTs	4.12
236	1236		0.72	MTs	0.03
237	1274		2.28	MTs	0.21
238	1515		173.64	MTs	5.98
239	1544		7.48	MTs	0.27
240	1551	1507/1534	26.08	MTs	1.10
241	1553	1599+3001/1543+460	134.54	MTs	3.24
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242	1557		8.58	MTs	0.29
243	1575	1738/1770	9.34	MTs	0.27

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244	1594	1516	21.77	MTs	0.73
245	1608	2002	0.23	MTs	0.02
246	1638	1647	148.18	MTs	3.89
247	1643	1617/1585+1621	370.44	MTs	6.04
248	1668	1547	56.49	MTs	2.01
249	1683		0.65	MTs	0.04
250	1740		972.41	MTs	46.29
251	1746		403.45	MTs	9.00
252	1748		106.02	MTs	3.43
253	1750		33.08	MTs	1.30
254	1766		80.57	MTs	1.90
255	2050		77.47	MTs	1.29
256	2066		39.15	MTs	3.14
257	2092		20.07	MTs	1.11
258	2098		8.02	MTs	0.97
259	2136		41.67	MTs	3.69
260	2184		83.36	MTs	5.06
261	3014		308.15	MTs	3.78
262	3022		2.32	MTs	0.02
263	3030		53.12	MTs	0.47
264	3074		113.45	MTs	1.57
265	3086		1.16	MTs	0.01
266	3102		280.65	MTs	3.18
267	3520		29.64	MTs	0.69
268	3520		3.47	MTs	0.69
269	4010		618.17	MTs	2.91
270	4053		66.68	MTs	4.48
271	4072		0.67	MTs	0.09
272	4074		0.23	MTs	0.03
273	4100		14.59	MTs	0.27
274	4535		46.31	MTs	8.17
275	4550		0.23	MTs	0.09
276	4558		66.67	MTs	2.50
277	4595		0.83	MTs	0.11
278	4597		148.47	MTs	6.63
279	4614		0.46	MTs	0.02
280	5004		2.89	MTs	0.02
281	5011		57.39	MTs	1.39
282	5050		5.79	MTs	0.14
283	5052		5.79	MTs	0.15
284	5053		9.26	MTs	0.88
285	5064		43.29	MTs	2.45
286	5074		4.63	MTs	0.04
287	5082	5076	117.80	MTs	2.20
288	5084		3.52	MTs	0.08
289	5514		4.17	MTs	0.04
290	6025	6012/6015	172.53	MTs	4.37
291	6074		221.33	MTs	9.22
292	6096		59.96	MTs	1.73
293	6104		43.35	MTs	1.73
294	6108		94.61	MTs	1.29
295	6200	6037	1.30	MTs	0.06
296	6214	232,	28.94	MTs	1.29
297	6216		208.37	MTs	3.84
298	6544		28.14	MTs	1.32
299	6546		6.95	MTs	0.33
300	6550		0.41	MTs	0.02
301	6560		0.85	MTs	0.02
301	6588		294.85	MTs	3.78
302	8086		5.09		
303	0000		5.09	MTs	0.41

304	8108	I		0.58	MTs	0.16
305	8118			3.03	MTs	0.63
306	8176			6.67	MTs	0.63
307	8594			3.47	MTs	0.13
308	8598			1.30	MTs	0.08
309	56060			17.85	MTs	0.61
310	63552			310.94	MTs	10.40
311	65538			289.15	MTs	2.37
312	65550			289.41	MTs	4.03
313	65568			0.93 60.89	MTs	0.03
314	65584				MTs	1.88
315	65642			2.09	MTs	0.07
316	65644			1.64	MTs	0.06
317	65694			99.32	MTs	1.77
318	65706			20.00	MTs	2.04
319	1052	100		3.70	MTs	0.24
320	1206	108		10.90	MTs	0.66
321	1244	1245		231.53	MTs	11.30
322	1306			1.42	MTs	0.05
323	1543	1599/1613		2,292.10	MTs	45.06
324	1647	1668		156.88	MTs	4.43
325	1673			18.95	MTs	0.70
326	1711			95.62	MTs	2.79
327	1732			666.78	MTs	17.16
328	1738			13.89	MTs	0.41
329	1742			16.21	MTs	0.38
330	1744			3.06	MTs	0.13
331	2042			0.22	MTs	0.02
332	2101	2100		210.57	MTs	10.83
333	2134	2131		416.75	MTs	16.86
334	4565	4568		222.35	MTs	10.51
335	6082	6084		217.98	MTs	2.85
336	55570			520.93	MTs	21.70
337	55578			289.41	MTs	12.74
338	55580			231.53	MTs	10.58
339	55552			208.37	MTs	8.68
340	55572			231.53	MTs	10.25
341	55576			219.95	MTs	9.71
342	8145	8144		69.46	MTs	3.50
343	1752	1756/1758		57.88	MTs	2.14
344	6102	6038		3,472.88	MTs	61.99
345	6006	6118		3,472.88	MTs	59.92
346	1768	1770		57.88	MTs	1.79
347	8162	81621/81622/81623		115.76	MTs	4.41
348	2007	20071		3.47	MTs	0.31
349	1764	1666/1756		57.88	MTs	2.41
	_, _,	,	NCIAL YEAR- 20		1 5	
		LUBES ADDITIVES & S			REMENT	
	Additive	Alternate				
1	1245	1244		16.72	MTs	0.70
2	1410	1414		309.22	MTs	7.73
3	1415	1415/1417/1418		278.11	MTs	5.91
4	1419			1.22	MTs	0.03
5	1504			12.16	MTs	0.47
6	1539	1244		6.31	MTs	0.31
7	1567	1526		317.00	MTs	8.75
8	1604	1490		1,636.80	MTs	32.14
9	1623	1617		1,738.17	MTs	38.27
10	1658	1659		3,646.52	MTs	78.11
11	1660	1678		959.03	MTs	21.11
11	1000	10/8		737.03	141 1 2	41.11

12	1685	1617/1772+4574	12.80	MTs	0.35
13	1708	1017/1772:1371	5.83	MTs	0.42
14	1722		5.26	MTs	0.27
15	1724		171.13	MTs	4.26
16	1734	1732	980.90	MTs	20.47
17	2010	1,02	11.91	MTs	0.23
18	2034		29.67	MTs	0.38
19	2120	2118	18.72	MTs	1.21
20	2130	2098	12.16	MTs	1.19
21	3002	2070	2,168.77	MTs	30.27
22	3002		10.62	MTs	0.10
23	3008		118.71	MTs	1.58
24	3010		37.88	MTs	0.84
25	3010		557.74	MTs	5.97
26	3028		33.46	MTs	1.03
27	3028		4.13	MTs	0.03
28	3039		6.77	MTs	0.46
29	3084		48.23	MTs	2.38
30	3088		0.61	MTs	0.01
31	3090		13.86	MTs	0.36
32	3098		8.20	MTs	1.12
33	3514		1,580.16	MTs	21.23
34	3544		209.07	MTs	2.19
35	3554		113.47	MTs	1.96
36	3558		148.29	MTs	2.38
37	3570		183.35	MTs	2.42
38	3572		33.55	MTs	0.24
39	3574		1,823.26	MTs	18.29
40	3575		143.42	MTs	1.57
41	3580		0.61	MTs	1.01
42	4025		6.08	MTs	0.26
43	4027		1.22	MTs	0.02
44	4047		0.15	MTs	0.02
45	4058		5.40	MTs	1.52
46	4064		177.44	MTs	3.27
47	4096		89.46	MTs	2.02
48	4098		5.45	MTs	0.23
49	4529	4542	230.95	MTs	12.14
50	4543		7.29	MTs	2.19
51	4556		25.40	MTs	4.58
52	4587		0.31	MTs	0.01
53	5012		5.47	MTs	0.02
54	5014		346.60	MTs	23.92
55	5016		3.04	MTs	0.02
56	5021		6.08	MTs	0.07
57	5028		2.19	MTs	0.08
58	5044		189.62	MTs	1.79
59	5060		131.55	MTs	0.89
60	5067		60.78	MTs	1.61
61	5080		0.97	MTs	0.02
62	5082	5076	182.33	MTs	4.34
63	5516	20.0	1.82	MTs	0.01
64	5522		163.87	MTs	4.83
65	5523		0.39	MTs	0.03
66	5534		2.73	MTs	0.03
67	5560		5.75	MTs	0.06
68	6001		4.25	MTs	0.24
69	6011		112.10	MTs	3.49
70	6012		143.37	MTs	4.15
71	6017	6038/6102	8.47	MTs	0.20
/ 1	001/	0030/0102	0.47	IVI I S	0.20

72	C0 E 1	l I	1 444.26	l Mar-	10.71
72 73	6051 6084	6082	444.36 112.31	MTs MTs	19.71 1.43
74	6100	6037	246.96	MTs	10.43
75	6100	6038/6017	513.70	MTs	7.31
76	6202	0038/0017	12.16	MTs	0.35
77	6210		5.83	MTs	0.35
78			1.22		
	6218		21.27	MTs	0.05
79 80	6548 6552		56.37	MTs MTs	0.90 2.70
			1.49		
81 82	6554 6566		61.47	MTs MTs	0.08 2.22
83	6590		0.44	MTs	0.03
84	7014		0.61	MTs	0.02
85	7024		0.48	MTs	0.13
86	7029		0.49	MTs	0.02
87	8002		41.81	MTs	2.48
88	8014	00201	55.91	MTs	1.80
89	8038	80381	5.70	MTs	0.36
90	8052		1.82	MTs	0.03
91	8072		0.61	MTs	0.01
92	8075		34.03	MTs	0.47
93	8089		17.02	MTs	1.23
94	8102	0122 (0120	0.73	MTs	0.01
95	8121	8133/8120	766.01	MTs	12.94
96	8138		34.20	MTs	1.30
97	8153		0.24	MTs	0.01
98	8171		4.85	MTs	0.03
99	8194		72.93	MTs	1.82
100	8528		0.61	MTs	1.04
101	8540		1.82	MTs	0.20
102	8560	10.00	9.01	MTs	0.08
103	40621	4062	54.73	MTs	1.86
104	55901	5590	2.63	MTs	0.11
105	56036	56032	306.31	MTs	3.98
106	56058		2,953.68	MTs	34.27
107	65548		0.97	MTs	0.03
108	65562	CF CO. 1 (CF CO.)	148.29	MTs	1.78
109	65646	65684/65682	109.40	MTs	2.02
110	65654	65684/65682	58.34	MTs	1.05
111	1050		27.56	MTs	3.18
112	1256		0.46	MTs	0.01
113	1300		2.70	MTs	0.15
114	1304		33.05	MTs	1.18
115	1350		126.03	MTs	3.90
116	1414	1000	189.57	MTs	5.02
117	1418	1296	15.12	MTs	0.63
118	1426		12.25	MTs	0.32
119	1427		52.42	MTs	1.33
120	1431		2.61	MTs	0.11
121	1436		3.99	MTs	0.25
122	1442		1.45	MTs	0.09
123	1453		50.58	MTs	2.08
124	1468		203.33	MTs	6.37
125	1475		1,609.79	MTs	35.63
126	1477		7.54	MTs	0.24
127	1478		13.35	MTs	0.31
128	1482		51.60	MTs	1.78
129	1490	1604	111.43	MTs	2.53
130	1492	1474	436.69	MTs	14.55
131	1496		4.94	MTs	0.40

1500 1505 1512 1516 1527 1541 1545 1546 1552 1560 1573 1574 1585 1586 1587 1589 1596 1597 1617 1618 1619	1242 1599/1613 1554 1774/1772	20.32 89.59 1.97 25.57 14.59 3.17 426.25 665.13 782.06 71.99 73.96 27.59 1.44 89.62 115.62 70.71 2.54 8.95	MTs	0.73 2.56 0.06 0.73 1.11 0.10 8.88 14.63 20.10 2.25 2.62 1.01 0.08 2.58 4.09 2.74 0.07
1512 1516 1527 1541 1545 1546 1552 1560 1573 1574 1585 1586 1587 1589 1596 1597 1617	1599/1613	1.97 25.57 14.59 3.17 426.25 665.13 782.06 71.99 73.96 27.59 1.44 89.62 115.62 70.71 2.54	MTs	0.06 0.73 1.11 0.10 8.88 14.63 20.10 2.25 2.62 1.01 0.08 2.58 4.09 2.74
1516 1527 1541 1545 1546 1552 1560 1573 1574 1585 1586 1587 1589 1596 1597 1617	1599/1613	25.57 14.59 3.17 426.25 665.13 782.06 71.99 73.96 27.59 1.44 89.62 115.62 70.71 2.54	MTs	0.73 1.11 0.10 8.88 14.63 20.10 2.25 2.62 1.01 0.08 2.58 4.09 2.74
1527 1541 1545 1546 1552 1560 1573 1574 1585 1586 1587 1589 1596 1597 1617	1599/1613	14.59 3.17 426.25 665.13 782.06 71.99 73.96 27.59 1.44 89.62 115.62 70.71 2.54	MTs	1.11 0.10 8.88 14.63 20.10 2.25 2.62 1.01 0.08 2.58 4.09 2.74
1541 1545 1546 1552 1560 1573 1574 1585 1586 1587 1589 1596 1597 1617	1599/1613	3.17 426.25 665.13 782.06 71.99 73.96 27.59 1.44 89.62 115.62 70.71 2.54	MTs	0.10 8.88 14.63 20.10 2.25 2.62 1.01 0.08 2.58 4.09 2.74
1545 1546 1552 1560 1573 1574 1585 1586 1587 1589 1596 1597 1617	1554	426.25 665.13 782.06 71.99 73.96 27.59 1.44 89.62 115.62 70.71 2.54	MTs	8.88 14.63 20.10 2.25 2.62 1.01 0.08 2.58 4.09 2.74
1546 1552 1560 1573 1574 1585 1586 1587 1589 1596 1597 1617	1554	665.13 782.06 71.99 73.96 27.59 1.44 89.62 115.62 70.71	MTs	14.63 20.10 2.25 2.62 1.01 0.08 2.58 4.09 2.74
1552 1560 1573 1574 1585 1586 1587 1589 1596 1597 1617		782.06 71.99 73.96 27.59 1.44 89.62 115.62 70.71 2.54	MTs	20.10 2.25 2.62 1.01 0.08 2.58 4.09 2.74
1560 1573 1574 1585 1586 1587 1589 1596 1597 1617		71.99 73.96 27.59 1.44 89.62 115.62 70.71 2.54	MTs	2.25 2.62 1.01 0.08 2.58 4.09 2.74
1573 1574 1585 1586 1587 1589 1596 1597 1617	1774/1772	73.96 27.59 1.44 89.62 115.62 70.71 2.54	MTs MTs MTs MTs MTs MTs MTs MTs MTs	2.62 1.01 0.08 2.58 4.09 2.74
1574 1585 1586 1587 1589 1596 1597 1617	1774/1772	27.59 1.44 89.62 115.62 70.71 2.54	MTs MTs MTs MTs MTs MTs MTs	1.01 0.08 2.58 4.09 2.74
1585 1586 1587 1589 1596 1597 1617	1774/1772	1.44 89.62 115.62 70.71 2.54	MTs MTs MTs MTs MTs	0.08 2.58 4.09 2.74
1586 1587 1589 1596 1597 1617 1618	1774/1772	89.62 115.62 70.71 2.54	MTs MTs MTs MTs	2.58 4.09 2.74
1587 1589 1596 1597 1617 1618	1774/1772	115.62 70.71 2.54	MTs MTs MTs	4.09 2.74
1589 1596 1597 1617 1618	1774/1772	70.71 2.54	MTs MTs	2.74
1596 1597 1617 1618	1774/1772	2.54	MTs	
1597 1617 1618	1774/1772			0.07
1617 1618	1774/1772	8.95	3	0.07
1618	1774/1772		MTs	0.53
	,	1,580.16	MTs	29.71
		11.73	MTs	0.51
	1410	465.22	MTs	10.05
1632	-	41.36	MTs	2.49
				24.40
				13.98
	1658			13.31
				22.99
	1030			1.19
				0.82
				0.23
	+			40.83
			_	30.05
	1660			9.83
	1000			5.44
	1660			9.02
	1660			16.69
	1710/1711		_	0.04
	1712/1714			7.52
				0.12
				0.91
				0.09
				3.97
		0.83	MTs	0.09
		3.87	MTs	0.16
		49.88	MTs	3.38
2064		5.54	MTs	0.46
2065		36.47	MTs	2.50
2067		5.23	MTs	1.17
2068		2.89	MTs	0.46
		1.51	MTs	0.13
2116		235.14	MTs	14.27
	1		MTs	8.61
				7.34
		9.98		1.67
	2158			1.89
	2130			5.69
				48.30
				0.20
				0.57
				0.02
				1.30
	1632 1642 1644 1652 1659 1662 1664 1672 1674 1676 1678 1682 1684 1700 1710 1718 1728 1730 2006 2014 2046 2061 2064 2065 2067 2068 2082 2116 2117 2124 2152 2154 2160 2170 2176 2176 23001	1642 1644 1652 1658 1659 1658 1662 1664 1672 1674 1676 1660 1682 1660 1684 1660 1700 1712/1714 1718 1728 1730 2006 2014 2046 2061 2064 2065 2067 2068 2082 2117 2124 2146 2152 2158 2154 2160 2170 2182 2182 2082	1642 818.04 1644 378.95 1652 1658 607.75 1659 1658 1,177.88 1662 24.67 1664 1664 13.12 4.59 1672 4.59 1676 1678 1660 386.01 1682 171.63 1684 1694 1660 738.33 1700 0.98 1710 1718 1.90 1728 1730 1.85 2006 2004 3.87 2006 2014 0.83 2046 2064 5.54 2065 2065 36.47 2067 2068 2.89 2082 2117 195.56 2114 2124 123.46 9.98 2152 2158 5.59 2154 72.66 742.09 2170 2.07 2.07 2176 7.26 2.026	1642 818.04 MTs 1644 378.95 MTs 1652 1658 607.75 MTs 1659 1658 1,177.88 MTs 1662 24.67 MTs 1664 13.12 MTs 1672 4.59 MTs 1674 881.49 MTs 1676 1,163.57 MTs 1682 171.63 MTs 1684 331.06 MTs 1694 1660 738.33 MTs 1700 0.98 MTs 1710 1712/1714 243.10 MTs 1728 19.83 MTs 1730 1.85 MTs 2006 67.57 MTs 2006 67.57 MTs 2061 49.88 MTs 2064 3.87 MTs 2065 36.47 MTs 2065 36.47 MTs 2066 2.89 MTs

102	2000	l I	C 47	MTa	0.50
192 193	3080 3082		6.47 0.72	MTs MTs	0.50 0.06
193	4540		6.90	MTs	0.06
194	4540		1.16	MTs	0.24
195	4554	4528	63.12	MTs	2.59
196	4562	4528	44.17	MTs	1.96
		4528			
198	4569		2.21	MTs	0.30
199	4598		22.83 1.54	MTs MTs	1.13 0.17
200	4600		5.34		0.17
201	4602	(114	425.43	MTs MTs	13.67
	6000	6114			
203	6008		27.79	MTs	1.82
204	6028		286.60	MTs	4.22
205	6030		9.85	MTs	0.49
206	6032	(100	69.62	MTs	3.58
207	6037	6100	568.86	MTs	27.08
208	6038		1,331.51	MTs	19.04
209	6039		1.80	MTs	0.13
210	6063		376.88	MTs	21.11
211	6078		17.76	MTs	1.32
212	6092		2,222.41	MTs	41.72
213	6110		3.95	MTs	0.28
214	6204		12.13	MTs	0.48
215	6212		33.84	MTs	2.07
216	6556		20.32	MTs	0.98
217	6558		121.55	MTs	7.84
218	6562		6.81	MTs	0.42
219	6594		7.60	MTs	0.44
220	6596		1.62	MTs	0.13
221	6598		118.20	MTs	6.28
222	7012		1.42	MTs	0.15
223	7022		17.77	MTs	2.13
224	7040		2.68	MTs	0.59
225	8026		1.95	MTs	0.17
226	8027		5.24	MTs	0.96
227	8040		3.85	MTs	0.26
228	8082		21.82	MTs	1.43
229	8180	2004/20042	16.04	MTs	1.21
230	20041	2004/20042	34.03	MTs	2.44
231	56038		14.76	MTs	0.41
232	56040		1.81	MTs	0.11
233	65630		19.69	MTs	1.66
234	80381	1226 /1221	1.21	MTs	0.08
235	1233	1236/1231	114.26	MTs	4.32
236	1236		0.76	MTs	0.03
237	1274		2.39	MTs	0.22
238	1515		182.33	MTs	6.28
239	1544	1507/1524	7.85	MTs	0.28
240	1551	1507/1534	27.39	MTs	1.16
241	1553	1599+3001/1543+4601	141.27	MTs	3.40
242	1557	1720 /1770	9.01	MTs	0.30
243	1575	1738/1770	9.80	MTs	0.28
244	1594	1516	22.86	MTs	0.76
245	1608	2002	0.24	MTs	0.02
246	1638	1647	155.58	MTs	4.08
247	1643	1617/1585+1621	388.96	MTs	6.34
248	1668	1547	59.32	MTs	2.11
249	1683		0.68	MTs	0.04
250	1740		1,021.03	MTs	48.60
251	1746		423.62	MTs	9.45

Laral	1740	1) N/T-	2.60
252 253	1748 1750		111.32 34.73		3.60 1.37
254	1766		84.60		1.99
255	2050		81.34		1.35
256	2066		41.11		3.30
257	2092		21.07		1.16
258	2098		8.42	MTs	1.02
259	2136		43.76		3.88
260	2184		87.53		5.31
261	3014		323.56		3.97
262	3022		2.43	MTs	0.02
263	3030		55.78		0.50
264	3074		119.12		1.64
265	3086		1.22	MTs	0.01
266	3102		294.69		3.34
267	3520		31.12		0.72
268	3522		3.65	MTs	0.05
269	4010		649.08		3.05
270	4053		70.01		4.70
271	4072		0.71	MTs	0.09
272	4074		0.24	MTs	0.03
273	4100		15.32		0.28
274	4535		48.62	MTs	8.58
275	4550		0.24	MTs	0.09
276	4558		70.01	MTs	2.62
277	4595		0.88	MTs	0.11
278	4597		155.89	MTs	6.97
279	4614		0.49	MTs	0.02
280	5004		3.04	MTs	0.02
281	5011		60.26	MTs	1.46
282	5050		6.08	MTs	0.15
283	5052		6.08	MTs	0.16
284	5053		9.72	MTs	0.93
285	5064		45.45	MTs	2.57
286	5074		4.86	MTs	0.04
287	5082	50	6 123.69	MTs	2.31
288	5084		3.70	MTs	0.09
289	5514		4.38	MTs	0.05
290	6025	6012/6015	181.16		4.59
291	6074	,	232.40		9.68
292	6096		62.96		1.82
293	6104		45.52		1.81
294	6108		99.34		1.36
295	6200	60		MTs	0.07
296	6214		30.39		1.36
297	6216		218.79		4.04
298	6544		29.55		1.39
299	6546		7.29	MTs	0.34
300	6550		0.43	MTs	0.02
301	6560		0.43	MTs	0.02
302	6588		309.59		3.97
303	8086		5.35	MTs	0.43
304	8108		0.61	MTs	0.43
305	8118		3.18	MTs	0.66
306	8176		7.00		
				MTs	0.66
307	8594		3.65	MTs	0.13
308	8598		1.37	MTs	0.08
309	56060		18.74		0.64
310 311	63552		326.48		10.92
	65538	İ	303.61	MTs	2.49

312	65550		303.88	MTs	4.23
313	65568		0.97	MTs	0.03
314	65584		63.94	MTs	1.97
315	65642		2.20	MTs	0.08
316	65644		1.72	MTs	0.06
317	65694		104.29	MTs	1.86
318	65706		21.00	MTs	2.14
319	1052		3.89	MTs	0.25
320	1206	108	11.44	MTs	0.69
321	1244	1245	243.10	MTs	11.86
322	1306		1.49	MTs	0.05
323	1543	1599/1613	2,406.70	MTs	47.31
324	1647	1668	164.72	MTs	4.65
325	1673		19.89	MTs	0.73
326	1711		100.40	MTs	2.93
327	1732		700.11	MTs	18.02
328	1738		14.59	MTs	0.43
329	1742		17.03	MTs	0.40
330	1744		3.22	MTs	0.14
331	2042		0.23	MTs	0.02
332	2101	2100	221.10	MTs	11.37
333	2134	2131	437.58	MTs	17.70
334	4565	4568	233.46	MTs	11.04
335	6082	6084	228.88	MTs	3.00
336	55570		546.98	MTs	22.78
337	55578		303.88	MTs	13.38
338	55580		243.10	MTs	11.11
339	55552		218.79	MTs	9.11
340	55572		243.10	MTs	10.76
341	55576		230.95	MTs	10.20
342	8145	8144	72.93	MTs	3.67
343	1752	1756/1758	60.78	MTs	2.24
344	6102	6038	3,646.52	MTs	65.09
345	6006	6118	3,646.52	MTs	62.92
346	1768	1770	60.78	MTs	1.88
347	8162	81621/81622/81623	121.55	MTs	4.63
348	2007	20071	3.65	MTs	0.33
349	1764	1666/1756	60.78	MTs	2.53

	FINANCIAL YEAR- 2024-25							
SN	Description of Item	Broad specification parameters	Qty	Accounti ng Unit	Estimated value of Procureme nt value in Crores			
1	Pipeline	API 5L / IS3589 /IS1258	99,642	RM	34.01			
2	Steel Plates	IS 2062 Gr B	22,752	TO	144.44			
3	Pump	Centrifugal Pump	151	EA	11.57			
4	Pump	Fire Pump	27	EA	4.88			
5	Pump	Screw Pump	18	EA	1.05			
6	Valve	Manual Ball / Gate / Butterfly Valves	1,392	EA	1.86			
7	Valve	Motorized Ball / Gate / Butterfly Valves	1,007	EA	23.18			
8	Valve	Double Block & Bleed Valve (DBBV)	150	EA	7.69			
9	Valve	TOBV with Pneumatic or EH Actuator (ROSOV)	108	EA	9.35			
10	Valve	TOBV with Electrical Actuator	226	EA	11.84			
11	MFM	Mass Flow Meter	5	EA	3.13			

FINANCIAL YEAR- 2025-26 ENGG MATERIAL PROCUREMENT							
SN	Description of Item	Broad specification parameters	Qty	Accounti ng Unit	Estimated value of Procurement value in Crores		
1	Pipeline	API 5L / IS3589 /IS1258	1,04,624	RM	35.71		
2	Steel Plates	IS 2062 Gr B	23,890	TO	151.66		
3	Pump	Centrifugal Pump	159	EA	12.14		
4	Pump	Fire Pump	28	EA	5.13		
5	Pump	Screw Pump	19	EA	1.10		
6	Valve	Manual Ball / Gate / Butterfly Valves	1,462	EA	1.96		
7	Valve	Motorized Ball / Gate / Butterfly Valves	1,057	EA	24.34		
8	Valve	Double Block & Bleed Valve (DBBV)	158	EA	8.07		
9	Valve	TOBV with Pneumatic or EH Actuator (ROSOV)	113	EA	9.82		
10	Valve	TOBV with Electrical Actuator	237	EA	12.43		
11	MFM	Mass Flow Meter	5	EA	3.29		

FINANCIAL YEAR- 2026-27 ENGG MATERIAL PROCUREMENT

SN	Description of Item	Broad specification parameters	Qty	Accounti ng Unit	Estimated value of Procurement value in Crores
1	Pipeline	API 5L / IS3589 /IS1258	1,09,855	RM	37.49
2	Steel Plates	IS 2062 Gr B	25,085	ТО	159.24
3	Pump	Centrifugal Pump	167	EA	12.75
4	Pump	Fire Pump	29	EA	5.38

5	Pump	Screw Pump	20	EA	1.16	
6		Manual Ball / Gate /			2.05	
	Valve	Butterfly Valves	1,535	EA		
7	Valve	Motorized Ball / Gate / Butterfly Valves	1,110	EA	25.56	
8	Valve	Double Block & Bleed Valve (DBBV)	166	EA	8.48	
9	Valve	TOBV with Pneumatic or EH Actuator (ROSOV)	119	EA	10.31	
10	Valve	TOBV with Electrical Actuator	249	EA	13.05	
11	MFM	Mass Flow Meter	5	EA	3.46	
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FINANCIAL YEAR- 2027-28

ENGG MATERIAL PROCUREMENT

SN	Description of Item	Broad specification parameters	Qty	Accounti ng Unit	Estimated value of Procurement value in Crores
1	Pipeline	API 5L / IS3589 /IS1258	1,15,348	RM	39.37
2	Steel Plates	IS 2062 Gr B	26,339	TO	167.20
3	Pump	Centrifugal Pump	175	EA	13.39
4	Pump	Fire Pump	30	EA	5.65
5	Pump	Screw Pump	21	EA	1.21
6	Valve	Manual Ball / Gate / Butterfly Valves	1,612	EA	2.16
7	Valve	Motorized Ball / Gate / Butterfly Valves	1,166	EA	26.83
8	Valve	Double Block & Bleed Valve (DBBV)	174	EA	8.90
9	Valve	TOBV with Pneumatic or EH Actuator (ROSOV)	125	EA	10.83
10	Valve	TOBV with Electrical Actuator	261	EA	13.70
11	MFM	Mass Flow Meter	5	EA	3.63