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## **MANUFACTURING CAPACITY FORM: SOURCE (OWNED BY SSPL)**

# GALVANIZING PLANT 1 : GIMECO PLANT

S/N	Particulars' of Machinery	Capacity	Operation	Qty
1	Degreasing Tank (Gimeco)	11mx 1.2mx 2.3m	Degreasing	2
2	Pickling Tank (Gimeco)	11mx 1.2mx 2.3m	Pickling	6
3	Rinsing Tank (Gimeco)	11mx 1.2mx 2.3m	Rinsing	1
4	Fluxing Tank (Gimeco)	11mx 1.2mx 2.3m	Fluxing	1
5	Galvanizing Bath (Gimeco)	10.5mx 1.2mx 2.3m	Galvanizing	1
6	Furnace with Temp & Auto Combustion Control System (Gimeco)	10 MT per hour	Galvanizing	1
7	Quenching Tank (Gimeco)	11mx 1.2mx 2.3m	Water Quenching	1
8	Dichromate Tank (Gimeco)	11mx 1.2mx 2.3m	Dichromate	<u>·</u>
9	Acid Storage Tank (Gimeco)	35 MT	Acid Storage	4
10	LDO Service Tank	2.5 KL	Furnace Oil Service Storage	2
11	LDO Storage Tank	42 KL	Furnace Oil Storage	1
12	Air Blower	25 HP & 15 HP	Combustion	2
13	Oil Heating/ Pumping Unit- Main Burner		Oil Preheating with Standby	2
14	Oil Heating/ Pumping Unit- Hot Air	1 HP + 4 KW	Oil Preheating with Standby	2
14	Generator Burner	THE # 4 KVV	On Freneating with Standby	
15	Hot air Generator			1
16	Storage Oil Pump	3 HP	Furnace Oil Pumping with Standby	4
17	Acid Pump	3 HP	Acid Transfer with Standby	2
18	Water Pump	3 HP	Pump	1
19	Rail shuttle (Gimeco)	6.4 MT	Black & Galvanized Material Shifting	2
20	Temperature Measurement/ Recorder with Thermocouples	0 - 800 degrees	Monitoring & Measurement	2
21	Flux Regeneration & Filter Press Unit		Iron Contents Removal & Flux Recycle	1
22	Twin Hoist Monorail System	3,2+ 3,2 MT	Pre-treatment of Material	2
23	Dryer with Electro-Mechanized Covers		Drying Material After Fluxing	1
24	Service Bridge Crane	3.2+ 3.2+ 2.5 MT	Service Bridge for Galvanizing	1
25	Acid Fume Extraction System	40 HP with Drive Controller	Pollution Control	1
26	Acid Fume Extraction System	40 HP with Drive Controller	Pollution Control	1
27	Waste Acid Treatment Plant	10,000 liters/ day	Waste Acid Treatment	1
28	Double Trolley EOT Cranes	SWL 3.2+ 3.2 MT	Black material Loading/ Unloading & Finish material Withdrawals.	3
29	Air Compressor	7.5 Bar	Pollution Control & Pneumatic Operation	1
30	Shuttles	4 MT	Finish Material Handling &  Transfer to Stock Yard	4

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## **MANUFACTURING CAPACITY FORM: SOURCE (OWNED BY SSPL)**

S/N	Particulars' of Machinery	Capacity	Operation	Qty
1	High Temperature top heated basin furnace	7.000 MT/Hr for batch line products, 3.000 MT/Hr for Spinning line	Hot Dip BATCH Galvanizing Hot Dip Galvanized Fasteners	1 Line 1 Line
2	Acid Proof Pretreatment Service Tanks for Rack (Batch) galvanizing-  7. Zinc Stripping- Single position tank 8. Degreasing- Double position tank 9. Pickling- Double position tank 10.Rinsing after pickling Single position tank 11. Fluxing Single position tank	7.50 M x 1.50 M x 2.00 M For Single position tanks, 7.50 M x 3.00 M x 2.00 M For Double position tanks,	<ol> <li>Zinc Stripping</li> <li>Acid         degreasing</li> <li>Acid Pickling</li> <li>Rinsing after         pickling</li> <li>Fluxing</li> </ol>	1 No. 1 No. 3 Nos. 1 No.
3	Acid Proof Pretreatment Service Tanks for Spin galvanizing- 12. Degreasing- Single position tank 13. Rinsing after degreasing- Single position tank 14. Pickling- Single position tank 15.Rinsing after pickling Single position tank 16. Fluxing Single position tank	1.70 M x 1.30 M x 1.60 M For Single position tanks,	6. Acid degreasing 7. Rinsing 8. Acid Pickling 9. Rinsing after pickling 10. Fluxing	1 No. 1 No. 4 Nos. 1 No.
4	4 Heating ( Heat exchangers) units for Degreasing and Fluxing with motorized 3 direction control valves	Acid Degreasing up to 40 Deg. C, Fluxing up to 55 Deg. C	Heating media for water	6 Nos.
5	Acid Vapor enclosure with scrubber (Controlling Acid vapors to atmosphere), with floating bed scrubbing tower and chimney	Chimney dia 1.40 m x 20 mm thick x 18 meter Height	Exhausting acid vapors	1 Unit
6	Acid Scrubbing centrifugal Blower with variable frequency Drive control	60 HP, 40,000 CuM/Hr.	Exhausting acid vapors with efficient power cost consumption	1 Set

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### MANUFACTURING CAPACITY FORM: SOURCE (OWNED BY SSPL)

S/N	Particulars' of Machinery	Capacity	Operation	Qty
7	Acid Scrubbing Water recycling pump	12.5 HP	Acid scrubbing from vapors	2 Set
8	Acid dripping and emergency well pumps	Pneumatic driven	Pretreatment tank pit, Scrubbing tank pit and tanker platform	3 Nos.
9	Fresh Acid & spent acid distributing storage tanks	Dia 2.5 Meter x 6.4 meter Height, Cylindrical vertical, volume 45 CuM ( 3 x 20 CuM)	Acid Storage tanks	3 Nos.
10	Open impeller centrifugal multipurpose pumps for acid handling	3 HP,	acid loading/ unloading	2 sets
11	Oil separating unit for degreasing solution tank with collecting tank and temperature controller	300 liters/ hr, 5.5 HP	Oil separating unit for degreasing solution	
12	Flux reprocessing and regeneration Unit		Flux recycling and regeneration	1 unit
13	Chemical area Electrical control Board	Step 7 Siemens PLC and operating 12" touch screen instrumentation, Invertor drives.	Pretreatment area automation and controlling	1 No.
14	Indirect heating Chain conveyor pit dryer and Hot air Generator	5 drying places ( Jig ) unidirectional	Material drying before galvanizing	1 set
15	Hot air recycling centrifugal blower	Air Flow- 7900 CuM/Hr	For Belt dryer	1 No.
16	Chain Conveying mechanism	1.5 HP geared motor		
17	Ceramic Basin furnace	Useful Size- 7.00 x 1.60 x 1.80 meter,	Zinc holding of capacity 325 MT	1 No.
18	Hydraulically operated Cupola rotating & lifting device with Power pack			1 No.
19	Gas controlling station with Pressure gauges and controlling shut off valves.	5 station LPG gas Station	Pre-ignition of burners	1 Set
20	High pressure combustion air blower, centrifugal type.	20 HP, 2950 Cum/Hr	Supply of combustion air to burner	1 Nos.

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## **MANUFACTURING CAPACITY FORM: SOURCE (OWNED BY SSPL)**

S/N	Particulars' of Machinery	Capacity	Operation	Qty
21	LDO pumping Station with filter and stand by pump	3/4" Geared pump	LDO pumping for	2 Nos.
22	High velocity burners with self proportionating air to gas modulator with electronic burner control board		Generating thermal energy	4 Nos.
23	Set of thermocouples & Temperature controllers		Temperatures monitoring and controller operating	1 set
24	Heat Economizer with mechanized butterfly valves		Flue Gas heat recovery system	1 Set
25	Flue gas Exhausting Blower	15 HP,		1 No.
26	Water Quenching and passivation tank- Single Position tanks	7.50 M x 1.50 M x 2.00 M	Quenching & passivation of HDG products	2 Nos.
27	27 Cooling tower with Blower RMS9- 130	Water Flow rate 35 CuM/Hr.	Hot water cooling Tower	1 No.
28	Hot Water recycling pump	4 HP, 15 meter head, Discharge 30 CuM/Hr.	Hot water recycling to cooling tower	1 No.
29	White fumes exhausting and filtering plant with Chimney	Chimney dia 1.6 Meter x 18 meter height		1 unit
30	Variable frequency controller White fumes exhaust blower, (Centrifugal double flanged)	75 Hp, 50,000 CuM/Hr	Flux and zinc reaction Fumes exhausting	1 No.
31	Lime dozing mechanism with vibrating element			1 No.
32	Galvanizing Electric control board	Step 7 Siemens PLC and operating 12" touch screen monitor and process instrumentation, Invertor drives.	Pretreatment area automation and controlling	1 No.
33	Universal racks and fixed position jigging stations		Black/ Finished material loading stations	20 Nos+10 Nos.
34	Black rack transferring rail shuttle	5 MT material Handling capacity	Black Material shifting to pretreatment process	1 No.

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## **MANUFACTURING CAPACITY FORM: SOURCE (OWNED BY SSPL)**

S/N	Particulars' of Machinery	Capacity	Operation	Qty
35	Automatic rack dipping and transferring rail shuttle	2.5 MT + 2.5 MT, lift level 2.4 meters,	Quenching + passivation process and transferring to unloading bay	1 No.
36	Automated and radio control remote operated Monorail ( master & Slave ) couple units,	2.5 MT + 2.5 MT in couples, Hoist speed 0.5/8 M/Min., LT Speed 30 M/Min	Batch Line material Pretreatment process material	2 sets
37	Automated and radio control remote operated Monorail hoist Single units,	2.5 MT individual, Hoist speed 0.5/8 M/Min., LT Speed 30 M/Min,	Spinning line material pretreatment processing	2 Nos.
38	Electric Control board for monorail controls	Step 7 Siemens PLC with profibus communication and monorail positioning system, Invertor drives.	Operation & control at pretreatment process	7 Nos.
39	Reversed shifting cranes ( suspended latching cranes)		Spinning line pretreatment loop closing for monorail	2 Nos.
40	Double girder Galvanizing Bridge crane with suspended hood enclosure (remote radio control operated)	2.5 MT + 2.5 MT, Hook travel 10 meters	Lifting from dryer, Hot Dip galvanizing, and shifting to Quenching	1 set
41	Movementation electric control board	Step 7 Siemens PLC and operating touch screen monitor and process instrumentation, Invertor drives.	Galvanizing line overhead and floor material handling control & process supervision	1 No.
42	Container Discharging Unit	1.5 MT	Transferring material to spinning pretreatment process	1 No.
43	Drum filling station			1 No.
44	Drum rotating mechanism and motorized racks		Rotating drum during pretreatment process Spinning Line	3 Nos.
45	Drum downloading station with vibrating chute		Discharging fluxed material on conveyer	1 Set
46	In feed Belt dryer	6.00 Meter, 140 Deg. C temp,	spinning Line Material drying	1 Set

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S/N	Particulars' of Machinery	Capacity	Operation	Qty
47	Electric Hot air generator	250 KW , 10,000 CuM/ Hr air recycling capacity		1 set
48	Hot air recycling Blower, centrifugal, double shell type			1 set
49	Automatic weighing and Dozing Unit	85 Kgs. Max.	Material filling in basket for Spinning	1 set
50	Distributing & basket loading Station	4 Position	Basket handling for spinning	1 set
51	Automatic basket Spinning machine (Gantry bridge type)	Rail span	Basket Spinning	1 Unit
52	Outlet Rolling & basket emptying station		Finished items unloading and empty basket returning	1 set
53	Spare basket rolling distributor		Cleaning of dirty basket	2 set
54	Basket unloading device and quenching tank	1.5 M x 1.00 M x 1.00 M, Volume 1.4 CuM, Storage volume 5 CuM,		1 Unit
55	Drying belt tunnel & inspection Table	1 meter x 4 meter, 150	Finished material drying and inspection	1 unit
56	Drying Belt electric generator unit			1 No.
57	Warm air recycling blower, centrifugal, double shell type	3 HP, 1470 RPM,		2 Nos.
58	Spinning Electric control board and supervisory control	Step 7 Siemens PLC and operating touch screen monitor and process instrumentation, Invertor drives.	Spinning line Galvanizing control & process supervision	1 No.
59	LDO Service tank	3000 Liters	LDO Service Storage	2 Tanks
60	LDO Storage tank	42,000 Liters	LDO Storage	1 Tank
61	LDO Loading Station with Gear Pump 3 HP		LDO Storage	1 set

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### **MANUFACTURING CAPACITY FORM: SOURCE (OWNED BY SSPL)**

#### **GALVANIZING PLANT NO. 2: DUAL PURPOSE BATCH & SPINNING LINES**

#### **SERVICE & UTILITY- GALVA PLANT:**

S/N	Particulars' of Machinery	Capacity	Operation	Qty
1	Double Girder EOT crane (New Age, Gaziabad)	3.2 Mt+ 3.2 Mt	Raw material Jigging and Finished material un-jigging cranes	2 Nos.
2	Main LT Power Distribution Panel and Set of Auxiliary power control centers	As suitable	Power supply	10 Nos.
3	Diesel Generator 320 KVA, 435 Amps, (Powerica)	320 KVA	Back up power supply	1 No.
4	Air Compressor complete with Dryer and receiver Unit IR 15-7, and IN 10-7 (Ingersoll Rand)	7 bar, 1.06 CuM/Min, And 7 Bar 1.54 CuM/Hr.	Pneumatic functions of Manufacturing machineries	3 Nos.
5	Air Compressor complete with Dryer and receiver Unit GAe15, Atlas copco	10 bar, 80 CFM	Pneumatic functions of Manufacturing machineries	1 Nos.