

# *Suryadipta Projects Private Limited*

*We do things differently*

*&*

*that makes the difference*



Our Core Businesses :

Shipbuilding | Repairs | Conversions |

Oil & Gas | Petrochemical Equipment

Process Equipment's for : Steel | Cement | Food Processing Industries

Tanks & Vessels | Heat Exchangers | Pressure Vessels | Ash Vessels

Construction Equipment | Jack Up Barges | Structures | Walkways





S.P.P.L has complete Engineering & Ship building Solutions for you under one roof.

We offer quality Engineering Products to International Standards & cost effective solutions for Engineering, Procurement and Construction of Mechanical Equipment's required for any process plant / projects and shipbuilding.

Amongst numerous market-leading equipment & ship manufacturers , S.P.P.L has a proven track record in engineering , S.P.P.L manufactured some of the most pioneering & Innovative Equipment solutions available in the industry.

#### Mission & Vision:

To Offer Complete Heavy Engineering & Fabrication Solutions under one roof to quality Conscious Engineering Solution Providers who cater to, Engineering, Power, Infra, Mining, offshore & Shipping Industry.

#### Company & Managing Directors Profile

Founded by **Mr. S. Ghoshal** is a qualified engineer with a 20 year long tenure with India's finest engineering co : Larsen & Toubro. With a vast experience in engineering he founded Suryadipta Projects Pvt Ltd [ SPPL] in 1996 at Retibunder ,Ghodbunder, Mira Road , adjacent to the Arabian Sea creek, for Heavy Engineering Solutions , offshore & Ship Building.

#### Director Projects & Planning :

**Mr Deep Ghoshal** Joined SPPL to assist His Father Mr S. Ghoshal

Mr Deep is a BE Mech & an MBA in marketing & HR.

He looks after the day-to-day production & planning managing both the fabrications sites of heavy engineering & Ship Building.

## Infrastructure

Banking & Financial Capabilities : We are banking with India's Top rated scheduled banks with adequate : C/C, L/C/ , B.G , Bills Discounting & Export Finance facilities , We have adequate banking facilities for execution of top end projects.

Manufacturing Facilities -: Process Equipment / Heavy Fabrication & Shipbuilding

Location: 23 km from Mumbai International Airport / 5 km from Dahishar Checkpost, Mumbai / 1.5 km from Mumbai Ahmedabad Western Express Highway.

Floor Shop Areas Unit 1 : *For Industrial Products :*

50,000 SQFT yard, with concrete JETTY having draft of 4.5 mtrs, A 10,000 SQFT covered fabrication & machine shop . Yard is suitable to anchor barges for transportation of oversized equipment's.

Ship building Yard Unit 2. :

400 mtrs from our main office & unit 1 an 50000 SQFT open yard with slip way and adequate bollards for Anchoring ships for repairs & Conversion.



Upcoming Facility Unit 3 : For Offshore & Ship Anchorage

On an 10 acre Plot under development about 55 kms from the present location, with water-front & Direct access to the Arabian Sea creek having draft of 6 mtrs



## Core Businesses

### Ship Building , Repairs & Conversion

Range of Products - : We offer all listed products on turnkey basis from concept design to delivery, including Design & detailing of mid size Ships, Tugs, Barges, Crew Boats, Crafts, cargo & Supply Vessels Speedboats, Barges [dumb & Self Propelled], Jack-up Barge [Self Elevated platform], Submersible barge / bridge, Tugs, OSV, Mooring Equipment, Buoy's, Cassion Gates.



**Aquator Crew Boat built by S.P.P.L under IRS class ,capacity 30 pax + 6 crew.  
Area of operation - 200 nautical miles from shore , complied under SPS code.**

Ships Allied Equipments -: Manufacturing of stern tube, propeller shaft, rudderstock , cement tanks for carriers, Davit foundations , bulk carrier hatches & Piping & Machinery Alignment services. all testing are carried out as per surveyors satisfaction.



**Fuel oil Carrier – 650 Kl For Tristar [Dubai].  
Built under ABS class**

**Offshore Supply Vessel – 10 mtr x42 mtr +12<sub>4</sub> crew  
built under RINA class**

#### Repairs & Conversion:-

We have capability to undertake repairs of Tugs, supply vessels ,Buoys , barges , medium size bulk carrier , reconditioning of accommodation , Electrical re-wiring and re-routing etc. We have expertise in steel renewal as well as on maintenance & overhauling of machineries, crane overhauling , F.W/ S.W pumps,winches,capstan,grab buckets, steering system / rudder & stern tube re-alignment, generator overhauling , engine overhauling , gear box servicing. We have dedicated in house workshop for machining, re-fit and repairs of machineries.

#### Jackup Barge Construction



Modular Jack-up Barge made Under IRS Class.  
Size : 18 mtr x 18 mtr / 36 mtr Spud length

Unique Features – the Jack-up can be assembled in 7 different configurations. Moon pool at the center can be configured as per usage requirement. Spud pipes had been bolted AND THE interlocking arrangement for joining at site are made of Alloy steel.

Range of Jack-up -: Jack-up for Survey , Pilling , Heavy loading capacity , offshore service platforms , wind farm operator type, Rigid Hull type & Modular offshore Drilling unit .

Special Coatings -: We now offer Jackup barges painted with Special Corrosion Control Paints & Anti Fouling systems , U.V Stabilized, which last 5-6 yrs hence longer life of expensive barges ,saves maintenance & dry docking time losses , which is advised in conventional coating systems every 2-3 years.

Our special coatings are Guaranteed for 5-6 years but last much longer.



## Oil & Gas , Petrochemical Project Supplies

### Installation Reel:

S.P.P.L has fabricated an Extra Large Size Pipe Spool [8.5 mtr Dia ] to store, carry and install subsea pipes & cables. SPPL has built & transported directly from its Yard's Jetty through a barge into high seas for final loading on Vessel and Shipped to USA.



Cable REEL shipped on Barge from our Jetty to Mumbai Port for Shipment to USA  
 Equipment Spec -: 8.5 Mtr dia x 6.5 Mtr. Wide & 40 MT weight of each .  
 Raw Material used A-572 gr-70 , Load Tested and certified by DNV class.



Lifting of Cable reels onto barge



Modular Reformer body for L&T

## Offshore Equipment

Sledge & Pull Head assembly : This was built to pull 24 inch dia pipes for Laying pipes from Onshore to Offshore . Raw Material API 5L Gr B / S-355 J2 G3/  
total weight of entire set 45 MT



**Manufactured for - M/s. Leighton Welspun. [ Cairn Energy project Gujrat ]**

We have supplied various Pipe laying equipment's required for offshore pipe line installation for ONGC PRP-1 , PRP-2 projects

Range of Products -: Pig launcher , Pig Receiver, Riser Clamps , buoyancy tanks , bend stiffener connectors , Bear clamp , walk way, Buckle Detector , Multi purpose Skid mounted units & and many more items ,Pile Chaser . Skid mounted high pressure pump( for chemical/water injection/fire fighting) supplied to oil India Assam through L&T.



**Skid Mounted Water Injection Pump for OIL India / L&T**

**Spec:- Caterpillar engine coupled with gear box ,Flywheel & suitable Pump**



## Process Equipments

### Cement Plant Equipments

Coolax Grate Cooler: Manufactured & supplied to Lafarge Cement Bangladesh.

The grate cooler was designed by FLSmidth Denmark [leaders in cement plant consultancy] and project supplied by L&T.

Unique feature-: The Cooler feeding clinker having temperature of 1380°C which is cooled up to 65°C within 30 Mtr travel. Internal area of the equipment were machined at assembled position



*Shipment of Clinker Cooler from our Heavy Engg. Yard : Size 30 mtr x 4.5 mtr x 4 mtr  
Weight : 120 MT*

Range of Products -: Klin Shell , Clinker Cooler, Preheater, Air Separator, Silo Cone Stacker, Reclaimer & PN gates , Fan Rotor, Screw Conveyor , Pneumatic seal , Impact Arm , Roller Hub, Rotary Valve , Air Sluice , Atox mill body , Mill base ,OK Mill body , Louver Dampener 's , Insulated tanks Etc.



**Dynamic Balancing of Blower Impellor**



**Air separator erected at unit 1**



## **STEEL PLANT EQUIPMENT**

Pickling Tank: A fabricated rectangular long tank with provision of multiple roller assembly.

The tank is rubber lined than lined with granite to save the tank from highly corrosive acid required for pickling process.

Continuous paint plant: The thin shell de-coiled from one end passes through pickling process enters to the oven where it is dried than painted in painting booth and strip passes through the oven which blows hot air to dry the paint, sheet at other end rolled to make coil form. The process includes hot air generator (incinerator) duct, etc.

SPPL manufactured complete plant in modular form, pre assembled at factory dismantled & exported to Mexico .



Range of Equipments: Moving sleeve, acid cleaning tank, service roller, rinse tank, pickling tank, rinse recirculation tank, rinse spray tank, prewash tank, bridle roller assembly , tension leveler, coil saddle, slide cover, continuous paint plant ( incl. incinerator, duct, oven, chimney in additional to above few pre-process tanks). Rubber lined tanks Etc



## Construction Equipment

Pile Guide Frame : Built for India's largest Jack up Barge "Samrat" Owned by M/S Afcons infrastructure it is hydraulically driven in X-Y Direction to guide & position vertical as well a racker pile

Each guide weighs 100 Tons Size : 3.4 mtr x 5.5 mtr x 12 mtr. It is manufactured, transported, erected & commissioned by us at DAHEJ Site. [ Pic of Pile Guide on Cover Page]

### Loading Installation:

The pride of Mumbai "The Bandra Worli Sea Link" [ BWSL now Rajiv Gandhi Setu]

We Suraydipta projects are proud to fabricate the two main Mammoth sized gantry cranes of 1200 MT capacity & related Towers [designed & quality assured by "VSL Singapore Pte Ltd.",



Range of Equipment's : Tower crane structure , Crane body / structure Crane base / foundation , single girder gantry, double girder gantry, A-Frame, Pile out board frame, subsea piling tools, Pile upending system, Stab frame, equipment's combining Hydraulics and mechanical operation as well as Excavator Boom, Grab buckets, Pile Chaser ,



Gantry girder of 50 ton capacity manufactured for City Cement Saudi Arabia.

Size -: 16 mtr long x 1.2 mtr H.T

Material -: A-572 Gr -70 steel

Inspected by -: Tata projects ltd



## Structural Fabrication

We are pioneers in fabrication of most complicated & Heavy structures for various industries.

Our structures are present in many industries, few of them are for IOCL, BPCL, NPCIL, GAIL, Forges Tardieu Mauritius, City Cement Saudi Arab and many other foreign clients

Range of Products -: Cement plant building, steel plant buildings, structural shed, Pre-engineered buildings, hollow pipe structures, structural gate, chimney supports, ACC conveyor supports, supports for handling system, fabricated beams, Pipe racks, walkways, over-Hang structure's, Etc



**1.5 KM Long Pipe rack at Vashi bridge for GAIL [Project:- Dhaej-Uran gas pipeline]  
Manufactured, transported and erected at site including core drilling on concrete**



**Cement plant building  
structure total 600 M.T .  
Including platforms, columns  
and stairs.**

**Scope:- Detail designing ,  
Procurement, fabrication ,  
Assembly , dismantle ,match  
mark & dispatch**

**Mat Spec - : U.B ,U.C , UPC  
C.H.S , H.E.A , H.E.B etc.**

**Building size -:  
24 mtr x 12 mtr x 60 mtr H.T**

## Food Processing Equipments

S.P.P.L's manufactured equipment processes 40 types of raw materials, of which soybeans, sunflower seed, rapeseed, groundnuts, cottonseed and palm oil, are most popular.

In the past 15 yrs we have supplied small and large plants to most of the parts in India , as well in SAARC region . Our products are proven and are being used in wide environmental conditions.



**Desolventizer Toaster -: 4 mtr dia x 12 mtr 8 stage Exported to Russia**

**Range of products -: De-solventizer Toaster, Dryer Cooler, Extractor, Oil Refining Equipments, deodorizer, Tube condenser , agitator ,Heat recovery unit ,Contionous bleacher, low pressure D.T , Cooker , De-arator , Zero effluent discharge system and other solvent extraction plant equipment's**



**Major Equipment Manufactured by us : Extractor Size : 4.5x2.4 x 30**

**It is used in Solvent extraction plant , it's in modular form with flanged ends for transportation**



## Tanks & Coded Vessels

**Range of Products** -: Compressed Air Storage duplex vertical Tank , under ground Petroleum storage tank , Condensate separator tanks, vessels manufactured for Cement , Chemical & power plants from various materials Viz : IS 2062 , A 516 Gr 70 , A 387 Gr P II ,  
**Capability** -: Manufacturing standards conforming to ASME Sec VIII, having precise time bound planning ,Quality welding Procedure and various in house tank testing facility enables us to deliver Superior quality of most complex designed vessels within stipulated time .

Duplex tank of 100 KL capacity 2 nos  
 Client -: Total Oil Lube Ltd  
 4 mtr dia x 12 mtr Lg

Scope -:

Manufacturing , Hydro testing ,  
 transportation, erection at site ,  
 handrails and ladder assembly .



**DT for Client -: Noble [Russia]**  
**Spec:- 4.5 mtr dia x 12.5 mtr Lg**  
**Made from stainless steel SS.304 & A516 gr-70 , sail hard .**  
**It has 8 stages of double bottom which are hydro tested at 25 kg/cm2**  
**It has suitable shaft, blades and bearing assembly which are aligned at our yard**

### Process Tank

**Spec -:**

**Stainless steel tank –SS-316**

**2.5mtr dia x mtr long**

**Duly fabricated as per ASME code**



## Special Projects

We are capable of manufacturing various custom built Equipment's & Pilot Projects for different industries as per clients requirement in Turnkey basis . It includes Detail design ,Procurement, fabrication , assembly ,piping , Insulation of diff grades, Rubber lining, F.R.P lining , Trial run at our yard & dispatch. We have supplied Silica beneficiary plant to Ethiopia producing 99 % pure silica .

PVC Lined tank  
Manufacturing & testing,  
piping installation & trial  
run for process  
confirmation



Catalyst Cage  
one of the largest sized cage  
of size 2.4 mtr dia x 30 mtr  
Lg. Built for PETRONAS &  
Exported to Malaysia thru  
M/s L&T

Stack Chimney & ducts:  
Built up to 60 mtr  
height self-supported  
chimney supported to  
D20 up-gradation of  
NCPIL Tapp 3 & 4.  
Stack's also supplied to  
BPCL & some steel  
plants.



Ducts  
Fabricated ,  
assembled ,  
insulated and  
dispatched



### **Other Miscellaneous Project Supplies**

Range of products -: Thermal Plant , Tetrapod Molds , Buoys, Floating Marinas ,Galvanized Handrails, platform gratings, Stairs , Pipe structure for amusement parks, any other custom fabrication as per Clients design

### **Heavy Duty Gratings**



**For wagon Tipplers , coal handling , trench covers for heavy equipment movement**



Our New Division : Light Fabrication

Recently Launched to offer single point solution to our customers, we now offer.

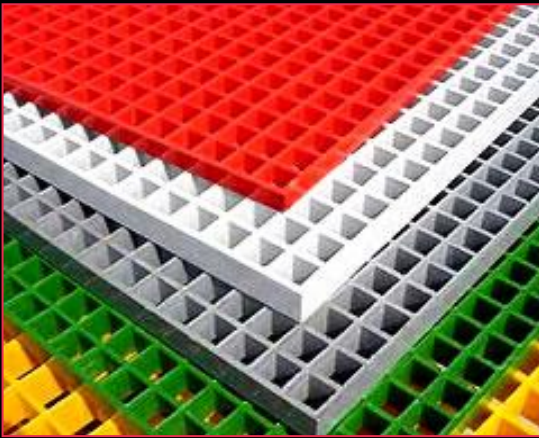
Gratings : Manual Welded Heavy Duty & light Duty fabricated , an perfect alternate where Electro forging is not feasible. For application in : Coal Industry [wagon tippler, track hopper ] , Power Industry Cranes & Heavy Vehicles & Aircraft Movement.

We have manufactured single PC 3 x 3 mtr weight 2.75 MT  
From Flats size : 200 mm width x 25 mm thick

## Single Point Industrial Flooring Solutions



Expanded Metal Products :  
Catwalks & Fencing Application  
Available in MS,SS, AL with paint  
or galvanized finish.



**Fiber Glass Gratings & Cable Trays**  
for applications in corrosive & Chemical Atmosphere



**Steel Floor Tiles : Ideal Replacement for Conventional Concrete Industrial**  
Floorings available in 1 SQFT size , in thickness 2, 2.5, 3.00 mm



## Technical Capabilities

We have a complete range of precision metal fabrication capabilities to bring your design to life while adding value, timeliness and overall cost-savings to your project.

Our specialties include engineering, design ,fabrication & supply on turnkey basis to various industries and Marine field

### Types of Materials we can fabricate :

We have worked with special metals & have an experienced & qualified Work team with required qualification for precision welding jobs.

We work with all kinds of metals Viz : Mild Steel , Stainless Steel , Alloys , Inconel, Monel ,High tensile steel , molybdenum , Aluminum EN series material , Manufacturing Pipes , beams & columns Etc.

### Standards :

We have a dedicated procurement department headed by an well experienced manager to source all our material requirements.

We have records & procedures for all in coming materials which are purchased with perfect test reports from NABAL 17001 certified labs.

We procure Raw Materials confirming to Indian as well as international Standards & maintain manufacturing standards Such as : ASTM , ASME, BS, DIN , JIS , EN & GOST

### Inspection Agencies :

Our Ships & boats are built under IRS & RINA stringent inspection parameters under SPS class , to our credit is an crew boat for end user ONGC built for the 1<sup>st</sup> time in India, inspection by IRS.

We have supplied material for projects within India & for export under strict Inspection of 3rd party agencies Viz : BV, TUV, RINA, IRS ,GIL ,LRIS , ABS , DNV, UHDE & other agencies

Our company has requisite WPS & PQR qualified welders in our team of workmen.

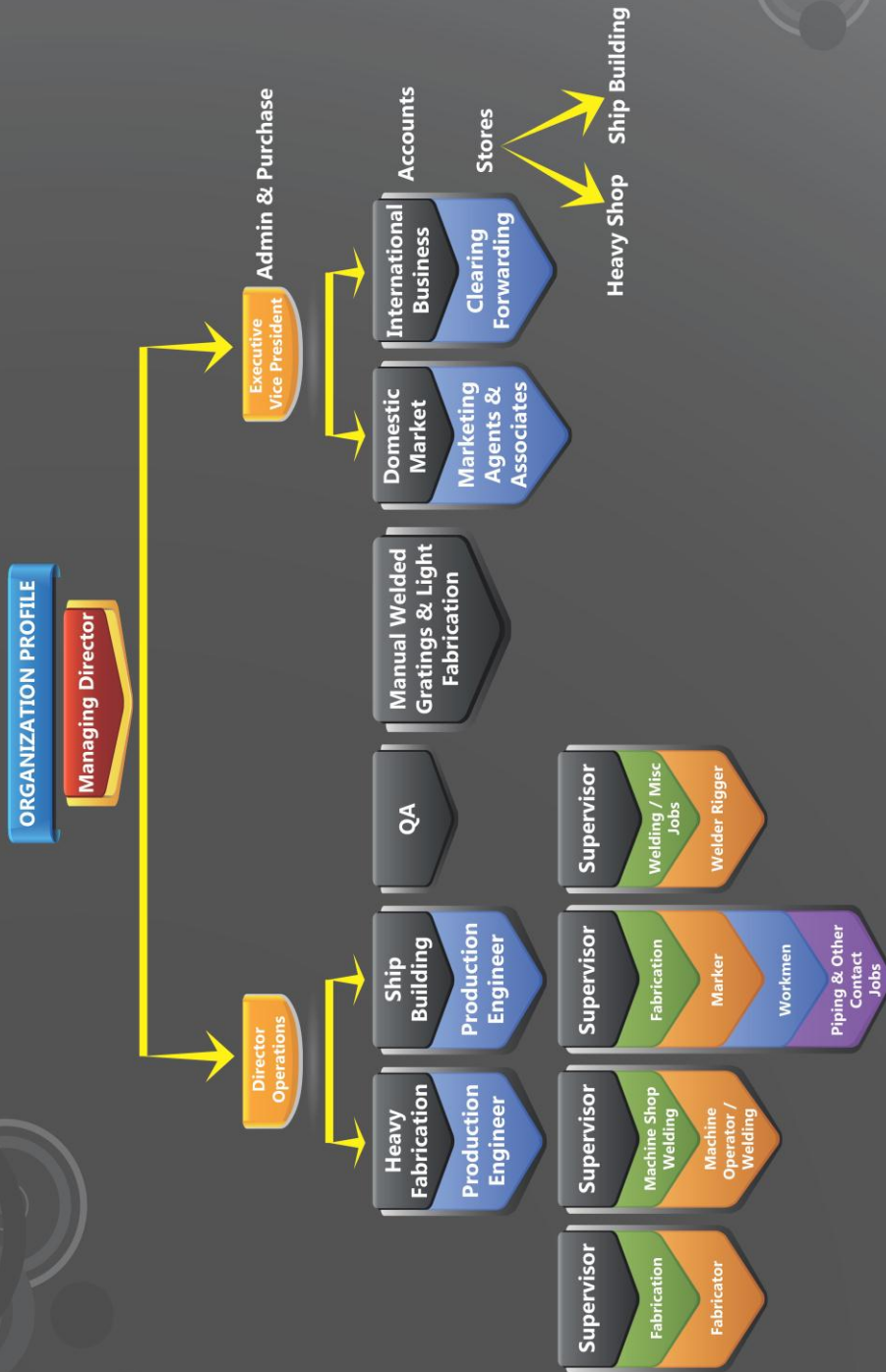
## Machinery & Equipment List

Machinery	Qty
Rectifier	25
inverter	04
Argon Set	02
Co2 welding	05
Submerged Arc Welding	01
Plate Bending Machine 36 THK x 2500 wide	02
Hydraulic Press 450 MT Capacity	02
Radial Drill 2" Capacity	01
Core Drill Machine	04
Gang Drilling Machine	01
Magnet Drill	03
Lathe Machine [ 6, 4 1/2 Ft ]	01 + 01
Shaping Machine [24" , 30" ]	01+ 01
Hacksaw Machine	01
Grinders	20
Pug Cutters	03
Tools	02 + 06
Electrode Baking + Portable Oven	01 + 08
Heating Burners	04
Tank Rotator + Idler	05 sets
Gantry 10 MT	01 Set
Chain Pulley [Diff Capacity ]	04
Calibrated Instruments	01
Boring Machine Spindle	01
Core Drill Automatic 65 Dia x 50 Thk	06
Hydra Crane 11 MT & 14 Ton	01 each
Welding Transformer	03
Power Pack Hydraulic Jack 400 Ton	01
Air Blower	04
<b>Instruments</b>	
Out Side Micrometer Mitutoya 0-25, 0-100,0-150,150- 300, 300-400, 400- 500	01 each
Inside Micrometer Mitutoya 0 – 1000 mm	01 each
Bore Gauge , Mitutoya 18- 34 , 35 – 60 , 60- 120 mm	01 each
Height Gauge Mitutoya 0- 300 mm	01 each
Dial Vernier Mitutoya 0-200 mm	01 each
Vernier Caliper Mitutoya 0- 300 , 0- 600 , 0 -1000 mm	01 each
Combination Set Mitutoya	
Paint DFT Meter	01 each
Sand Blasting DFT Meter	01 each
Hydro Test Machine	01 each
Hydo test pump	01 each



## Major Projects completed by SPPL

		Major Projects Executed Heavy Engineering		
Product	Customer	Inspection Agency	End User	Approx Wt MT / Nos
Radiant Heater	L&T	EIL	BPCL	450 Tons
Bridge Installation	HCC	TUV	MSRDC	800 Tons
Process Equipment	L & T	L & T	Reliance BPCL/IOCL/CFCL	300 Tons
Structural 's	L&T	DNV	IOCL	150 Tons
Ext. Platform	Supreme offshore	EIL	ONGC	100 Tons
Pickling Line	FLAT	FLAT	Various Customers	8 x 40 Tons
Continuous Paint Plant	FLAT	FLAT	Protarsa USA	100 Tons
Structural's & Chimney	NICCO	NPCIL	NPCIL	230 Tons
Sugar Plant Structural	Citadel	F.T Mauritius	Forges tardieu	150 Tons
OK MILL Body	L&T	L&T	L&T	150 Tons
Coolax Cooler	L&T	TPL	LAFARGE	120 Tons
Air Separator	L&T	TPL	LAFARGE	20 Tons
Spool Reel drum sides for Flexible pipes	Deep Sea	DNV	Oceaneering Tech USA	2 x 40' containers
Installation Aid BOUY 'S	Leighton	ONGC	IOCL, MRPL	300 Tons
Bridge loading Installation	HCC	MMRDA { BWSL }	HCC	
Pile Guide	Afcons			100 Tons
Heavy Gratings	Omkareshwar Engineering	GMR Infra	GMR Infra	125 Tons
GEA Cooling	Condensate Tanks	OPG Power	GEA Cooling	6 nos
GEA Cooling	Ducts	OPG Power	GEA Cooling	180 Tons
GEA Cooling	Dish Ends	OPG Power	GEA Cooling	5 mtr x 5 mtr
Energog engineering	Ash Vessels		Energog	18 nos
Indiana	coupling station	BASF	Toyo engg	8 stations
		Ship Building		
		MDL/WOT	Ship Units P-17	MDL
Jack Up Barge	Renuka	IRS	Renuka	200 tons
OPSV tug 2nos	Virgo	IRS,RINA	AL AHMED I	600 Tons
Ship building	Mech Marine	ABS,IRS,RINA	Shell	800 Tons
high Speed Crew Boats	SDS Offshore	SPS Class	ONGC	36 Pax + Crew
Hydrography Boats	Mah. Maritime board	IRS	M.M.B	3 nos





## Mgf Process flow chart



## Suryadipta Projects Pvt Ltd.



Heavy Engineering, General fabrication, Ship Building.

Fabrication Yard 1 & H.O  
Kherani Compund ,  
Retibunder , Ghoubdunder Village ,  
Mira Road [E] , Thane - 401107 INDIA

Ship Building Yard 2  
Famous Compund , Retibunder,  
Ghoubdunder Village Mira Road [ E]  
Then 401017 INDIA

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