



GOA SHIPYARD LIMITED
(A GOVERNMENT OF INDIA UNDERTAKING)

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EXPRESSION OF INTEREST (EOI)

TO

DESIGN, FABRICATE, SUPPLY , INSTALL , OPERATE & MAINTAIN AUTOMATIC SHOT BLASTING AND PAINTING PLANT
AT GOA SHIPYARD LTD

1. Goa Shipyard Ltd. (GSL), 63 years old Defence Shipyard of India having best repute for its quality & timely delivery and has been consistently undertaking constructions of myriads of complex war ship and auxiliary vessels and delivering those well before the stipulated delivery time.
2. GSL wishes to have a Shot Blasting Plant along with a painting section and dryer unit, capable of blasting and painting 2.5 meter plates at the rate of 4 plates per hour.
3. The firm will be required to undertake the following:
 - a. Design, Fabricate, Supply, Install Automatic Shot Blasting Plant and Painting Booth capable of blasting 2.5 metres plates with Control Panels and displays for each of the main units and built in Maintenance/ fault diagnosis.
 - b. Operate and Maintain for 5 years from the date of Commissioning inclusive of warranty/guarantee period.
4. The Automatic Shot Blasting Plant will have the following units and technical parameters:
 - a. **The Roller Conveyor System** - The Conveyor System should convey plates at a height of 1000 mm from the ground. Further the conveyor system will be used to send the plates to the Shot Blasting Plant, Painting section and dryer unit. The Roller Conveyor System will comprise of the following:
 - i. Plate loading Roller Conveyor
 - ii. Inlet Roller conveyor to the Automatic Shot Blasting Plant
 - iii. Enclosed Roller conveyor from Automatic Shot Blasting Plant to Automatic Painting System
 - iv. Roller conveyor after the automatic painting system for drying chamber.
 - v. Outlet Roller conveyor for unloading purpose.

b. **Automatic Shot Blasting Plant** will have the capability to use either shots or combination of shots and grit and comprise of following units :

- i. Shot Blasting Chamber
- ii. Impeller, Scraper, Blow-off.
- iii. Low Screw Conveyor
- iv. Bucket Elevator, Storage Hopper and Associated Piping.

5. The **Painting Booth** will be dry type followed by **Air Dryer**. The painting booth will carry out Airless Spray painting and allow at least two different paints to be used with an option to select any one depending upon the need.

6. The following are the technical parameters of the entire plant:

| SR NO | MAIN UNIT | DESCRIPTION | SIZE/LENGTH |
|-------|---|--|---|
| a | ROLLER CONVEYOR SYSTEM Width to cater for 2.5 m plates | Plate loading Roller Conveyor | Minimum 12 Meter |
| | | Inlet Roller conveyor to Shot Blasting MC | Minimum 12 Meter |
| | | Enclosed Roller conveyor from Shot Blasting MC to Automatic Painting System | Minimum 5 Meter |
| | | Roller conveyor after the automatic painting system for drying chamber. | Minimum 12 Meter |
| | | Outlet Roller conveyor for unloading purpose. | Minimum 12 Meter |
| b | AUTOMATIC SHOT BLAST MACHINE | Blasting Chamber to cater for 2.5 meter plate. | Minimum 10 Meter |
| | | Roto blasters. | Minimum 3 on top and 3 below the plate |
| | | Shots / Shot and Grit and dust brush off. | Wire/ Composite Plastic cylindrical brush |
| | | Low Screw Conveyor | One Set. |
| | | Shots / Shots and Grit collection, Bucket elevator, Storage Hopper, transfer and feeding system. | One Set |
| | | Control Panel with built in diagnosis. | One Set. |
| c | DUST COLLECTOR AND DUCTING | Dust collector with Auto dumper. | Separate dust collector unit |

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|---|-------------------------|--|--|
| | | Control Panel with built in fault diagnosis. | One Set |
| d | PAINT BOOTH | Dry type paint booth. | One Set |
| | | Painting reciprocator system with paint spray guns for painting of plates. | 4 Spray Guns with 2 spray guns for painting of top of the plate and 2 spray guns for painting from bottom. |
| | | Paint Booth to provide facility to use two different paints with its own spray guns and paint feeding system without the need to stop the painting booth. | |
| | | Airless Paint spray pumps. | Minimum 2 Pumps |
| | | Paint transfer pump with complete system as required. | Minimum 2 Pumps |
| | | Paint Feeding Tanks. | Minimum 2 Tanks |
| | | Fume suction, ventilation system with exhaust. | One Set |
| | | Control Panel with cameras with built in fault diagnosis. | One Set |
| | | Collection System for collecting drip off paint/paint from sump and storing the same in a paint disposal tank. | One Set |
| e | DRYER | Dryer using air blowers, ducting for top and bottom side of plates. | One Set |
| | | Control Panel with built in fault diagnosis. | One Set |
| f | VACUUM RECOVERY MACHINE | Vacuum Recovery Machine collects abrasive and dust scattered in the Shot Blasting Plant , area between Shot Blasting Plant and Painting Booth and transfers it to Auto dumper for temporary storage. | One Set. |
| | | Control Panel with cameras with built in fault diagnosis. | One Set |

7. The firm undertaking the design, fabrication and supply and installation will carry out following:
- a. Any civil related work related to installation.
 - b. Installation of power supply cables the individual systems from the distribution Panels.
 - c. Fabrication of control room for controlling and monitoring performance of all the individual systems.

8. Designer who are interested in undertaking the above job may respond to this EOI. The vendors/designer are required to accept the below terms & conditions & the necessary confirmations / undertakings in support of same & to be submitted by the vendors/designer in response to this EOI:
- a) The Designer should maintain the secrecy & confidentiality of the type of work / data / costing etc.
 - b) The Designer should quote separate prices/ costs for following:-
 - a. Roller Conveyor System.
 - b. Automatic Shot/ Shot and Grit Blasting Plant with dust collection unit.
 - c. Dry type Painting Section.
 - d. Dryer Unit.
 - e. Vacuum Recovery Machine and associated items.
 - c) The Designer should have earlier designed/modified on similar system previously, details of work to be submitted.
 - d) The Designer should be able to depute their representatives on their own cost during Technical evaluation meetings.
 - e) The Designer must not be de-barred /blacklisted by any of the Government organization and necessary legal undertaking in this regard is to be submitted by the designer.
9. Those interested & eligible designers shall submit their response to GM (Prod.) at GSL at the above address in sealed envelope super scribing "Expression of Interest for Design, Fabrication, Supply and Installation of Automatic Shot Blasting Plant and Operation and maintenance for the same for a period 05 years from the date of Commissioning " on or before 5th May 2021 (15:00 hrs) along with necessary supporting documents as stated in paragraphs above.
10. Firms who are responding to this EOI should submit para wise compliance along with requisite supporting documents. Yard will request for more documents, if found insufficient.
11. GSL reserves the right to accept or reject any or all applications without assigning any reasons thereof. Only selected designers will be informed about the outcome of the scrutiny of the respective EOI. For any clarification, Cdr. Santosh Gupte (Retd.), AGM (Yard Services) or Mr. Mukesh K. Meena DGM (Prod.) may be contacted.