



MISHRA DHATU NIGAM LIMITED

A Government of India Enterprises, Ministry of Defence

PO Kanchanbagh, Hyderabad – 500 058, Telanagana, India.

Phone: 040 – 24340001 (10 Lines), 24184453, Fax: 040 – 24340764

Website: www.midhani-india.in

Invites

Expression of Interest

For

SAND BLASTING, GRINDING, POLISHING, PROTECTIVE COATING AND PACKING OF SPECIAL STEEL PLATES

EOI No: MDN/PUR/4687048/EOI/687/18-19 Dated: 05.11.2018

Start of EOI Downloading Documents : 05.11.2018 @ 17:00 Hrs
Close Date for Downloading EOI Documents : 26.11.2018 @ 17:00 Hrs
Receipt of EOI on or before : 27.11.2018 @ 10:30 Hrs
Opening of EOI : 27.11.2018 @ 11:00 Hrs

Interested parties can submit their application in a sealed cover along with all credentials, technical leaflets, datasheets etc before the due date. The envelop should be super scribed as “**EOI for Sand Blasting, Grinding, Polishing, Protective Coating and Packing of Special Steel Plates**”, Ref No : **MDN/PUR/4687048/EOI/687/18-19 Dated: 05.11.2018, Due Date : 27.11.2016** and shall be addressed to :

AGM (Purchase),
Mishra Dhatu Nigam Limited,
PO –Kanchanbagh,
Hyderabad -500-058.

Technical Contact Point: Sri Praavin Warad Phn No:040 2418 4506, praavin@midhani-india.in

Commercial Contact Point: Sri Sujan Mondal Phn No:040 2418 4453, smondal@midhani-india.in

Sand Blasting, Grinding, Polishing, Protective Coating of Special Steel Plates and finally packing before return

1 Objective :

Mishra Dhatu Nigam Limited is looking to identify probable vendors, to meet the increased requirement for processing of special steel plates by sand blasting, grinding, polishing, protective coating & packing.

2 Nature of Job Work :

The detailed Scope of Work applicable in the existing contracts is being provided herein (point no 2 to 17), so that the interested bidders are able to clearly and fully understand our requirement

MIDHANI will supply Special Steel Grade plates in hot rolled, annealed, edge trimmed and leveled condition .

2.1 The party has to carryout sand blasting, grinding, polishing, protective coating, and packing of these plates.

2.2 The input and output details are as per the following:

Sl. No.	INPUT SIZE IN mm	OUT PUT SIZE IN mm	Quantity (Nos.)
I	$9.0^{+0.8/-0.3} \times 2250^{+75/-0} \times 9500^{+200/-50}$ (P22)	$7.8^{+0.4/-0} \times 2250^{+75/-0} \times 9500^{+200/-50}$	206
II	$17.5^{+0.9/-0.3} \times 2250^{+75/-0} \times 5500^{+200/-50}$ (P26)	$16^{+0.4/-0.0} \times 2250^{+75/-0.0} \times 5500^{+200/-50}$	2
III	$9.0^{+0.8/-0.3} \times 2250^{+75/-0} \times 10750^{+200/-50}$ (M22)	$7.7^{+0.4/-0} \times 2250^{+75/-0} \times 10750^{+200/-50}$	170

Total Order quantity tolerance shall be $\pm 15\%$ on each size.

3 Quantity

15 Plates (approx) are required to be processes per month for next 03 years beginning April 2019. The total tonnage shall be 1100 Ton approx in these 03 years.

4 Scope of Work

The detailed scope of work is given below:

- 4.1 The plates are to be sand blasted on both sides in order to remove mill scales completely.
- 4.2 After Sand blasting the plates shall be inspected for scale pits and other imperfections and an inspection report shall be generated in the presence of MIDHANI representative.
- 4.3 Sand blasted surface shall have a surface finish of 10 to 12 microns.
- 4.4 A coat of waste oil to be given to the sandblasted plate.
- 4.5 The initial thickness of sandblasted plates shall be measured by checking thickness at the grid points 400 x 500 with calibrated ultrasonic thickness gauge (provided by MIDHANI) and recorded in log book. The plate thickness shall be monitored at regular intervals during grinding and polishing operations so that the plate thickness shall not go down below the minimum plate thickness as indicated above. The record of such thickness measurements shall be maintained at the job worker's place.

- 4.6 It must be ensured that surface is uniform after grinding /polishing with no grinding Steps /sander marks.
- 4.7 Grinding / polishing shall be carried out in such a way that no overheating takes place.
- 4.8 Adequate precautions shall be taken to avoid bending of plates during grinding/polishing and in subsequent operations.
- 4.9 The surface finish on both sides of the plates shall be better than 2 microns. The entire plate shall be divided into grid size of 400 X 500 (W X L) mm and surface roughness measurement to be taken at the grid point. In addition to grid points, locally ground areas shall also be checked for surface finish.
- 4.10 After grinding, the plate shall be arranged for UT (the testing will be done by MIDHANI). Final Thickness measurement shall be done with ultrasonic thickness gauge as per grid size of 100 X 125 mm.
- 4.11 After completion of grinding/polishing the plates shall be coated with non-corrosive oil on both sides.
- 5 Protective coating & packing is to be done on the ground/polished inspected plates, and should carried out after receiving clearance from MIDHANI representatives.
 - 5.1 The plates shall be de-watered with dewatering liquid to remove any moisture on the plate. The dewatering shall be applied as many times as needed for cleaning both sides of the plates thoroughly (minimum of three times), flushing the plate so that no traces of moisture or dirt remain on the plate. De-watering liquid of CASTROL make RUSTILO-DW-950 shall only be used. Before dewatering, the plate shall be free from any rust or surface pitting and oil/greasy materials.
 - 5.2 Protective coating (minimum two coats) shall be given on both sides of the finished plates. The coating material to be used shall be RUSTEX-No.3 (BLACK JAPAN) or equivalent approved by VSSC/MIDHANI and the coating film shall be uniformly thick. The application shall not leave any area exposed to atmosphere and shall be of such thickness as to give adequate protection to the surface against handling, peeling etc. The coating shall be applied immediately after completion of inspection and in any case not later than 4 days after completion of inspection.
 - 5.3 Each plate shall be wrapped with thick polythene sheet initially and again wrapped with bituminized hessian cloth; then the polythene sheet shall be stitched along with bituminized hessian cloth and strapped.
 - 5.4 The grinding dust arising during process has to be collected and returned to MIDHANI by the job worker.
- 6 Final inspection of Ground plates at the job worker's place will be done by MIDHANI and 3rd party inspection agency. The job worker shall allow at all times the inspection agency to witness the grinding/polishing/coating and packing of plates at their works. The party shall earmark separate area with necessary provisions for inspection of ground/polished plates.
- 7 The plates are to be suitably handled at all times of operation (i.e. during sandblasting, grinding, inspection, and packing so that the surface quality is not affected. No handling marks/scratches/rust marks or surface pitting shall be permitted. During handling of plates for packing, ensure that protective coating already applied does not get damaged.
- 8 The grinding/polishing has to be carried out as per scope of work indicated. In case any plate is rejected due to bad workmanship of the party, no payment for the process shall be paid to the job worker.
- 9 Delivery schedule: The plates are required to be ready for delivery / collection after completion of all the processes within 60 days from the date of issue of the plates, along with grinding dust. Each batch may consist of 2-5 plates.
- 10 Following information shall have to be engraved on each plate and painted on the packed plate after the process:
 - 10.1 Name of the manufacturer - MIDHANI
 - 10.2 Specification & Grade
 - 10.3 Heat No, Plate No, Heat-treatment batch no.

- 10.4 Size
- 10.5 Heat treatment Condition
- 10.6 Top & Bottom identification.
- 10.7 Contract No
- 10.8 Inspector's stamp for clearance
- 11 The validity of the Purchase order shall be 3 years from the date of placement.
- 12 Transportation: To and Fro transportation will be arranged by MIDHANI.
- 13 Payment shall be done as follows:
- 90 % payment will be released immediately after sandblasting, grinding & polishing duly certified by MIDHANI representative
 - Balance 10% within 30 days from date of receipt and acceptance of plate at MIDHANI.
- 14 If there is further requirement by MIDHANI in future, provision for 100% increase of quantity shall be there by amending the contract/PURCHASE ORDER on mutually agreed terms.
- 15 One UT thickness measurement machine will be placed at each work centre to avoid low thickness problems under the control of MIDHANI QC.
- 16 Part payment on pro-rata basis shall be paid for plates where work is discontinued due to quality problems not attributable to sub-contractor:
- 17 In the event of plates having pits whose depth is more than the salvageable thickness limits (which is not due to contractor's faulty work), plates will be supplied, and only after clear instructions from MIDHANI further action will be taken. However, charges for the work carried out by the party thus far will be payable as per the value apportioned to the job done as given below:

Sl. No	Activity-Scope of Work	% of Value apportioned(Approx)
1	Sand Blasting on both sides of the plate for mill scales removal. Visual inspection for pits identification & thickness checking/recording at 400 X 500 mm grid points	10%
2	Skin cut by belt grinding on both sides (0.2 mm material removal on each side) and thickness checking as 100 X 125 mm grid points. Identification of deep pits if any and recording	35%
3	Grinding on one side of the plate for the total removal of surface defects and polishing to 2u surface finish and recording the thickness and surface roughness	55%
4	Reversing the plate and grinding on second side for the total removal of surface defects and finish polishing the plate to the required thickness tolerances as mentioned in P.O. and 2μ surface finish.	80%
5	Inspection by Midhani/Sub-contractor for thickness & surface roughness & making the final thickness and surface roughness report	90%
6	Visual surface roughness, thickness and ultrasonic inspection of the plate by MIDHANI/CUSTOMER/Third Party Inspector. Then dewatering, protective coating & Packing	100%

18 Facilities including machinery etc. required to be available with the vendors:

- a) Belt Grinding / Belt Polishing machines of suitable capacity to carry out grinding / polishing plates as per scope of work.
- b) Power Supply.
- c) Crane suitable for handling of the plates.
- d) Sand Blasting machine.
- e) Shed for polishing machines and inspection.
- d) Suitable skilled manpower to carry out the working and also for carrying out stage wise inspection while processing.

These are major equipments required for setting up facilities. Other utilities & auxiliary facilities may be required as per the requirement to carry out job work smoothly.

19 Eligibility Criteria:

Following is the eligibility criteria

- a) Should have PAN, GST, TAN No.
- b) Work to be done / carried out at Hyderabad only, for logistic and inspection convenience.**
- c) Acceptance of all Technical scope and general commercial terms & conditions.
- d) List of Plant & Machinery (applicable for establish sources already operative in Hyderabad but not currently supplying to MIDHANI).
- e) New bidders shall set up requisite facilities within 06 months from the date of issue of PO. Similarly, if existing vendors of MIDHANI wish to augment their facilities, same shall have to be setup within 6 months from the date of PO . Detailed action plan is to be submitted after short-listing of successful vendors.

20 Selection of Eligible Bidder

Bidders who fulfil all the eligibility criteria and accept all the commercial terms & conditions as outlined in this EOI shall be considered as eligible bidders.

- a) Interested bidders have to submit their required documents as per the due date mentioned in EOI.
- b) Based on the information provided in response to Eligibility Criteria, bids will be evaluated by MIDHANI. If required, MIDHANI may conduct capacity assessment also. Eligible bidders shortlisted shall be communicated accordingly.
- c) MIDHANI may consider extending Startup Benefits to new vendors as well as benefits to existing vendors for augmenting of their facilities.

21 General :

- a) Party shall quote deliverable quantity of finished plates based on their **CAPACITY ONLY.**
- b) Considering the requirement and capacity of individual bidders, order may have to be booked with multiple sources.
- c) Midhani shall reserve the right to enhance the quantities of the vendors which are executing the order in time by diverting the quantities from defaulting vendors.

..... **Thank You**