

**MISHRA DHATU NIGAM LIMITED**

A Govt. of India Enterprise

P.O. Kanchanbagh, Hyderabad - 500 058 (A.P.), INDIA.

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**TENDER NO. MDN/PUR/ADVT/PQ/HS & SRM/ 2008**

**DATE. 26-07-2008**

**TENDER DOCUMENTS**

**FOR**

**HOT ROLLING MILLS FOR ROLLING TUNGSTEN AND MOLYBDENUM ALLOYS**

**MISHRA DHATU NIGAM LIMITED**

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Website:

**NOTICE INVITING PRE-QUALIFICATION TENDER BIDS**

Additional General Manager (Purchase), Mishra Dhatu Nigam Limited (MIDHANI) invites separate sealed Pre-Qualification Bids from eligible Bidders for the following Stores:

Sl. No.	Tender No.	Description	Quantity	Tender Fee
1.	MDN/PUR/ADVT/PQ/H S & SRM/2008	HOT ROLLING MILLS FOR ROLLING TUNGSTEN AND MOLYBDENUM ALLOYS	1 NO.	RS.500/-

Bidders scope includes Design, Manufacture, Supply, Erection, Testing and Commissioning of the Equipment and Demonstration of Performance at Midhani, Hyderabad. Bidders are advised to visit our Website [www.midhani.com](http://www.midhani.com) for further details regarding this Pre-Qualification Documents.

Eligible applicants may obtain the Pre-Qualification Documents from the Additional General Manager (Purchase) against non-refundable fee indicated above. The fee shall be paid in the form of Demand Draft drawn in favour of Mishra Dhatu Nigam Limited, Hyderabad.

Submission of application for Pre-Qualification, original and four copies must be received in sealed envelope at the address given above not later than 10:30 hrs. IST on **05.09.2008**. Midhani reserves the right to accept or reject late applications.

Applicants will be advised in due course of the result of their applications. Only those bidders who fulfill the Pre-Qualification criteria will be qualified and invited to bid.

Sd/-

Additional General Manager (Purchase)

**PRE-QUALIFICATION CRITERIA FOR HOT ROLLING MILL FOIR ROLLING  
TUNGSTEN AND MOLYBDENUM**

For

**TENDER NOTICE INVITING PRE-QUALIFICATION BIDS FOR DOMESTIC COMPETITIVE  
BIDDING**

HOT ROLLING MILLS FOR ROLLING TUNGSTEN AND MOLYBDENUM ALLOYS

**LIST OF TENDER DOCUMENTS**

PRE-QUALIFICATION CRITERIA

TECHNICAL SPECIFICATION – ANNEXURE – I

PRE-QUALIFICATION CRITERIA QUESTIONNAIRE – ANNEXURE – II

PRE-QUALIFICATION PROCEDURE – ANNEXURE – III

Design, manufacture, supply, erection and commissioning of one number 3 Hi-Non-reversible continuous strip cum section Rolling Mill complete with necessary mechanical and Electrical equipment, structural steel work, accessories etc. The Rolling Mill should be capable of strip rolling to 2mm X 300mm width from input size of 50mm X 100/200mm X 250/500mm at starting temperature of 1550<sup>0</sup>C and rod rolling to sizes 25/20/15/10/9/6mm diameters from input size of 45/50mm square at a starting rolling temperature of 1550<sup>0</sup>C.

The Rolling Mill should be capable of accommodating maximum slab weight of 20 Kgs for strip rolling and maximum billet weight of 15 Kgs for rod rolling.

The Tenderer must be a regular manufacturer of above equipment and should have supplied similar equipment before and units must be in satisfactory commercial operation.

The Tenderer should have technical expertise and experience in the field of design, manufacture and supply of Industrial strip / section Mill.

The Tenders have to submit, complete list of supplies of Multistrand Hot Rolling Mills with capacity, during last 5 years. Performance certificate from the users shall have to be submitted along with offer. Their annual turnover shall be more than Rs.20 Crores in last 3 years. They will submit solvency certificate from their Bankers.

The delivery period for the above equipment shall be 8 months or less from the date of placement of order.

**PRE-QUALIFICATION CRITERIA FOR HOT ROLLING MILL FOR ROLLING TUNGSTEN AND MOLYBDENUM**

1. The bidder must have minimum five year experience in the field of design, manufacture and supply of industrial strip / section mill.
2. The annual turn over must be more than Rs. 20 Crores in the last 3 Years.
3. The bidder must submit the solvency certificate from their banker.
4. The bidder must confirm that they will be able to obtain export license for any part of the equipment, if required.
5. The delivery period must be within 8 months of placement of order.
6. The bidder must undertake the responsibility of erection and commissioning of the equipment.
7. The bidder may state his experience in the field of design and supply of hot rolling mills for rolling sintered bars / slabs. This is not an essential requirement, however, the bidder having experience in designing in hot rolling mills for rolling sintered bars / rods will be preferred.

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**Technical Specification for 3 Hi Continuous Strip Cum Section  
Rolling Mill**

**1.0 GENERAL**

- 1.1 This specification covers the design, manufacture, supply, erection and commissioning of one (1) No. 3 Hi Non-reversible Continuous Strip cum Section Rolling Mill complete with necessary mechanical and electrical equipment, structural steel work, accessories etc for Mishra Dhatu Nigam Limited, Hyderabad, India.
- 1.2 The tenderer shall visit the Purchaser's site with prior intimation for details of proposed location of installation for assessing the space constraints and facilities available before submitting the offer.
- 1.3 This specification forms a part of tender documents and shall be read in conjunction with the same.
- 1.4 This equipment is required for very critical applications and therefore no compromise shall be made on quality of individual components and on the final equipment.
- 1.5 All items of equipment shall be complete in all respects and any equipment not covered in this specification but essential for proper design and operation shall be included in the offer.
- 1.6 The tenderer shall study the specification and satisfy himself thoroughly regarding the workability of the equipment and shall take full responsibility for the guaranteed operation of the equipment as regards output, performance and smooth reliable working. The tenderer has the option to submit his proposal on the basis of his own design, which he considers suitable and capable of meeting the required operating and duty conditions. Nevertheless the tenderer shall submit the information as called for in the enclosed questionnaire duly filled in.
- 1.7 Source of supply
- 1.7.1 Where found necessary, the Purchaser reserves the right of selecting the manufacturer of mechanical component, electrical equipment, instruments and controls /any other specialized items in the interest of standardization and the successful tenderer shall agree to supply equipment of the particular make, if so required.

**2.0 STANDARDS**

- 2.1 The components of all equipment shall be designed, assembled and tested in accordance with the latest standards of the standards Institution, Institution of Electrical Engineers and the Manufacturer's Association of the country where they are manufactured.
- 2.2 The components shall conform to the relevant standards published by the Indian Standard Institution, wherever available, so that specific aspects under Indian conditions are taken care of.

- 2.3 The equipment shall also conform to the latest Indian Electricity Rules as regards safety, earthing and other essential provisions specified there in for installation and operation of electrical equipment.
- 2.4 The equipment shall comply with the statutory requirements of the Government of India and Government of Andhra Pradesh.
- 2.5 In cases, where offer deviates from the specified standards, the tenderer shall indicate clearly in his offer the standards proposed to be adopted by him along with details thereof.

### **3.0 OTHER REQUIREMENTS**

#### **3.1 Accessibility and Interchangeability**

All working parts, so far as possible, are to be arranged for convenience of operation, inspection, lubrication and ease of replacement with minimum downtime. All like parts on equipment furnished or on duplicate equipment, are to be interchangeable.

#### **3.2 Quality and Workmanship**

Workmanship and material shall be of good commercial quality suitable for the purpose intended and in accordance with the highest standards and practices for equipment of the class covered by the specification.

#### **3.3 Lubrication**

All equipment shall have sufficient lubrication arrangement so that bearings and other parts do not get unusually heated in the course of operation. Sufficient lubrication points shall be provided wherever necessary and all such points shall be easily accessible.

#### **3.4 Safety**

The equipment shall comply with all the related and relevant safety standards on commissioning. All equipment shall be complete with approved safety devices wherever a potential hazard to personnel exists and with provision of access of personnel to and around equipment for operational and maintenance functions. These items shall include not only those usually furnished with elements of machinery, but also the additional covers, guards, cross-overs, stairways, ladders, platform, handrails etc. which are necessary for safe operation of the equipment.

### **4.0 UTILITIES AND SERVICES**

#### **4.1 Water**

Industrial quality water shall be available at a temperature of 35°C max. and at a pressure of 3.0 Kg/Cm<sup>2</sup> at shop floor level. If any equipment is designed for a supply different from the above, necessary transformation equipment shall be provided.

#### **4.2 Compressed Air**

- 4.2.1 Compressed air for general shop use shall be available at a pressure of 5 Kg/Cm<sup>2</sup> minimum.

4.2.2 Clean instrument grade compressed air is not available in the shop. If instrument grade air is required, the offer shall include necessary equipment to obtain the same. The tenderer shall also include necessary in-line filters, regulators, lubricators etc. for pneumatic cylinder operation, if required.

#### 4.3 LPG

LPG is available at a pressure of 1 Kg/sq.cm. at the shop header, running at a height of approx. 6m level. The gas will have calorific value of 27,780 Kcal/Nm<sup>3</sup> and sulphur content max. 0.02% by weight. The gas will have a specific gravity of 1.9 (with respect to air, at NTP).

#### 4.4 Electric Power

4.4.1 Electric power will be available in the shop 415/240V, 3-Phase, 4-wire, 50Hz system with transformer neutral solidly grounded. Variation in supply voltage and frequency will be limited to +/- 5% and +/- 3% respectively.

4.4.2 If any equipment is designed for a different rating from above, the tenderer shall provide necessary transformers, conversion equipment etc.

4.5 The utility services will be made available at the tapping points from shop headers. Purchaser shall provide each point with an isolating valve. The tenderer shall include in his offer the pipe work (with necessary valves, fittings and instruments) interconnecting the tapping points on the headers to the various consuming points of the equipment and its auxiliaries. The offer shall also include for bringing the return water from various units to a common point for connecting to Purchaser's return water pipe work.

### 5.0 **DESIGN BASIS**

5.1 The 3 Hi Continuous Strip cum Section Mill shall be used for high temperature, high strength rolling of pure molybdenum and tungsten molybdenum alloys produced by powder metallurgy methods to finished strips and rods.

5.2 The mill capacity requirements are as specified below

5.2.1 For strip rolling, the input size shall be 50mm X 100/200mm X 250/500mm and the final output size 2mmX300mm width. The starting rolling temperature shall be 1550°C and the finish temperature shall be around 950°C. The above conversion in size shall take place within a maximum of two re-heatings. The maximum weight of the slabs shall be 20 Kgs.

5.2.2 For hot rolling of rods, the input size shall be 45/50mm Square and the final output size 25/20/15/10/9/6mm diameters. The starting rolling temperature shall be 1550°C and the finish temperature shall be around 950°C. The above conversion in size shall take place within a maximum of two re-heatings. The maximum weight of the biket shall be 15 Kgs.

5.2.3 The speed of the mill shall be 0-20-100m/min continuously and infinitely variable.

5.2.4 The dimensional tolerance of the finished product (rod & strip) should be within  $\pm 5\%$

5.3 The physical characteristics of the materials to be rolled are as under

a) Hardness

<u>Temperature (°C)</u>	<u>Molybdenum (VHN)</u>
1600	120
1400	150
1200	160
1000	170

b) Ultimate Tensile Strength

<u>Temperature (°C)</u>	<u>Molybdenum (MPa)</u>	<u>Moly-Tungsten Alloy (MPa)</u>
1600	100	210
1400	125	280
1200	160	330
1000	200	400
800	250	500

5.4 Reheating furnace and handling facility

The available facility is as detailed below:

Number of furnaces available :	Two
Type of furnaces :	Electrically Heated, Hydrogen atmosphere
Chamber Size :	1500X380X100mm
Maximum Temperature :	1650 °C
Calibration Status :	± 10 °C

Handling facility :	Manual with Tongs with a maximum length of 1500 mm .
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5.5 The Mechanical equipment

The mechanical equipment shall generally consist of, not limited to, the following to finally turnout defect free products.

- Main motor, gearbox, pinion stands, universal couplings, interstand spindles and spindle supports. The main gearbox and the pinion stand shall be made of cast steel housings.
- There shall be a maximum of three mill stands suitably designed with sturdy cross members. The screw down motors for each stand shall be positioned at the top with gearboxes on either side. These gearboxes shall be made of cast steel housings. All the stands shall be capable of accommodating both the sets of roll assemblies required for section rolling of rods and strip rolling of slabs.
- Common machined base with T-slots to be grouted and leveled on floor within ±0.1mm. All the mill stands shall be aligned and rigidly bolted with T-bolts.
- One set of roll assembly with chokes and Timken bearings/suitable berths consisting of required numbers (3 x numbers of stands) of assemblies for all the stands for section rolling and one set of roll assemblies consisting of (3 x numbers of stands) of assemblies for all the stands for strip rolling.
- Roll changing tackle for quick roll changing.
- Suitable adjustable side guides on either side for strip rolling
- Set of roll guides on either side for section rolling.

- Hydraulic jumping mechanism for middle roll adjustment for rolling of strips.
  - Roll balancing mechanism to short gap the mill springs and backlashes.
  - Roll tackles for feeding in and feeding out the mill.
  - Roll pre-heating arrangements.
  - Rolls cooling, arrangements for hot rolling.
  - Suitable cleaning arrangement for intermittent removal of deposited adherent scale on the roll surface.
  - Entry and exit roller guide/friction guide for feeding in and out of mill for all stands.
  - Monorail conveying for feeding of input to mill stand one to the others.
  - Spindle support for interconnecting spindles if required.
  - Fume extraction for generated fumes during rolling.
  - Centralized grease lubrication for all bearings.
  - Oil lubrication system.
  - Motorized screw down mechanism with digital roll gap indicators.
  - Roll pass design for sequence section rolling from 45/50 square to all sizes.
  - Handling devices for handling both rods and strips.
  - Safety features as per 3.4 above.
- 5.6 The mill shall generally consist of all the above components and any other alternatives with additions or substitution, but the responsibility of successful rolling of the rods and strips as per the technical requirements as above rests on the supplier.

#### 5.7 Test rolling

Before arriving at the design parameters, the tenderer may carry out trial rolling of the above jobs on the mills that he has supplied anywhere before. The Purchaser shall supply the material for the same.

### 6.0 **ELECTRICAL EQUIPMENT**

- 6.1 Mill motor shall be DC or variables and AC suitably coated as per relevant mill standard.
- 6.2 All the motors shall be of TEFC type with class B/F insulation and transformer as per relevant standards shall be suitably rated with over load capacity in accordance with mill standards wherever applicable.
- 6.3 The electrical panels shall be of industrial type, floor mounted, dust and vermin proof, well ventilated with panel fans. Panel AC (of make Rettal only) shall be provided for the Variable drive panel. The panels shall have a short circuit level of 50 KA symmetrical withstanding capacity. The associated switchgear/control gear consisting of triple pole switches/MCCBs, triple pole contactors, control transformers, motor protective circuit breakers, motor protective relays, control switches and relays etc. shall be wired as per relevant standards. The current carrying capacity shall not be less than 100 A/Sq.cm for Al bus bar and 150 A/Sq.cm for Cu bus bar. The control wires cross section shall not be less than 1.5 sq.copper stranded PVC. All the components shall be of DIN rail mounting type and the panel terminations shall be of clip on terminals with end markers/ferrules. All the cables shall be sufficiently rated as per relevant standards.
- 6.4 The Control Desk /Control Post shall be of floor mounted industrial type, dust and vermin proof well ventilated with exhaust fans. The desk shall have digital displays for mill control and electrical parameters, industrial heavy-duty push buttons/indication lamps, control switches with engraved name plates. The control console shall be provided with microprocessor based alarm communication for the equipment safety.

## 6.5 Earthing

The equipment shall be effectively double earthed in accordance with the relevant clauses of the Indian Electricity Rules. Separate earth pits shall be provided with copper cables for electrical and electronic controls.

6.6 Makes of electrical equipment shall be Siemens / L & T / ABB / GE / Kirloskar / Finolex / Minilec only.

## 7.0 **DRAWINGS AND DOCUMENTS**

7.1 The tenderer's offer shall contain general arrangement, layout drawing including equipment, P&I diagram, panels and installations and over all dimensions, location of equipment centerlines etc. The offer shall include makes, model numbers etc., of all the electrical, instrumentation and mechanical items. It shall also contain a document with description of salient features.

7.2 The details of the proposed rolling scheme/schedule for the above rolling requirement shall also be submitted along with the offer.

7.3 The successful tenderer shall submit two sets of all the drawings and documents as under requiring approval of Purchaser within four (4) weeks of receipt of purchase order. The tenderer shall provide

- 1) Detailed civil foundation drawings, cable trench layout needed for inter connecting power and control cabling purposes and allied civil works if any , to enable the purchaser to execute the civil works.
- 2) All drawings (Electrical, Instrumentation and Mechanical) for the complete equipment along with bill of materials and quantities shall be submitted for approval prior to manufacture.
- 3) Erection and commissioning schedule.

7.4 The approval of these drawings by the purchaser does not in anyway absolve the supplier from the full responsibility for the successful commissioning of the project and guaranteed operation of the equipment.

7.5 The Final drawings shall be submitted after inspection and acceptance of equipment at supplier's works. These shall include all the drawings on reproducible tracings and as soft copies wherever possible in drg.format.

Overall dimensional G A drawings

Mill Sectional drawings

Drawings of components like rolls, choke assembly etc.

Operating and Maintenance Catalogues of all bought out items

List of bearings, oil seals and fasteners

Manufacturing drawings for wearing and spare parts

Schematic drawings for electrical controls etc.

Drawings for electrical and instrumentation parts, layout drawings showing location of all electrical equipment, single line, interlocking and sequence diagrams etc.

5 sets of operating and maintenance manuals with soft copies.

## **8.0 SPARES**

8.1 The tenderer shall submit with his tender a list with itemized prices for various spares required for commissioning the mill and for two year's normal operation of the equipment. The spares shall include critical items like one set of rolls, chokes, bearings, liners, couplings, electronic PCBs etc. The supplier shall submit itemized details of spares offered along with the offer.

## **9.0 CONSUMABLES AND SUPPLIES**

The successful tenderer shall supply all materials required for startup, commissioning, initial filling and performance tests and the spares required for two year's normal operation of the plant.

## **10.0 INSPECTION**

10.1 Pre dispatch inspection shall be carried out by Purchaser at supplier's works for all the items figuring in the bill of materials furnished by him. Specification details, dimensions, motor ratings etc. shall be checked. Test certificates for all bought out items and materials and inspection reports for all in-house built items shall be submitted at the time of inspection. Original manufacturer's test certificates for the important items like motors, drives, controls, instruments etc. wherever applicable shall also be submitted.

## **11.0 ERECTION AND COMMISSIONING**

11.1 The successful tenderer shall be responsible for erection, startup and putting into commissioning including performance tests of all equipment supplied by him, as well as those that may be procured from/fabricated by others based on his drawings and specification. The special tools and tackles, welding set, gas set, welding consumables etc. for this purpose shall be arranged by the Supplier. Purchaser shall do all civil works necessary for erection of the machinery as per the civil drawings supplied by the Supplier.

## **12.0 TESTS**

12.1 The following will be demonstrated during performance acceptance tests:

- Physical inspection of supply
- Inspection of all the performance parameters of all the individual mechanisms during idle run and trial rolling.
- Trial rolling of actual products as per the designed parameters and the designed sequence of roll pass to satisfy the contract specifications.
- The quality of the final product within the acceptable tolerances.
- For acceptance trials rolling of 10 rods each of molybdenum and moly-tungsten alloy for bar rolling and 10 strips each of molybdenum and moly-tungsten alloy for strip rolling will be carried out and the quality of the products will be inspected/checked.

## **13.0 TRAINING**

13.1 The supplier shall arrange for the site training and classroom training of a reasonable number of purchaser's technical personnel. The number of such personnel and the period of training will be mutually agreed upon.

#### **14.0 PERFORMANCE GUARANTEE**

- 14.1 Performance of the furnace as per above shall be guaranteed continuously for a period of minimum twelve (12) months from the date of acceptance of the equipment or minimum eighteen (18) months from the date of dispatch of the equipment whichever is earlier. All equipment shall be guaranteed for workmanship and materials and satisfactory performance. The guarantee for performance shall cover individual items and systems including electrics for their ratings / outputs (as required in the specification or as may be finalized at the time of order placement), as well as for the integrated operation of the equipment, its auxiliaries and the ancillary equipment specified. The supplier shall at his own expense, upon written demand by the Purchaser promptly repair or replace free to the Purchaser at site any part comprising the equipment which is defective or not complying with the specifications, within the guaranty period from the date the equipment is put into commercial operation at site.

#### **15.0 DELIVERY**

- 15.1 The delivery (FOR port of shipment or site as the case may be) shall be completed, within 8 months from the effective date of contract. However, an earlier delivery would be preferred.

The offer shall be accompanied by a time schedule showing the individual time periods required for submission of drawings as well as the time for erection, start-up, putting into commission and performance tests. A network diagram incorporating important activities shall also be submitted with the offer.

#### **16.0 PRICES**

- 16.1 The price for supply of basic equipment and accessories shall be quoted separately.
- 16.2 The prices for spare parts (operational and maintenance) shall be indicated separately giving itemized prices.
- 16.3 The charges for erection, inclusive of start-up, commissioning and performance tests shall be quoted separately, in terms of the currency in which payments are to be made.

#### **17.0 INFORMATION TO BE FURNISHED WITH THE TENDER**

- 17.1 The tenderer shall furnish in his offer the information called for in different paras / sections of the tender documents without which the offer is liable to be rejected. The information furnished shall include the following:

##### **17.2 General**

- 17.2.1 General description of the equipment offered specifying the important features, materials of construction, etc. to enable the Purchaser to have a proper understanding of the equipment offered and its operation. The details of the proposed rolling scheme/schedule for the above rolling requirement shall also be submitted along with the offer.

##### **17.3 Drawings**

The offer shall be accompanied by necessary drawings as called for in item 7.0

#### 17.4 Time schedule

Time schedule showing the individual time periods required for submission of drawings as well as the time for erection, start-up, putting into commission and performance tests. A network diagram incorporating important activities shall also be submitted with the offer.

#### 17.5 Questionnaire

The tenderer shall submit the information as called for in the enclosed questionnaire duly filled in. Offers with incompletely filled in questionnaires are liable to be rejected.

#### 17.6 Exceptions

Each exception to the specification or other parts of the tender documents shall be listed separately. If exceptions are not clearly listed, the Purchaser will not consider them.

### **18.0 SCOPE OF SUPPLY AND WORK OF SUCCESSFUL TENDERER**

18.1 Design of rolling scheme, layout, roll pass design etc.

18.2 Procurement of materials, manufacture/fabrication, supply, erection and commissioning of all equipment as specified in this specification.

18.3 All interconnecting electrical cabling including earthing etc.

18.4 Initial filling of all lubricants, oils etc.

18.5 Operational and maintenance spares for two years smooth operation.

18.6 Submission of all drawings, manuals and documents including progress reports, etc.

18.7 Submission of information, drawings and specifications required by others to fabricate and provide foundation bolts and embodiments of ordinary grades of steel and other miscellaneous items.

18.8 Furnishing details of auxiliaries, which are essential for safe and efficient working of the plant in terms of the contract.

18.9 Preparation and submission of a recommended manning list for operation of the equipment.

### **19.0 WORKS BY PURCHASER**

19.1 All civil engineering work and building structures shall be executed by the purchaser either departmentally or by others and are excluded from the scope of work of the tenderer.

19.2 Power supply to electrical panels. The Motor Control Centre.

19.3 All utility supply lines to connect to the terminal points finalized with the successful tenderer.

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**ANNEXURE-I****QUESTIONNAIRE TO BE FILLED IN AND SUBMITTED WITH THE OFFER****FOR****3-HI CONTINUOUS STRIP CUM SECTION ROLLING MILL .**

The tenderer shall fill this questionnaire and submit two (2) copies with each copy of his offer. The information is required in this form to facilitate tender processing even though it may duplicate information presented elsewhere in the offer. This data shall form a part of the contract with the successful tenderer.

This questionnaire does not supersede instruction in the tender documents relating to the descriptive and other information to be submitted with the offer for a complete understanding of the equipment offered and its operation.

**1.0 General**

Tenderer's name and address:

Total shipping weight of Mill offered by the tenderer, tons:

Weight of heaviest single item, tons

**2.0 Mill Design and capacity**

Number of mill stands

Range of speed of the mill and speed control accuracy

Mill Drive motor type, capacity, make

Screw down motor capacity, make

Type of roll bearings

Type of roll cooling arrangement

Type of roll pre-heating arrangement

Type of roll cleaning arrangement

Size of entry table

Size of exit table

Size of intermediate table, if any

Describe monorail arrangement

Hydraulic system components make

Roll gap indicators, make

Make of electrical panels

Make of panel AC

Pass schedule for section rolling

**3.0 Guarantee and Performance**

Guarantee period offered

Power consumption

## HOT ROLLING MILLS FOR ROLLING TUNGSTEN &amp; MOLYBDENUM ALLOY

**Pre-Qualification Criteria Questionnaire**

Note: This Questionnaire shall be filled in by authorized person and submitted in a separate cover (other than Price bid and Technical bid)

1. Brief description of Company's background\* :
2. Field of Business :
3. Experience in years in the field of design, manufacture and supply of industrial section cum strip Hot rolling mills for rolling of sintered ingots
4. List of supplies of Multistrand Hot rolling mills with capacity \*

S No.	Year of supply	Capacity of the mill	No. of Units	Name of customer*	Remarks
1.	2007-08				
2.	2006-07				
3	2005-04				
4	2003-04				
5	2002-03				

5. Annual Turnover of the Company for the last 5 years

S No.	Year	Annual Turnover in Rs. Crores

- Separate sheet may be enclosed if space provided is insufficient
6. Is the support evidence from the Banker enclosed ?  
YES/NO
  7. Whether the undertaking stating that they would obtain export license from their Govt. without affecting the delivery promised in the bid ?  
YES/NO

**Documents enclosed::**

A. Essential:

1. Annual reports of the Company for the last 5 years.
2. Support Evidence from the Banker.
3. Undertaking in the format prescribed, stating that export licence from their Govt. would be obtained without affecting the delivery period stipulated, if required.

B. Others:

- 1.
  - 2.
  - 3.
  - 4.
  - 5.
  - 6.
- 

**Company seal**

**Signature:**

**Name :**

**Date :**

**ANNEXURE –III****1.0 PRE-QUALIFICATION PROCEDURE FOR HOT ROLLING MILLS FOR ROLLING TUNGSTEN AND MOLYBDENUM:**

- 1.1 Sealed Bids shall be submitted.
- 1.2 Only bids of tenderers who meet specific requirement and eligibility criteria shall be considered for acceptance for inviting subsequent bids i.e. technical and commercial bid in two part bidding through limited tendering mode subject to receipt of prescribed EMD from such tenderers. Midhani reserves the right to reject any or all the pre-qualification bids without assigning any reason whatsoever.

**2.0 TENDERERS ELIGIBILITY & QUALIFICATIONS:**

- 2.1 Tenderer should be regular manufacturers of Industrial Hot Rolling of strip / section Mill and should have supplied similar machine before with satisfactory commercial operation.
- 2.2 Tenderers should have expertise and experience in the field of design manufacture and supply of industrial strip / section Mill.
- 2.3 Tenderer's manufacturing facilities and sub-vendor base should be capable of meeting the quality and delivery requirements of the tender.
- 2.5 Tenderers must submit their experience with copies of purchase order etc., and other data / information as relevant.
- 2.6 Tenderers shall submit duly filled in Pre-qualification Criteria Questionnaire (Annexure–II).

**3.0 DELIVERY PERIOD:**

The delivery shall be completed within 8 months from the date of placement of order.

**4.0 GENERAL INFORMATION:**

- 4.1 Midhani reserves the right to assess the capability and capacity of tenderer, as per Company's norms and policies.
- 4.2 In the event the tenderer contemplates to participate in the tendering process in association with any Indian/Foreign Associate, the tenderer need to furnish name and address of such associate along with their pre-qualification bid. Further details like financial status, work experience, projects handled/executed along with a copy of agreement / MOU for the proposed joint tendering vis-à-vis the Division of scope need to be submitted as part of the pre-qualification bid. The Associate should not be of an Agent in nature as per Govt. of India guidelines.
- 4.3 The manufacturer who would qualify for above would be considered as a principal contractor responsible for equipment and its performance guarantee.
- 4.4 Tenderer may obtain clarifications from Midhani, if required before submission of Pre-qualification and other bids.

- 4.5 Pre-qualification bids shall be submitted in full five sets (original + 4 copies).
- 4.6 Government of India's guidelines for tender evaluation including purchase preference as applicable at the time of order finalization shall be taken into consideration.
- 4.7 Tenderer is to note and understand that Midhani is inviting tenders solely on its own behalf and not on behalf of any other person or entity. In particular, it is to note and understand that the Government of India is not a party to this tendering process and has no liabilities, obligations or rights here under. It is to note and understand Midhani is an independent legal entity with power and authority to enter into contracts solely on its own behalf under the applicable Laws of India and General Principles of Contract Law. It is to note and understand that Midhani is not an agent, representative or delegate of the Government of India and shall not be liable for any acts, omission, commission, breaches or other wrongs arising out of the tendering process. Accordingly, Bidder shall have no rights, whatsoever, against the Government of India as to any manner, claims cause of action or thing whatsoever arising of or under this tendering process.

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