

## Pre Qualification Criteria for open tender of Rate contract for copper section for Two years

CMM-Cu/MISCC\_OT\_Copper Section

## Pre-Qualification Criteria for Open Tender of Copper Section FA/RC E7033015

Sl. No.	Criteria	Supporting documents
1	Only manufacturers who have supplied at least 355 MT (on job work basis or finished basis or both for copper sections, rotor bars, and copper flats) in last 03 years ending on 31.03.2023 shall be allowed to participate.	a) GST registration certificate from statutory authority. b) Self declaration (seal signed by authorized signatory on Company's letter head) giving purchase order reference, purchase order date, customer name, quantity supplied and supply date.
2	Average Annual Turnover of atleast Rs 14.23 Crs of last 3 years ending 31.03.2023	a) Audited balance sheets with profit and loss statement having UDIN number.
3	<b>Technical Requirements for Section AA &amp; BB</b>	
	Manufacturing Facilities -	
A	Manufacturing facility to convert Copper wire Bar/Ingot /Cathode to finished size through hot extrusion process as per BHEL's Technical Specifications. Manufacturing by conforming process is not acceptable.	Declaration that Input material shall be - Copper Wire /Bar/Ingot/CC Rod/Cathode. Specific confirmation as a declaration*
B	Vendor should preferably have in-house Melting and Hot extrusion facility. However if it is proposed to be outsourced then details like name, address and manufacturing facilities utilized of outsourced vendor is to be furnished.	1) List of relevant manufacturing facilities to be furnished as a self-declaration * that all the facility at one location is owned by the party. 2) In case of outsourcing for copper wire bar/ingot/Cathode then name, address of outsourced vendor along with its relevant manufacturing facilities is also to be furnished.
C	Flow chart describing complete manufacturing process clearly indicating facilities owned and outsourced.	Flowchart indicating complete manufacturing process indicating facilities owned / outsources by vendor to be furnished duly seal & signed
4	<b>Technical Requirements for Section CC</b>	
	Manufacturing capabilities:	
A	Manufacturing facility should be to convert copper wire Bar/Ingot/Cathode to finished size through hot extrusion and minimum 2 passes of drawing and annealing along with BHEL's technical specification. Manufacturing by conforming process is not acceptable.	Declaration that Input material shall be - Copper Wire /Bar/Ingot/CC Rod/Cathode. Specific Confirmation as a declaration*
B	Casting and extrusion facility of minimum of 10 inches billet.	Confirmation
C	Annealing to be done in inert gas environment for copper flats and rotor bars.	Confirmation
D	Annealing furnace should be able to accomodate flats of length of 5.5 meters.	Confirmation

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28/12/23

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M. K. Marai  
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	Vendor should preferably have in-house Melting and Hot extrusion facility. However if it is proposed to be outsourced then details like name , address and manufacturing facilities utilized of outsourced vendor is to be furnished.		1) List of relevant manufacturing facilities to be furnished as a self-declaration * that all the facility mentioned at one location is owned by the party. or 2) In case of outsourcing of facility so desired then details like name , address and manufacturing facilities of outsourced vendor is to be furnished.
F	Flow chart describing complete manufacturing process clearly indicating facilities owned and outsourced .		Flowchart indicating complete manufacturing process indicating facilities owned / outsources by vendor to be furnished duly seal & signed
5	<b>B. Quality assurance &amp; Testing:</b>		
a	1.For copper flats, rotor bars & damper bars, QA plan no. QA/MT/BOI 052 R04 & QC/TCB/B0/14, QSP/HG/105 shall be applicable.		Compliance & Confirmation to QAP as seal and signed copy of i. QA/MT/BOI/052. ii. QC/TCB/B0/14.. lii. QSP/HG/105
b	2. Flats above 30mm thick to be Ultrasonically tested as per spec mentioned in QA plan.		Confirmation
c	1.Electrical conductivity of the finished conductor to be established by Electromagnetic (Eddy current method ) (ASTM E1004-09). 2.For raw material in CC Rod form and finished material where eddy current method cannot be used due to cross section dimension limitations, the V-I method for resistivity measurement (ASTM B193-02) is to be adopted.		Confirmation
d	1.Availability of testing facilities required to conduct all the tests as per QAP is desirable with the supplier, preferably in-house for measurement of tensile, elongation, hardness and oxygen content and Electrical Conductivity  2. If any particular testing facility is not available in-house, then manufacturer may outsource to labs/firms for testing.  3.All testing facilities / equipments have to be duly calibrated by NABL accredited lab / agency or traceable to either NABL or equivalent international accreditation agency.  4.Outsourced testing labs/firms should necessarily be NABL or equivalent international agency accredited.		1)Declaration* of List of relevant testing facilities available with vendor with recent calibration details to be submitted.  2) Self-attested copies of calibration report not older than 01/01/2023 from NABL accredited lab/agency.  3) List of relevant outsourced facilities (if used) may be submitted (seal signed by authorized signatory on Company's letter head). Outsourced facilities to be NABL accredited.
6	Delivery from date of LOI should not be more than 45 days (from the date of issue of LOI till date of reaching of material at BHEL, Bhopal Works)	T r d	Action plan /flow chart/time chart depicting how delivery of material will be ensured in 45 days from date of LOI, Can be combined with Process flowchart 3(C) & 4 (F) above.
7	Sources of raw material has to be ETP grade copper and should be sourced from BHEL's approved sources like Hindalco, Sterlite and HCL only. For sourcing from any other sources, prior approval from BHEL shall be required.		a) Self Declaration* for compliance of Clause 7 of PQR to be furnished. BHEL reserves the right to disqualify vendor other than BHEL Approved vendors. b) Sample TC's clearly stating chemical composition including oxygen content.

Note: 1. PQR sheet to be seal & signed by authorized signatory

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