

INSTRUCTIONS TO VENDORS

(A) TECHNICAL SUPPLY CONDITIONS OF PROFILED/RECTANGULAR/ SILVER BEARING HALF HARD COPPER STRAIGHT & FLAT FOR FABRICATED FIELD COILS OF HYDROGENERATORS & MOTORS :

1. The copper conductor shall be half hard profiled as per drawing or rectangular as given in the enquiry and to specification.
2. The conductor shall be supplied in final finished condition.
3. The conductor is to be supplied in continuous lengths as specified in the enquiry.
4. Copper flats shall be produced by proven process so as to achieve properties and characteristics required under technical specification and also achieve Metallurgical qualities as follows:

a) Metallurgical requirements :

The microstructure shall be consistent with a best commercial practice for production of extruded and drawn copper shapes. The microstructure shall consist of equiaxed grains. A fine dispersion of rounded copper oxides typical of deoxidized silver bearing copper is allowed.

Planar or linear features (such as oxides, voids, laps etc) exceeding the limits specified below are not allowed.

- I. Length greater than 0.1 mm
- II. Only one indication per side
- III. No more than 1 indication per micro section.
- IV. There is no loose material or open to the surface ligament associated with indications.

Voids, laps, seams, tears or similar features are not allowed.

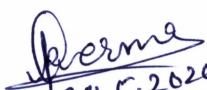
b) Surface Quality :

The copper shall have a uniform and smooth surface. Score marks, cracks, indentations, bubbles, glitter and impressed foreign particles are unacceptable. The copper shall be free of loose particles. The copper surface shall be free of any processing fluids, oils and lubricants.

The surface finish shall be better than 1.6 μm .

c) Ultrasonic test :

Ultrasonic test shall be carried out on full length of 2 strips randomly selected from the lot.


29.5.2020
(P.K.Verma)


29.05.20
(A. Dixit)

5. Vendor to furnish the reputed source of raw material copper in their offer.

The information given by vendor is subject to inspection, verification & assessment by BHEL at its discretion any time before finalization of the case and /or after P.O. placement till final finish stage.

(B) ACCEPTANCE CRITERIA:

Material shall be accepted on the basis of following:

1. QAP compliance certificate furnished by the supplier.
2. Test & inspection certificate furnished by third party inspector and/or testing carried out at BHEL end.

(C) REJECTION :

Material is liable for rejection in part or full of the supplies, which could not be tested due to random sample testing plan and are found to be defective or contains hidden defects which are noticed at the time of processing / assembly or during operation of the machine.


Prepared by 29/5/2020
(P.K. Verma)


Checked by
(A. Dixit)


Approved by
A. Bhatnagar