

TECHNICAL TERMS & CONDITIONS FOR PURCHASE OF COPPER WINDING WIRE – CONTINUOUSLY TRANSPOSED COPPER WIRE (CTC) UNDER RATE CONTRACT FOR 2 YEARS (2020-22) ON FINISHED BASIS.

1. **Technical Parameters:** CTC to be supplied under this enquiry shall strictly conform to the following purchase / technical specifications.
 - (i) CTC with annealed copper strips – BHEL Purchase Specification AA28127 Rev. 06
 - (ii) CTC with Proof stress strips – BHEL Purchase Specification AA28129 Rev. 04. However for CTC cable dimensions, refer Annexure-2 of BHEL Purchase Specification TRE 036 Rev. 08
 - (iii) CTC with 'B' stage epoxy coating over PVA enamel & with proof stress strips – BHEL Purchase Specification TRE036 Rev. 08
 - (iv) Kraft insulating paper – High air permeability – for use as covering – BHEL Purchase Specification AA21111 Rev. 06
 - (v) Kraft insulating paper – Low air permeability – for use as covering – BHEL Purchase Specification AA21116 Rev. 03
 - (vi) High Density Thermally upgraded Paper- for use as covering- Weidmann make 22HCC or Cindus make 42HCF
 - (vii) Normal Density Thermally upgraded paper- for use as covering-BHEL Purchase Specification TRE218 Rev. 01
 - (viii) Continuously cast copper wire rod - Raw material for manufacturing bare copper strips- Purchase Specification AA12024 Rev. 07
2. Grade of enamel coating shall be grade '1'. Increase in dimensions for CTC at sl. no. 1 (iii) shall be 0.085 ± 0.025 mm due to enamel coating and 0.06 ± 0.02 mm due to epoxy coating.
3. The bidders shall guarantee that curing properties and shelf life of the Epoxy Coated CTC shall not be affected by transportation in GP container in the ambient temperature up to 50° C.
4. The CTC should be free from instability / twisting / entanglement / tilting when unwound from the drum / payoff.
5. The bidder has to comply BHEL Quality Assurance Plan no. QC/TCB/QAP/BO/55 Rev. 01. In some cases, where considered essential, BHEL's customer Quality Assurance Plan shall also to be adhered by the suppliers in addition to BHEL Quality Assurance Plan.
6. **Inspection of material :-** BHEL reserves the right to get the material at source inspected through its own Engineers / Customer / Third party (TP) inspection agency (e.g. Lloyds, Bureau Veritas, SGS etc.). Seller shall submit the test certificates covering test results for each size of CTC as required in our purchase / technical specification. Test certificates for Copper, Insulating paper, Enamel etc, and CTC shall be submitted along with each supply, complete in all respect.
7. **Guarantee:** CTC under this tender shall be free from any kind of manufacturing defect and shall be under guarantee for a period of 12 months from the date of dispatch or until testing of transformers using CTC supplied under this enquiry, whichever occurs earlier.
8. Number of parallel strands shall be from 5 to 95 both inclusive & cross sectional area up to 35 sq. mm.
9. Drum width i.e dimension 'D' of Annexure-I of spec AA28129/AA28127 shall be 440 mm (max.).The supplier can select drum designation 8 or 9 from Annexure-I of spec AA 28127/28129 depending upon the 'length per drum' requirement of CTC to be supplied.
10. Bidders shall mark on each drum/package of CTC the following data:
 - Gross and net weight.
 - Weight of empty bobbin/drum.
 - Weight of other packing material

Ce Ce Krishnan
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(K. G. Krishnan)
DGM (TRE)