

Research Designs and Standards Organisation  
(Traction Installation Directorate)

Reasoned document of TI/STR/039 for Continuous Cast Silver Bearing Copper (CCSBC) Wire Rods.

1. STR no. TI/STR/039 for Continuous Cast Silver Bearing Copper (CCSBC) Wire Rods was uploaded on RDSO website for one month dated 29.06.2020 for seeking comments,
2. Comments/Suggestion received from viewers are as below.

Clause No.	Particular in Draft STR	Comments Received	RDSO Remarks
1.0	This Schedule of Technical Requirements (STR) is to assess manufacturing capability of the Vendor for new Registration /Approval in RDSO to manufacture and supply of Continuous Cast Silver Bearing (CCSBC) Copper Wire Rods of size 19.1 to 26.5 mm diameter to RDSO approved Vendors of Silver Bearing Grooved Copper Contact wire. This STR shall be read in conjunction with RDSO Specification No. TI/SPC/OHE/CW(Cu-Ag)/0130 with latest amendments.	<b><u>M/s Hindalco Industries Limited</u></b>  The preference should be given to the Domestic manufacturers of CCSBC Rods in line with the Make in India and Atmanirbhar Bharat.	In compliance of Spl DG letter no. SplDG(VD)/Misc dated 25.06.2020 regarding inclusion of Make in India clause in the technical specification, para 1.2 added.
2.2.1(i)	Raw material : Electrolytic grade Copper cathodes conforming to the requirement of LME Grade `A` copper as listed in the London Metal Exchange.Facility for alloying silver with `A` grade copper cathode and manufacturing of continuous cast silver bearing copper rod to suitable diameter shall be available with the firm	<b><u>M/s Vedanta Limited</u></b>  Amend - "Copper used, should be Grade `A` copper conforming to the chemical composition of Cu-Cath-1 of IS 191:2007 or latest"	Not accepted. To ensure quality of copper used.
2.2.1(vii)	Ultrasonic flaw detector.	<b><u>M/s Hindalco Industries Limited</u></b>  As per the specification No. TI/SPC/OHE/CW(Cu-Ag)/0130 (02/2020) and clause No.8.5.8, the ultrasonic test is required during production stage of Contact Wire by the wire manufacturer. So the above clause is not required. Reason: Ultrasonic testing is done by contact wire manufacturers pre, post & during drawing of contact wires, so no need to include Clause "Ultrasonic Testing" for CCC wire rod. Also, CCC wire rod is tested by "Eddy current" as per OEM-	Not accepted as ultrasonic/eddy current testing of rod for detecting blow holes or any manufacturing defects is essential at manufacturing stage of Rod.  However, Eddy current is added as option to Ultrasonic current

## 127989/2020/O/o PED/TI/RDSO

		South Wire guidelines.	
2.1.1(xiv)	----	---	New para added "Extrusion machine for Vertical upward continuous casting process." In line with M/s APAR Industries comment regarding requirement of further processing of rod manufactured by Vertical upward continuous casting process
2.3(3)	Oxygen analyzer	<b><u>M/s APAR Industries</u></b>  Clarification required whether oxygen analyser required or not if not than the same shall be removed from STR. As oxygen can be verified via spectrometer which is already included in STR.	May be accepted.  Oxygen analyser added as desirable facility, as some spectrometer may not determine oxygen content. In such case manufacturer need to procure oxygen analyser.