

Research Designs and Standards Organisation  
(Traction Installation Directorate)

Reasoned document of RDSO's Specification No. TI/SPC/OHE/CAT(Cu-Cd)/0971 for Cadmium Copper Conductors for Overhead Electric Traction, which is now renamed as TI/SPC/OHE/CAT(Cu-Cd)/0971

1. RDSO's Specification No. TI/SPC/OHE/CAT(Cu-Cd)/0971 for Cadmium Copper Conductors was uploaded on RDSO website for 15 days dated 28.08.2020 for seeking comments,
2. Comments/Suggestion received from viewers are as below.

Clause No.	Particular	Comments Recieved	RDSO's Remark			
Table-3	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Weight Per KM</td> </tr> <tr> <td>Min. (Kg.)</td> </tr> <tr> <td>30.67</td> </tr> </table>	Weight Per KM	Min. (Kg.)	30.67	<p><b><u>M/s KEC</u></b> Minimum weight of 2.08 mm wire is 30.36 Kg/Km as per density formula.</p> <p><b><u>M/s Chandra Metals,</u></b> <b><u>M/s JK Cables,</u></b> <b><u>M/s Gupta Power</u></b> Minimum weight of 2.08 mm wire is 30.36 Kg/Km as per density formula.</p>	May be accepted. Minimum diameter changed to 2.09 mm.
Weight Per KM						
Min. (Kg.)						
30.67						
8.3.8 & 9.3	The stranded conductor shall be offered for inspection in a batch of 6 drums at a time. One sample of stranded conductor shall be taken from each drum for the tests prescribe in Clause 9.1. After visual examination, measurement of overall diameter, measurement of weight, measurement of resistance and measurement of lay ratio, three samples of wire shall be taken and subjected to test prescribed in clause 9.1(i), 9.1(ii), 9.1(iii), 9.1(v), 9.1(vi), 9.1(vii) & 9.1(x). For test prescribed in clause 9.1(x), three samples of wire from each drum, shall be tested for trace elements, cadmium and phosphorous content by spectrometer, after that one sample of wire from offered batch(6 drums) shall be tested for copper content	<p><b><u>M/s KEC</u></b></p> <p>As per IS: 191-2007 clause 7.2 we can also use of any established machine. We are following chemical test on three wires of each drum by spectrometer. If this method is important then Kindly allow us to do this test on one sample per lot (that we offer for final inspection) instead of one sample of wire from offered batch(6 drums) shall be tested for copper content</p> <p><b><u>M/s Chandra Metals</u></b> <b><u>M/s JK Cables</u></b> <b><u>M/s Gupta Power</u></b> As per IS: 191-2007 clause 7.2 we</p>	Spectrometer gives copper content by difference method(100-trace elements) instead of tracing copper. Other method/equipment to determine Copper content with accuracy may be suggest. The same will be analysed.			

		can also use of any established machine. We are following chemical test on three wires of each drum by spectrometer. If this method is important then can we take one sample against whole lot which we will offer for final inspection. It's request that remove this old method from specification or use only for type testing.	
9.1	---	<b><u>CORE/Allahabad</u></b> Specification may be reviewed to include the checks required to ensure correctness of counter, to avoid cases of supply of short drum lengths of Contact wire on account of faulty counter meter. Specification may be reviewed to include the aspect of actual weighment of Tare weight of drum during RITES inspection.	May be accepted.
9.2(ix)	Weighment of 3 or 1/5 <sup>th</sup> of offered Catenary Wire drums for acceptance test whichever is higher, for gross weight. The inspector shall verify the results of manufacturer's tests.	<b><u>CORE/Allahabad</u></b> Specification may be reviewed to include the aspect of actual weighment of Tare weight of drum during RITES inspection.	May be accepted.
9.2 Note	----	<b><u>CORE/Allahabad</u></b> Specification may be reviewed to include the aspect of actual weighment of Tare weight of drum during RITES inspection.	May be accepted
9.6(f)	----	-----	For checking the authenticity of proof of purchase documents