

Guaranteed Technical Particulars for
Super Enameled Aluminum winding wire of Grade-2 & class-130

Name of Firm :

Standard : IS:13730(Part-0/Sec-3) & 13730(Part-9) & other relevant IS with latest amendments.

Sl no	Parameter	Min Guaranteed Value				
1	Nominal Conductor Diameter (bare)	1.32 mm	1.40 mm	1.52 mm	1.62 mm	2.03 mm
2	conductor tolerance ± (mm)	0.013 mm	0.014 mm	0.015 mm	0.016 mm	0.020 mm
3	Minimum increase due to insulation	0.069 mm	0.069 mm	0.071 mm	0.073 mm	0.077 mm
4	Resistivity (ohm-mm2/ meter)	0.0280	0.0280	0.0280	0.0280	0.0280
5	Minimum Elongation %	15%	15%	15%	15%	15%
6	Minimum Tensile strength	80 N/mm2	80 N/mm2	80 N/mm2	80 N/mm2	70 N/mm2
7	Flexibility and adherence test					
	(i) Mandrel winding test (Nominal Conductor Diameters Up to and Including 1.600 mm)	The coating shall show no crack after the wire has been wound on a mandrel having diameter '3d' (d is the nominal diameter of wire).			--NA--	--NA--
	(ii) Stretching test (Nominal Conductor Diameters Over 1.000 mm)	The coating shall show no crack after the wire has been elongated 15%				
	(iii) Jerk test (Nominal Conductor Diameters Up to and Including 1.000 m m)	--NA--	--NA--	--NA--	--NA--	--NA--
8	Heat shock Test (Nominal Conductor Diameters Up to and Including 1.600 mm)	The coating shall show no crack. The minimum heat shock temperature shall be 155° C. The mandrel diameter shall be '3d' (d is the nominal diameter of wire).			The coating shall show no crack after the wire has been elongated 15%. The minimum heat shock temperature shall be 155° C.	
9	Resistance to solvents Test	Using a pencil of hardness "H" the coating shall not be removed				
10	Minimum Breakdown voltage (At room Temperature)	5000 Volt (rms)				
11	Checking of conductors declared weight.	verification as per offer list at site				
12	Max Gross weight of each reel (with material)	18 Kg (approximate)				
<u>Note :</u>	1. The result shall cover all aspects of technical specification and relevant IS. 2. Each reel shall have the Name of manufacturer/supplier and details of Purchaser engraved/ embossed necessarily on it. 3. The conductor should remain at least half inch below the outer periphery of drum /reels so that the material is not damaged.					