

1XXX Series Aluminum Rods for Electrical Applications

Chemical Composition

Aluminum Alloy Designation	% Chemical Composition														
	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ga	B	Ti	Va	Ti+Va	Other Each	Other Total	AL
1100	0.95		0.05-0.20	0.05	-	-	0.10	-	-	-	-	-	0.05	0.15	99.00
1120	0.10	0.40	0.05-0.35	0.01	0.20	0.01	0.05	0.03	0.05	-	-	0.02	0.03	0.10	99.20
1350	0.10	0.40	0.05	0.01	-	0.01	0.05	0.03	0.05	-	-	0.02	0.03	0.10	99.50
1370	0.10	0.25	0.02	0.01	0.02	0.01	0.04	0.03	0.02	-	-	0.02	0.03	0.10	99.70
Grade 2 of IS 4026 std.	0.13	0.30	0.04	0.01	-	Cr+Zr 0.01 each	-	-	-	-	-	0.02	0.03	0.10	99.60

Electrical & Mechanical Properties of Aluminum Alloy Rods.

Aluminum Alloy Designation	APAR Product Code	Temper	Diameter	Tensile strength (Mpa)		Elongation	Resistivity	Conductivity
			(mm)	Min	Max	(%)	($\mu\Omega\text{m}$)	(%IACS)
1100	1100		9.50 ± 0.50	95	125	16.0-16.8	30.372	56.77
1120	1120		15.00 ± 0.50	145	151	6.8-7.6	29.725	58.00
1350 / 1370	EC - 2HO	O	9.50 ± 0.50 12.50 ± 0.50	-	70	20.0	27.367	63.00
	EC - 2H01	O	9.50 ± 0.50 12.50 ± 0.50	-	90	15.0	27.899	61.80
	EC - 2H2	H2	9.50 ± 0.50 12.50 ± 0.50	93	123	4.0 - 8.0	28.264	61.00
	EC - 2H4	H4	9.50 ± 0.50 12.50 ± 0.50	93	123	4.0 - 8.0	28.264	61.00
	EC - 2H12	H12	9.50 ± 0.50 12.50 ± 0.50	83	117	4.0 - 8.0	28.035	61.50
	EC - 2H14	H14	9.50 ± 0.50 12.50 ± 0.50	103	138	4.0 - 8.0	28.080	61.40
	EC - 2H16	H16	9.50 ± 0.50 12.50 ± 0.50	117	152	4.0 - 8.0	28.126	61.30
	EC - 2H19	H19	9.50 ± 0.50 12.50 ± 0.50	93	123	4.0 - 8.0	28.172	61.20
Grade 2 of IS 4026 std.	EC - 211	G2-T1	9.50 ± 0.50	64	98	12.0	28.035	61.50
	EC - 212	G2-T1	9.50 ± 0.50 12.50 ± 0.50	98	123	8.0	28.035	61.50
	EC - 221	G2-T2	9.50 ± 0.50	64	98	12.0	28.264	61.00
	EC - 222	G2-T2	9.50 ± 0.50	83	123	8.0	28.264	61.00

We develop and manufacture a broad range of alloys.

The table above shows some typical values but we can also produce according various international standards and tailor made customer specifications.