

Rolled Products

AERIS 1220 (CuZn30)



Material Designation		Chemical Composition (Reference)		Typical Application
EN	CuZn30	Cu	70%	
UNS*	C26000	Zn	balance	

*United Numbering System

- Jewellery and metal goods
- Deep drawn parts
- Components for the electrical industry
- Stamped parts
- Connectors

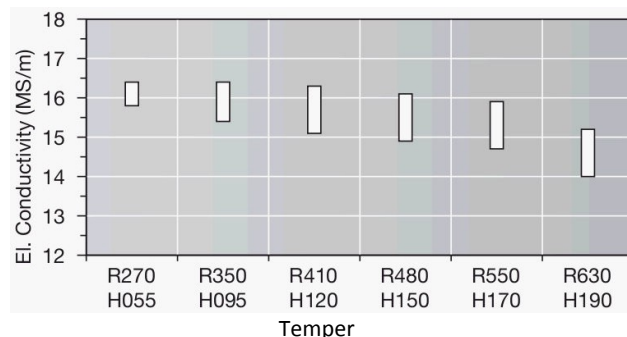
Physical Properties*			Fabrication Properties		Corrosion Resistance
Electrical Conductivity	MCM/M % IACS	16.0 27.6	Capacity for Being Cold Worked	excellent.	
Thermal Conductivity	W/(m·K)	126	Machinability	less suitable	
Coefficient of Electrical Resistance**	10 ⁻³ /K	1.5	Capacity for Being Electroplated	excellent	
Coefficient of Thermal Expansion**	10 ⁻⁶ /K	19.7	Capacity for Being Hot-Dip Tinned	excellent	
Density	g/cm ³	8.55	Soft Soldering	excellent	
Modulus of Elasticity	GPa	114	Resistance Welding	good	
Specific Heat	J/(g·K)	0.377	Gas Shielded Arc Welding	fair	
* Reference values at room temperature			Laser Welding	less suitable	
** Between 0 and 300°C					

Good resistance to: fresh water, neutral or alkaline solutions, organic compounds as well as land, sea, and industrial atmosphere.

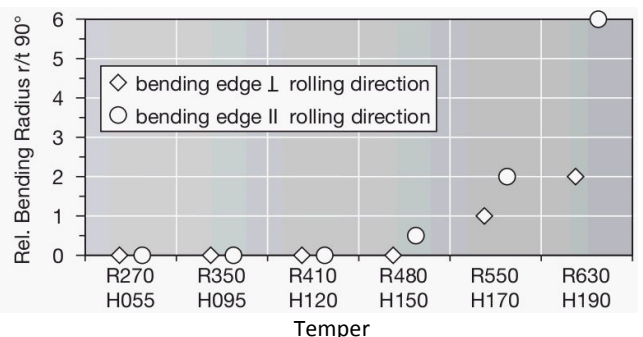
Not resistant to: acids, hydrous sulphur compounds, hydrous ammonia (stress corrosion cracking) in non-stress-relieved condition.

Mechanical Properties							
Temper		R270	R350	R410	R480	R550	R630
Tensile Strength, Rm	MPa	270-350	350-430	410-490	480-560	550-640	≥630
Yield Strength, Rp _{0.2}	MPa	≤160	≥170	≥260	≥430	≥500	-
Elongation, A _{50mm}	%	≥40	≥21	≥9	≥4	-	-
Temper		H055	H095	H120	H150	H170	H190
Hardness HV		55-90	95-125	120-155	150-180	170-200	≥190
Temper		G010	G020	G030	G050	G075	
Grain Size	mm	≤0,015	0,015-0,030	0,020-0,040	0,035-0,070	0,050-0,100	
Hardness HV		≤120	≤95	≤90	≤80	≤70	

Electrical Conductivity



Bendability (Strip Thickness $t \leq 0.5$ mm)



Types and Formats Available

- Standard coils with outside diameters up to 1400 mm
- Traverse-wound coils with drum weights up to 1,5 t
- Multicoil up to 5 t
- Hot-dip tinned strip
- Contour-milled strip
- Sheet
- Strip and sheet with protective coating

Dimensions Available

- Strip thickness from 0.10 mm; Thinner gauges on request
- Strip width from 3 mm, however min. 10 x strip thickness