

Technical Data Sheet

AMPCO[®] 22

Extruded bars



Nominal composition:

Aluminium	(Al)	14.4%
Iron	(Fe)	4.7%
Others		max. 0.5%
Copper	(Cu)	balance

Mechanical and physical properties	Units	Nominal Values
Tensile strength R_m	MPa	724
Yield strength $R_{p 0.2}$	MPa	427
Elongation A_5	%	0.5
Brinell hardness	HB 30	332
Rockwell hardness	HRC	35
Reduction of area ψ	%	0
Compressive strength R_{mc}	MPa	1351
Compressive strength, 0.1 % perm. set	MPa	510
Proportional limit in compression R_{pc}	MPa	241
Modulus of elasticity E	GPa	103
Charpy $_{aK}$	J	2.7
Izod $_{aK}$	J	2.7
Density ρ	g / cm ³	7.06
Coefficient of expansion α	10 ⁻⁶ / °K	16.2
Thermal conductivity λ	W / m · °K	42
Electrical conductivity γ	m / Ω · mm ²	6
Electrical conductivity	% I.A.C.S.	10
Specific heat c_p	J / g · °K	0.42

Assurances given with respect to properties or uses are subject to written approval from AMPCO METAL.

AMPCO[®] 22 is a duplex structure alloy of approx. 50 % of each phase - gamma 2 and beta. It is remarkable because of its hardness, its excellent compression and wear resistance and by its sliding properties.

As the elongation of the material is very low, thin sections should be avoided and the material should be well backed up.

APPLICATIONS:

The field of service of AMPCO[®] 22, with few exceptions, is limited to forming and/or drawing stainless steel, especially when runs are long or gauge is heavy and it is essential that tolerances be maintained.