Technical Data Sheet

AMPCO® 22

Forgings

Nominal composition:

Aluminium	(Al)	14.1%
Iron	(Fe)	4.7%
Others		max. 0.5%
Copper	(Cu)	balance

Mechanical and physical properties	Units	Nominal Values
Tensile strength R_m	KSI	90
Yield strength $Rp_{0.2}$	KSI	77
Elongation in 2"	%	0.5
Brinell hardness	BHN 30	338
Rockwell hardness	HRC	36
Reduction of area ψ	%	0
Compressive strength R_{mc}	KSI	209
Compressive strength, 0.1 % perm. set	KSI	81
Shear strength R_{cm}	KSI	66
Modulus of elasticity E	KSI	15000
Density ρ	LBS / IN³	0.255
Coefficient of expansion α	IN / IN / °F	$9 \cdot 10^{-6}$
Thermal conductivity λ	CGS	23
Electrical resistivity γ (1 mm^2 section)	Microhms/ Meter	167
Electrical conductivity	% I.A.C.S.	10
Specific heat c_p	BTU / LB. °F	0.1

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 are maintained.