

## Technical Data Sheet

# AMPCO<sup>®</sup> 22

## Continuous Cast



### 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 $R_m$	KSI	85
Yield strength $R_p$ 0.2	KSI	71
Elongation in 2"	%	0.5
Brinell hardness	BHN 30	331
Rockwell hardness	HRC	35
Reduction of area $\psi$	%	0
Compressive strength $R_{mc}$	KSI	210
Compressive strength, 0.1 % perm. set	KSI	95
Shear strength $R_{cm}$	KSI	70
Modulus of elasticity E	KSI	15000
Density $\rho$	LBS / IN <sup>3</sup>	0.255
Coefficient of expansion $\alpha$	IN / IN / °F	$9 \cdot 10^{-6}$
Thermal conductivity $\lambda$	CGS	0.1
Electrical resistivity $\gamma$ (1 mm <sup>2</sup> 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<sup>®</sup> 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<sup>®</sup> 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.