

# Technical Data Sheet

## AMPCO<sup>®</sup> 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 $R_m$	MPa	620
Yield strength $R_{p0.2}$	MPa	531
Elongation $A_5$	%	0.5
Brinell hardness	HBW 10/3000	338
Rockwell hardness	HRC	36
Reduction of area $\psi$	%	0
Compressive strength $R_{mc}$	MPa	1441
Compressive strength, 0.1 % perm. set	MPa	559
Shear strength $R_{cm}$	MPa	455
Modulus of elasticity E	GPa	103
Density $\rho$	$g / cm^3$	7.06
Coefficient of expansion $\alpha$	$10^{-6} / K$	16.2
Thermal conductivity $\lambda$	$W / m \cdot K$	42
Electrical conductivity $\gamma$	$m / \Omega \cdot mm^2$	6
Electrical conductivity	% I.A.C.S.	10
Specific heat $c_p$	$J / g \cdot K$	0.42

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 are maintained.