

Technical Data Sheet

AMPCO[®] 25

Forgings

Nominal composition:

(not published)

Mechanical and physical properties	Units	Nominal Values
Brinell hardness	HBW 10/3000	375
Rockwell hardness	HRC	40
Compressive strength R_{mc}	MPa	1579
Compressive strength, 0.1 % perm. Set	MPa	706
Shear strength R_{cm}	MPa	451
Modulus of elasticity E	GPa	110
Density ρ	g / cm^3	6.93
Coefficient of expansion α	$10^{-6} / K$	16.2
Thermal conductivity λ	$W / m \cdot K$	33
Electrical conductivity γ	$m / \Omega \cdot mm^2$	4
Electrical conductivity	% I.A.C.S.	8
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[®] 25 is a patented alloy which displays outstanding mechanical properties.

The extreme hardness, linked with an excellent compressive strength and very good friction properties, makes it ideal as a forming and drawing die material.

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

APPLICATIONS:

The phenomenal success of this alloy led to its use as forming rolls, bending and wiping blocks and it is considered the standard material in this field of applications.

Due to its inherent friction properties, this alloy has an excellent behaviour in any wear application where high compression loads are present.