Technical Data Sheet

AMPCOLOY® 940

Sand Castings

Nominal composition:

Nickel	(Ni)	2.5%
Silicium	(Si)	0.7%
Chromium	(Cr)	0.4%
Copper	(Cu)	balance

Nearest international specifications:

D	**DIN**	
F	**AFNOR**	
GB	**BS**	
USA	**RWMA**	**Class 3**

Mechanical and physical properties	Units	Nominal Values
Tensile strength Rm	MPa	544
Yield strength Rp 0.5	MPa	475
Elongation A5	%	8
Brinell hardness	HBW 10/3000	210
Rockwell hardness	HRB	95
Reduction of area ψ	%	18
Modulus of elasticity E	GPa	131
Density ρ	g / cm³	8.71
Coefficient of expansion α	10^{-6} / K	17.5
Thermal conductivity λ	W / m · K	208
Electrical conductivity γ	m / Ω · mm²	28
Electrical conductivity	% I.A.C.S.	48
Specific heat Cp	J / g · K	0.38

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

AMPCOLOY® 940 is a patented alloy which meets the demands of users of the RWMA class 3 alloys without Beryllium. In the industrialized countries, stricter health and safety instructions on the use of noxious elements have forced AMPCO METAL to develop this new alloy. It replaces the AMPCOLOY® 95 in practically all applications.

APPLICATIONS:

AMPCOLOY® 940 is used wherever a good electrical or thermal conductivity is required together with high mechanical properties:

Electrode holders

Parts for energy engineering