Technical Data Sheet
AMPCO® 8
Rolled sheet and plate

Nominal composition:

Aluminium	(Al)	6.5%
Iron	(Fe)	2.5%
Tin	(Sn)	0.25%
Others		max. 0.5%
Copper	(Cu)	balance

Mechanical and physical properties	Units	Nominal Values			
		Thickness ≤ 6.4 mm	Thickness 6.4 - 12.7 mm	Thickness 12.7 - 50.8 mm	Thickness 50.8 - 76.2 mm
Tensile strength R_m	MPa	552	538	524	483
Yield strength $Rp_{0.5}$	MPa	283	248	234	214
Elongation A_5	%	40	40	42	40
Brinell hardness	HBW 10/3000	153	149	143	140
Rockwell hardness	HRB	82	81	79	78
Reduction of area ψ	%	35	40	40	35
Compressive strength R_{mc}	MPa	862	827	758	689
Compressive strength, 0.1 % perm. set	MPa	…	…	248	…
Proportional limit in compression R_{pc}	MPa	172	165	159	145
Shear strength R_{cm}	MPa	359	345	310	290
Modulus of elasticity E	GPa	124	124	124	124
Charpy $_{aK}$	J	61	61	61	54
Izod $_{aK}$	J	88	88	88	81
Fatigue (100'000'000 cycles) $_{\sigma N}$	MPa	179	179	172	145
Density ρ	g / cm³	7.95			
Coefficient of expansion α	10^{-6} / K	16.3			
Thermal conductivity λ	W / m · K	54			
Electrical conductivity γ	m / Ω · mm²	7			
Electrical conductivity	% I.A.C.S	12			
Specific heat c_p	J / g · K	0.42			

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

AMPCO® 8 is a single phase alloy (100 % alpha) which possesses high tensile and good yield strength and has good properties at high temperatures (260°C) and sub-zero temperatures.
AMPCO® 8 is ductile, easily sheared, bent or deep drawn on standard equipment. It has a high impact and fatigue strength.
AMPCO® 8 is a fair hot working material which responds favourably to cold working, the only way of increasing its hardness. Correct annealing will remove any cold worked conditions.

APPLICATIONS:

AMPCO® 8 sheet and plate has excellent corrosion resistance, not only in alkaline or reducing environments

but also in oxydising media. This alloy is ideally suited for applications in the chemical and marine industry.

Its inherent wear resistance properties make it well adopted for wear strips and wear plates. Other uses, where both corrosion and wear are factors include chutes, troughs and wear plates in contact with both dry and wet abrasive cereals and crystalline chemicals, etc.