

bercoweld® A35 is used for welding cast and forge parts made of nickel-aluminum-bronze in shipbuilding (ship propellers, etc.), parts for power stations including valves, sieves, pumps, pipe systems, as well as for apparatus engineering and food containers. Buildup welding on steel and AlBz, including multi-material alloys. The weld metal is resistant to seawater and corrosion and is also resistant to wear (for example, simultaneous exposure to seawater, cavitation, and erosion).

Standardization and composition

ISO 24373	CuAl9Ni5Fe3Mn2 Cu6328
Cu	balance
Al	8.50 - 9.50
Ni	4.00 - 5.50
Fe	3.00 - 5.00
Mn	0.60 - 3.50
Others	max. 0.5

Physical properties

Density (kg/dm³)	7.5
Melting range (°C)	1015 - 1045
Thermal conductivity (W / m x K)	20 - 40
Coefficient of linear mean expansion (10⁻⁶/K)	19.3
Electrical conductivity (m / Ω x mm²)	3 - 4
Resistivity (Ω x mm² / m)	0.20 - 0.25

Mechanical properties of the weld joint (standard data)

Heat treatment	non treated
Tensile strength (MPa)	690
Elongation (%)	19
Brinell hardness (HB 2.5/62.5)	min. 200
Notched bar impact test (Av (J))	68

Delivery options

Make-up	Weight/Length	Dimension
SD300 / BS300 / K300	15 kg	1.20 / 1.60 mm