PRODUCT SPECIFICATION

Lastek 503

Seawater resistant

CLASSIFICATION

EN ISO 24373 : CuNi30Mn1FeTi
DIN 1733 : SG CuNi30Fe

GENERAL DESCRIPTION

Alloy for TIG welding of copper-nickel alloys with 10-30% nickel (Cunifer) or for joining these alloys to other nickel alloys.
High corrosion and erosion resistance in seawater.
Surfacing of steel and cast iron.
High purity weld deposit.
Porous free welds, with high toughness.

APPLICATIONS

Seawater condenser pipes, desalination plants, chemical industry, heat exchangers.

CHEMICAL COMPOSITION (%) (Typical values, all weld metal)

Ni : 29.00 - 32.00	**Mn :** 0.50 - 1.50	**Fe :** 0.40 - 1.40	**Ti :** 0.20 - 0.50	**Cu :** Balance

MECHANICAL PROPERTIES (Typical values, all weld metal)

Yield Strength N/mm²	Tensile Strength N/mm²	Elongation 5d (%)	Impact Strength Charpy V notch (ISO-V)
≥ 180 MPa	≥ 350 MPa	≥ 25%	

GENERAL INFORMATION

Welding positions				
Shielding gas	Argon (or Helium or Argon/Helium mixed gas)			
Packing	5 kg in a cardboard box			
Polarity	DC, with the torch on the negative pole.			
Diameter (mm)	1.6	2.0	2.4	3.2
Lenght (mm)	1000	1000	1000	1000

Tips & tricks

Always thoroughly remove oil and grease.
During welding of copper-nickel alloys, take into consideration the relatively poor thermal conductivity of these alloys (contrary to pure copper). Therefore welding should be done fast and with a small melting pool without preheating.