



DAIKOWT 412

GTAW

COPPER ALLOYS
CuNi 90-10

DESCRIPTION

Copper-nickel rod 90/10

The weld metal of this wire is developed to match CuNi 90/10 alloys and is nominally composed of 86% Cu and 10.5% Ni. Applications include offshore constructions, desalination plants, evaporators, condensers, and seawater and brackish water treatment facilities.

SPECIFICATIONS

EN ISO 24373	S Cu 7061	AWS A5.7	ERCuNi
DIN 1733	SG-CuNi10Fe	Shielding	I1
Positions	PA, PB, PC, PD, PE, PF	Current	DC-
Packaging Type	5kg carton tube		

ASME QUALIFICATIONS

F-No (QW432)	34
A-No (QW442)	-

HARDNESS

80HV - 110HV

CHEM. COMP. %	DEFAULT	MECHANICAL PROPERTIES	MIN. PER STANDARD	PRODUCT	
Mn	0.8	Tensile strength R_m MPa	345	400	
Ni	10	Yield strength $R_{p0.2}$ MPa	-	180	
P	0.003	Elongation A ($L_0=5d_0$) %	0	32	
S	0.005	Impact Charpy ISO-V	-	200J @ 20°C	
Si	0.01	Impact Charpy ISO-V	-	-	
Fe	1.2	WELDING PARAMETERS	1.6 mm	2.4 mm	
Ti	0.3		Ampere	110A - 150A	175A - 250A
Pb	0.001		Voltage	-	-
			Packaging	Ø 1,6÷4,0 mm	Ø 1,6÷4,0 mm
		Packaging Type	5kg carton tube	5kg carton tube	



The information contained in this technical data sheet is provided for information purposes only, based on data believed to be reliable at the date of publication, and does not constitute a warranty or contractual commitment. Actual performance may vary depending on operating and application conditions; it is the user's responsibility to verify the suitability of the product for the intended application. The manufacturer disclaims any liability for errors, omissions, or improper use. For the latest version, please refer to www.daikowelding.com.



CuNi 90-10

DESCRIPTION

COPPER ALLOYS

CuNi 90-10

APPLICATION

This consumable is ideal for cladding and plating operations, provided that a buttering layer is applied. Usually, this buttering is executed with alloy 400 or pure nickel. It is widely used in offshore constructions, desalination plants, evaporators, condensers, and saltwater and marine treatment systems. Preheating is generally not necessary, with a maximum interpass temperature of 150 °C and no post-weld heat treatment (PWHT). It is crucial to avoid any contamination in the weld zone with foreign materials, particularly those from lead, tin, or zinc, to prevent cracks in the weld metal.

ALLOY TYPE

90/10 copper-nickel alloys.

MICROSTRUCTURE

Solid solution, single phase alloy.

MATERIALS

EN W.Nr.: 2.0872 (CuNi10Fe), 2.0882 (CuNi30Mn1Fe), 2.0883 (CuNi30Fe2Mn2)

ASTM: C71500, C96400 (cast)

UNS: C70600, C96200

PROPRIETARY: Cunifer 10 (VDM), Osna®-10 (KME)

