

NiCu 70/30

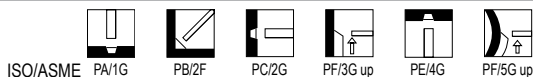
CLASSIFICATION

AWS A5.11/A5.11M : ENiCu-7
 ISO 14172 : E Ni 4060 (NiCu30Mn3Ti)

GENERAL DESCRIPTION

Basic all position electrode for welding CuNi and NiCu-alloys
High resistance to seawater corrosion (not stagnant)
Applicable for welding NiCu-alloys to mild and low alloyed steel
Very suitable for welding salt fabrication components
Excellent weldability and self releasing slag

WELDING POSITIONS



CURRENT TYPE

DC +

CHEMICAL COMPOSITION (W%), TYPICAL, ALL WELD METAL

C	Mn	Si	Cu	Ni	Ti	Fe
0.02	3.0	0.4	30.0	bal.	0.35	1.75

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Condition	0.2% Proof strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Impact ISO-V(J) -196°C
Required: AWS A5.11 ISO 14172 Typical values	not required min. 200 300	min. 480 min. 480 485	min. 30 min. 27 40	not required not required 110
AW				

PACKAGING AND AVAILABLE SIZES

	Diameter (mm)	2.5	3.2	4.0
	Length (mm)	300	350	350
Unit: PE tube	Pieces / unit	105	61	45
	Net weight/unit (kg)	1.7	1.9	2.1

Identification Imprint: NiCu-7 / NICU 70/30 Tip Color: black

NiCu 70/30: rev. EN 24

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MATERIALS TO BE WELDED

Steel grades	BS3076	DIN 17743	Mat. Nr	ASTM/ACI	UNS
	NA 13	NiCu30Fe	2.4360	Monel 400	N04400
		G-NiCu30Nb	2.4365		
	NA 18	NiCu30Al	2.4375	Monel K500	N05500

The NiCu 70/30 is also applicable for welding mild, low alloy, and stainless steels to CuNi and NiCu alloys

CALCULATION DATA

Sizes Diam. x length (mm)	Current range (A)	Current type	Arc time	Energy	Dep. rate	Weight/ 1000 pcs (kg)	Electrodes/ kg weldmetal B	kg electrodes/ kg weldmetal 1/N
			- per electrode at max. current - (S)*	E(kJ)	H(kg/h)			
2.5 x 300	45-70	DC+	50	72	0.8	20.7	90	1.85
3.2 x 350	70-90	DC+	65	129	1.2	32.5	46	1.49
4.0 x 350	90-130	DC+	67	245	1.75	47.1	31	1.51

*Stub end 35mm

WELDING PARAMETERS, OPTIMUM FILL PASSES

Diameter (mm)	Welding positions					
	PA/1G	PB/2F	PC/2G	PF/3Gup	PE/4G	PF/5Gup
2.5	65A	60A	65A	55A	55A	55A
3.2	90A	85A	90A	75A	75A	75A

REMARKS / APPLICATION ADVICE

Welding with Heat-Input max. 1.5 kJ/mm
Interpass temperature max. 150°C