

NiCrMo 60/16

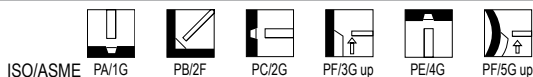
CLASSIFICATION

AWS A5.11/A5.11M : ENiCrMo-4
 ISO 14172 : E Ni 6276 (NiCr15Mo15Fe6W4)

GENERAL DESCRIPTION

A basic all position Ni-base CrMoW-alloyed electrode
 For welding Alloy C276 and comparable compositions
 Depending on the corrosion requirements also applicable for welding C-22 and C-4
 Applicable for surfacing in high temperature applications (up to 1200°C)
 Suitable for welding low temperature steel such as 5% and 9% Ni steel

WELDING POSITIONS



CURRENT TYPE

DC +

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

C	Mn	Si	Cr	Ni	Mo	W	Fe
0.015	0.5	0.05	15.5	bal.	16.0	4	6.5

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Condition	0.2% Proof strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Impact ISO-V(J)	
				+20°C	-196°C
Required: AWS A5.11 ISO 14172 Typical values	not required min. 400 550	min. 690 min. 690 800	min. 25 min. 22 40	not required not required 60	not required not required 50

PACKAGING AND AVAILABLE SIZES

	Diameter (mm)	2.5	3.2	4.0
	Length (mm)	300	350	350
Unit: PE tube	Pieces / unit	100	63	37
	Net weight/unit (kg)	1.7	1.8	1.9

Identification Imprint: NiCrMo-4 / NICROMO 60/16 Tip Color: grey

NiCrMo 60/16: rev. EN 24

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MATERIALS TO BE WELDED

Steel grades	DIN/EN	Mat. Nr.	ASTM/AISI	UNS
Ni Base high CrMo steel for high corrosion environments				
	NiMo16Cr15W	2.4819	C-276	N10276
	NiCr21Mo14W	2.4602	C-22	N06022
	NiMo16Cr16Ti	2.4610	C-4	N06455
9% Ni steel				
	X8Ni9	1.5662	A353/A353M A553/553M Type I A553/553M Type II	
5% Ni steel				
	X12Ni5 (12Ni19)	1.5680		

NiCroMo 60/16 is developed for welding C-276 material

Can also be applied for welding C-22 and C-4, depending on the corrosion requirements

CALCULATION DATA

Sizes		Current range (A)	Current type	Arc time	Energy	Dep. rate	Weight/ 1000 pcs (kg)	Electrodes/ kg weldmetal B	kg electrodes/ kg weldmetal 1/N
Diam. x length (mm)	(S)*			- per electrode at max. current - E(kJ)	H(kg/h)				
2.5 x 300	40-70	DC+							
3.2 x 350	70-100	DC+	61	137	1.34	32.5	44	1.43	
4.0 x 350	90-140	DC+	65	219	1.92	50.9	29	1.47	

*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	60A	55A	60A	60A	60A	60A
3.2	90A	80A	85A	80A	80A	80A
4.0	130A	120A	120A	120A	120A	120A

REMARKS / APPLICATION ADVICE

Welding with Heat-Input max. 1.5 kJ/mm

Interpass temperature max. 150°C