



FCW NI276P

Nickel type Alloy C-276
All positions flux cored wire

Classification

AWS A5.34 : ENiCrMo3T1-4

ISO 12153 : T Ni 6276 (NiCr15Mo15Fe6W4) P
M21 1

Description & Applications

Flux cored nickel base wire for gas shielded (Ar + CO₂) arc welding in all positions of high nickel alloys like Alloy C-276 and specials stainless steels. Used to weld heterogeneous assembly between Nickel alloys and low alloy steels or stainless steels and low alloy steels. Good resistance to various types of corrossions at high temperature. Excellent mechanical properties at low temperature up to -196°C.

Main applications: Offshore installations, tanks and piping system in chemical and petrochemical industries...

Base materials

UNS	Alloy	EN	Mat. N°
N10276	C-276	NiMo16Cr15W	2.4819
N06455	C-4	NiMo16Cr16Ti	2.4610
N06625	625	NiCr22Mo9Nb	2.4856
N08825	825	NiCr21Mo	2.4858
N08926	254SMO	X1NiCrMoCuN25 20 6	1.4529
	Steel 5% Ni	X12Ni5 / 12Ni19	1.5680
K81340	Steel 9% Ni	X8Ni9	1.5662

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Mo	Fe	Cu	Co	W	V	P	S	Ni
Min				14.52	15.0	4.0			3.0				50.0
Max	0.02	0.2	1.0	16.5	17.0	7.0	0.50	2.5	4.5	0.35	0.03	0.03	
Type	0.015	0.10	0.60	16.0	16.0	5.0	0.01	0.05	4.0	0.05	0.01	0.01	>50.0

Σ Others elements : <0.50

All Weld Metal Mechanical Properties

	R _{p0.2} (MPa)	R _m (MPa)	A ₅ (%)	KV (J)
Min	400	690	25	
Max				
Type	500	740	30	-196°C 60

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters			Shielding Gas
		Current (A)	Voltage (V)	Stick out (mm)	
FCAW = +	1.2	130 - 220	24 - 32	12 - 25	ISO 14175 : M21 (Ar + CO ₂) 10-20 l/min

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