

NIFIL C276 is an S Ni 6276 / ER NiCrMo-4 type solid MIG welding wire, supplied precision layer wound, depositing NiCr15Mo15Fe6W4 weld metal. Suitable for use with inert shielding gases.

NIFIL C276 is used for welding of CrMoW alloyed nickel alloys, matching with Alloy C276. Depending on the corrosion requirements also applicable for welding of C22 and C4. The Ni-CrMoW weld metal offers good corrosion resistance in wide range of aggressive organic and inorganic acid media. Also suitable for dissimilar welds and overlays on other high nickel and ferrous alloys, including duplex stainless steels.

NIFIL C276 is used for welding plate, pipework, vessels and tanks where general corrosion and stress corrosion cracking resistance in chemical and petrochemical plant, offshore gas and oil equipment and fuel gas desulphurisation plant.

Classification

EN ISO	18274: S Ni 6276 (NiCr15Mo16Fe6W4)
AWS	A5.14: ER NiCrMo-4

Chemical analysis (Typical values in %)

C	Mn	Si	P	S	Cr	Ni	Mo	Cu	Fe	Co	V	W
0.005	0.5	0.05	0.02	0.005	16	58	16	0.05	6	<1.0	0.2	3.5

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)
As Welded	> 500	> 740	> 43

Gas test: 30 % He + 2 % H₂ + 0,05 % CO₂, rest Ar

Shielding Gas - EN ISO 14175 : I1, I3

Materials

Alloy C276; UNS N10276; ASTM B575; B626

NiMo16Cr15W (2.4819)

Storage

Keep dry and avoid condensation.

Current condition and welding position

DC+

