

CLASSIFICATIONS

EN ISO 18274 : S Ni 6625 (NiCr22Mo9Nb)
 AWS A5.14 : ER Ni Cr Mo 3

DESCRIPTION

- Applicability in joint welding of steels with high Mo-contents to steels with Ni-based alloy steels, joint welding of different types of steels, and in welding of low-alloyed problematic steels
- Suitability for use in manufacture processes of pressure vessels with service temperatures between -196°C and + 550°C • High resistance to creep, to high temperatures, and to low temperatures (cryogenic applications) • Resistance to formation of oxide layers at temperatures up to 1200°C • Loss of elasticity at temperatures between 600°C - 800°C. • High strength against hot cracking. • General tendency towards diffusion of carbon at high temperatures or towards heat treatments of different materials. • Very high resistance to stress corrosion and to pitting corrosion (PREN 52). • Resistance to thermal shocks • Austenitic-structured stainless material with low coefficient of thermal expansion. • Very excellent performance in TIG welding. • Use of Ar or Ar+He mix as shielding gas.

CHEMICAL ANALYSIS OF WELD METAL % (TYPICAL)

Ni: Rest | C: 0.02 | Cr: 22.0 | Mn: 0.20 | Fe: 1.0 | Mo: 9.0 | Nb: 3.50

MECHANICAL PROPERTIES

Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Impact Strength		Elongation (L ₀ =5d ₀) (%)
		(ISO-V/+20°C)	(ISO-V/-196°C)	
540	800	140 J	75 J	38

BASE MATERIALS

• 1.4583 X10CrNiMoNb18-12, 1.4876 X10NiCrAlTi32-20, 1.4529 X1NiCrMoCuN25-20-7, X2CrNiMoCuN20-18-6, 2.4641 NiCr 21 Mo 6 Cu, 2.4856 NiCr 22 Mo 9 Nb, 2.4858 NiCr 21 Mo, 2.4816 NiCr 15 Fe • Welding of joining: P265GH, P285NH, P295GH, 16Mo3, S355N, X8Ni9 ((Inconel 600), ((Inconel 625), ((Incoloy 800)

WELDING POSITIONS



CURRENT TYPE

MIG D.C. (+) / TIG D.C.(-)

OPERATING DATA

Product Code	Diameter x Length (mm) / (inch)	Package Weight (Kg)
1011100179	1.00 / 0,040"	15
1011100180	1.20 / 0,047"	15
1011100181	1.6 x 1000 / 1/16 x 39"	5
1011100182	2.0 x 1000 / 5/64 x 39"	5
1011100183	2.4 x 1000 / 3/32 x 39"	5