TECHNICAL DATA SHEET

parweld
WELDING THE FUTURE

XP ER 316L

STAINLESS STEEL

CLASSIFICATIONS

EN ISO 14343-A	AWS A5.9
W 19 12 3 L	ER316L

KEY FEATURES AND APPLICATIONS

- Solid corrosion resisting chromium-nickel-molybdenum welding wire for welding of austenitic stainless alloys of 18% Cr - 8% Ni and 18% Cr - 10% Ni - 3% Mo-types.
- Excellent resistance to general, pitting and intercrystalline corrosion in chloride containing environments.
- This alloy has a low carbon content which makes it particularly recommended where there is a risk of intergranular corrosion.
- Ideal for service temperature up to 400°C max.
- Commonly used in chemical processing, food industries, shipbuilding, and a range of architectural applications.

BASE MATERIALS

1.4401 X5CrNiMo17-12-2, 1.4404 X2CrNiMo17-12-2, 1.4409 GX2CrNiMo19-11-2, 1.4429 X2CrNiMoN17-12-3, 1.4432 X2CrNiMo17-12-3, 1.4435 X2CrNiMo18-14-3, 1.4436 X3CrNiMo17-12-3, 1.4571 X6CrNiMoTi17-12-2 UNS S31600, S31603, S31635, S31640, S31653 AISI 316L, 316Ti, 316Cb

CHEMICAL COMPOSITION OF WIRE %

	C	Si	Mn	P	S	Cr	Ni	Mo	Cu
MIN	-	-	1.0	-	-	18.0	11.0	2.5	-
MAX	0.03	0.65	2.5	0.03	0.02	20.0	14.0	3.0	0.5

Single values are maximum values according to EN ISO 14343

MECHANICAL PROPERTIES OF ALL-WELD METAL - TYPICAL (MIN.) VALUES

Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)
468 (≥320)	625 (≥510)	36 (≥25)

Test data for mechanical properties are not guaranteed since actual as welded conditions depend on numerous variables

OPERATING DATA

Shielding Gases	Polarity
EN ISO 14175 - I1	DC-

PACKAGING AND AVAILABLE SIZES

Part Number	Diameter (mm)	Length (mm)	Weight (kg)	Packaging
XP30362	0.8	1000	5	PAP 20 Tube
XP30364	1.0	1000	5	PAP 20 Tube
XP30366	1.2	1000	5	PAP 20 Tube
XP30368	1.6	1000	5	PAP 20 Tube
XP30370	2.0	1000	5	PAP 20 Tube
XP30372	2.4	1000	5	PAP 20 Tube
XP30374	3.2	1000	5	PAP 20 Tube
XP30375	4.0	1000	5	PAP 20 Tube

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