TECHNICAL DATA SHEET

parweld
WELDING THE FUTURE

XP ER 2594S

STAINLESS STEEL

CLASSIFICATIONS

EN ISO 14343-A	AWS A5.9
G Z 25 9 4 N L W	ER2594

KEY FEATURES AND APPLICATIONS

- Solid corrosion-resistant, Super Duplex wire for welding austenitic-ferritic stainless alloys of the 25% Cr, 7% Ni, 4% Mo, low C types.
- Offers similar chemical and mechanical properties to wrought super duplex alloys like 2507 and ZERON 100.
- This alloy is primarily used in applications that demand exceptional corrosion resistance.
- Ideal for service temperatures up to 250°C max.
- Typical used in the oil and gas industries, desalination, chemical processing, drug manufacturing, and paper production industries.

BASE MATERIALS

1.4507, 1.4410, 1.4468, 1.4515, 1.4517, 1.4501, 1.4467, 1,4569, 1.4508

X2 CrNiMoCuN 25-6-3, X2 CrNiMoN 25-7-4, GX2 CrNiMoN 25-6-3, GX2 CrNiMoCuN 26-6-3, GX2 CrNiMoCuN 25-6-3-3, X2 CrNiMoCuWN 25-7-4, X2CrMnNiMoN26-5-4, X 2 CrNiMoN 26 7 4, GX2CrNiMoCuWN25-8-4

UNS S32520, S32550, S32750, S39274, S39277, S39553, S32760, J93380

Ferralium 255, SAF 2507, ZERON 100, UR 76 N, SM22Cr, SAF 2507, Alloy 2507, Alloy 2594

CHEMICAL COMPOSITION OF WIRE %

	C	Si	Mn	P	S	Cr	Ni	Mo	N	Cu	W
MIN	-	-	-	-	-	24.0	6.0	2.5	0.20	0.5	0.5
MAX	0.03	1.0	1.0	0.035	0.020	27.0	9.5	4.0	0.30	1.5	1.0

Single values are maximum values

MECHANICAL PROPERTIES OF ALL-WELD METAL - TYPICAL VALUES

Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)
≥550	≥750	≥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 - M12, M13	DC+

PACKAGING AND AVAILABLE SIZES

Part Number	Diameter (mm)	Spool	Weight (kg)	Pallet Qty
XP30288	1.0	BS300	15	72
XP30291	1.2	BS300	15	72

MADE IN EU

This information is subject to change and was accurate to the best of our knowledge at the time of printing. Please refer to www.parweld.com for the latest revision.