



CLASSIFICATIONS

EN ISO 14343-A	AWS A5.9
W 25 20	ER310

KEY FEATURES AND APPLICATIONS

- Solid corrosion-resistant chromium-nickel wire designed for welding heat-resistant austenitic steels in the 25% Cr, 20% Ni range.
- Primarily used for welding base metals of similar composition.
- Offers excellent oxidation resistance, particularly below 1000°C, thanks to its high chromium (Cr) content.
- This alloy is fully austenitic and therefore sensitive to hot cracking.
- Typical applications include industrial furnaces, fused salt treatment setups, annealing chambers, boiler components, and heat exchangers.

BASE MATERIALS

300 series austenitic stainless steel for welding e.g. AISI 310, 304, mild and carbon steels for overlay works.

CHEMICAL COMPOSITION OF WIRE %

	C	Si	Mn	P	S	Cr	Ni	Mo	Cu
MIN	0.08	0.30	1.0	-	-	25.0	20.0	-	-
MAX	0.15	0.65	2.5	0.03	0.03	28.0	22.5	0.75	0.75

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 (%)
485 (≥350)	645 (≥550)	30 (≥20)

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)	Length (mm)	Weight (kg)	Pallet Qty
XP30342	1.6	1000	5	PAP 20 Tube
XP30344	2.4	1000	5	PAP 20 Tube
XP30346	3.2	1000	5	PAP 20 Tube