

## XP ER 309L

STAINLESS STEEL



### CLASSIFICATIONS

| EN ISO 14343-A | AWS A5.9 |
|----------------|----------|
| W 23 12 L      | ER309L   |

### KEY FEATURES AND APPLICATIONS

- Solid corrosion resistant chromium-nickel wire for welding of similar steels, wrought and cast steels of 23% Cr-12% Ni types.
- Well-suited for depositing intermediate layers when welding clad materials.
- Good performance under carburising atmospheres.
- Ideal for service temperature up to 300°C max.
- Ideal for welding various components, including those in industrial furnaces, boilers, annealing chambers, heat exchangers, and fused salt treatment installations.

### BASE MATERIALS

42CrMo4, C45, 42MnV7, tool steels etc, 1.2780, 1.4541, 1.4550, 1.4710, 1.4712, 1.4713, 1.4724, 1.4729, 1.4740, 1.4741, 1.4742, 1.4746, 1.4762, 1.4745, 1.4825, 1.4826, 1.4828, 1.4832, 1.4878, X15CrNiSi20 12, G-X 40 CrNiSi209, AISI 446, AISI442, AISI309, UNS S30900, UNS S44200, UNS S4460

### CHEMICAL COMPOSITION OF WIRE %

|     | C    | Si   | Mn  | P    | S    | Cr   | Ni   | Mo  | Cu  |
|-----|------|------|-----|------|------|------|------|-----|-----|
| MIN | -    | -    | 1.0 | -    | -    | 22.0 | 11.0 | -   | -   |
| MAX | 0.03 | 0.65 | 2.5 | 0.03 | 0.02 | 25.0 | 14.0 | 0.5 | 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 (%) |
|----------------------|------------------------|----------------|
| 485 (≥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   |
|-------------|---------------|-------------|-------------|-------------|
| XP30330     | 1.6           | 1000        | 5           | PAP 20 Tube |
| XP30332     | 2.4           | 1000        | 5           | PAP 20 Tube |
| XP30336     | 3.2           | 1000        | 5           | PAP 20 Tube |