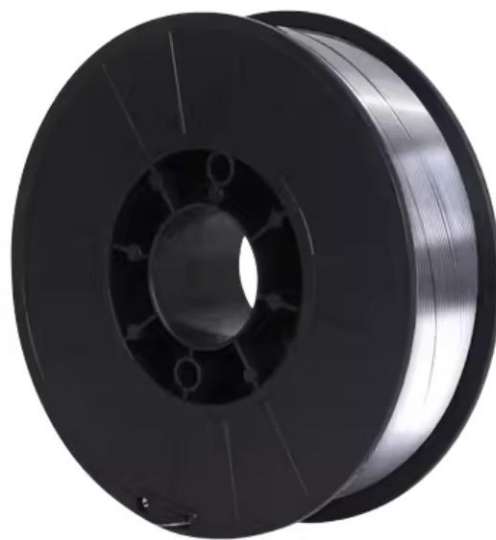


Used for welding dissimilar steels (such as carbon steel and stainless steel) and 309/309S stainless steel welding, commonly used in high temperature environments such as petrochemical pipelines, heat exchangers, boiler linings, etc.

Applicable process: MIG/MAG welding (recommended gas Ar + 1~2% O<sub>2</sub> or Ar + CO<sub>2</sub>).

### ■ Features:

- High alloy compatibility: High chromium-nickel (Cr/Ni) content alleviates the dilution effect when welding carbon steel and stainless steel.
- High temperature oxidation resistance: The weld has excellent oxidation resistance at high temperature ( $\leq 980^{\circ}\text{C}$ ).
- Process stability: Silicon (Si) optimizes the fluidity of the molten pool, reduces spatter, and forms smoothly.
- Low carbon design (L): Reduces the risk of intergranular corrosion and is suitable for multi-layer welding



### Chemical properties

Element	C	Cr	Ni	Mn	Si	P	S
Content	$\leq 0.03$	23-25	12-14	1.0-2.5	0.65-1	$\leq 0.03$	$\leq 0.03$

### Material properties

Characteristics	Value/Description
Tensile strength	$\geq 520$ MPa (75 ksi)
Yield strength	$\geq 210$ MPa (30 ksi)
Elongation (gauge length 50mm)	$\geq 35\%$
Impact toughness (-20°C)	$\geq 80$ J (Typical Value)
Electrical conductivity	$\approx 2.5\%$ IACS
Density	7.9 g/cm <sup>3</sup>
Melting point	1400~1450°C