THS-309 (ER309)

STAINLESS STEEL MIG WELDING WIRE

AWS A5.9 ER309
NB/T 47018 S309
GB/T 29713 S309
YB/H10Cr24Ni13

APPLICATION

Welding matching stainless steels, stainless steel linings, dissimilar steels such as 06Cr19Ni10 to low-carbon steel, and high-chromium or high-manganese steels.

CHARACTERISTICS

THS-309 is a 24% Cr-13% Ni stainless steel filler wire. Its high alloy content provides good high-temperature resistance. It offers a stable arc, good bead appearance, and all-position welding capability.

PRECAUTIONS

Remove rust, oil, moisture, and other contaminants from the workpiece before welding. Use Ar + 1-3% O_2 shielding gas for MIG welding. Establish a suitable welding procedure for the actual production conditions.

WELDING POSITIONS



MECHANICAL PROPERTIES

Items	Tensile strength (MPa)	Elongation (%)
Typical results	605	36

WIRE CHEMICAL COMPOSITION (%)

Items	C	Mn	Si	Cr	Ni	Mo	P	S	Cu
Requirements	≤0.12	1.00-2.50	0.30-0.65	23.00-25.00	12.00-14.00	≤0.75	≤0.025	≤0.020	≤0.75
Typical results	0.06	2.12	0.42	24.10	13.20	0.03	0.018	0.012	0.03