

GMAW Solid Wire for Stainless Steel

KMS-410

Classification

AWS	A5.9/A5.9M	ER410
JIS	Z3321	YS410
EN	14343-A	G 13
YB	T5092	H10Cr13

Shielding Gas: Ar+1~2%O₂(CO₂)

Applications and Features

- (1) Weld metal is martensitic structure with 13%Cr.
- (2) To prevent the crack in beads and HAZ, please apply preheat temperature: 200~300°C, PWHT: 700~760 °C.
- (3) Superior oxidation and corrosion resistance at 650 °C,.
- (4) Suitable for welding petro-refining and chemical industry, such as AISI 410 or 420 stainless steel.

Welding Position



Welding Instruction

- (1) Use Ar+1~2%O₂ for spray transfer and Ar+1~2%CO₂ for short-circuit transfer.
- (2) For other instructions, please refer to Appendix B and F.

Typical Chemical Composition of Weld Metal (wt%)

C	Si	Mn	P	S	Cr
0.11	0.34	0.46	0.013	0.009	11.77

Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation
N/mm ²	N/mm ²	%
570	390	25

Size and Suggested Operating Range (DC+)

Diameter (mm)	0.8	0.9	1.0	1.2	1.4	1.6	
Ar+1~2%CO ₂	Current (A)	40~120	60~140	80~160	100~210	-	-
	Voltage (V)	15~20	15~21	16~22	17~22	-	-
Ar+1~2%O ₂	Current (A)	160~210	170~260	180~280	200~300	210~320	220~330
	Voltage (V)	24~28	24~30	24~30	24~30	24~32	24~32