GMAW Solid Wire for Stainless Steel

KMS-310

Classification

AWS	S A5.9/A5.9M	ER310
JIS	Z3321	YS310
ΕN	14343-A	G 25 20

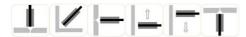
Shielding Gas: Ar+1~2%O₂(CO₂)

YB T5092 H12Cr26Ni21Si

Applications and Features

- (1) Weld metal is austenitic structure with 25%Cr-20%Ni.
- (2) Suitable for welding AISI 310S steel and dissimilar metals (carbon steel, Cr-Mo steel and stainless steel).
- (3) Ideal for welding in chemical processing and nuclear plants, as well as for furnace and heat treatment equipment, due to the high scaling temperature and excellent oxidation resistance.

Welding Position



Welding Instruction

- (1) Use Ar+1~2%O $_2$ for spray transfer and Ar+1~2%CO $_2$ for short-circuit transfer.
- (2) For welding dissimilar alloy, please refer to Appendix I.
- (3) For other instructions, please refer to Appendix B and F.

Typical Chemical Composition of Weld Metal (wt%)

С	Si	Mn	Р	S	Cr	Ni
0.09	0.41	2.01	0.010	0.007	27.36	21.55

Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation		
N/mm²	N/mm²	%		
610	480	44		

Size and Suggested Operating Range (DC+)

Diameter (mm)		8.0	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