

GMAW Solid Wire for Stainless Steel

KMS-307HM

Classification

AWS	A5.9/A5.9M	-
JIS	Z3323	-
EN	14343A	G 18 8 Mn
YB	T5092	-

Shielding Gas: Ar+1~2%O₂(CO₂)

Applications and Features

- (1) Weld metal is austenitic structure with 20%Cr-9%Ni-6%Mn.
- (2) 6% Manganese (Mn) increases resistance to hot cracking.
- (3) Suitable for welding work hardening manganese steel and armor plate.
- (4) Designed for joining dissimilar 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	Ni
0.06	0.41	6.21	0.012	0.010	19.31	8.24

Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation
N/mm ²	N/mm ²	%
600	470	42

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