

## GMAW Solid Wire for Stainless Steel

# KMS-307Si

### Classification

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

Shielding Gas: Ar+1~2%O<sub>2</sub>(CO<sub>2</sub>)

### Applications and Features

- ( 1 ) Weld metal is austenitic structure with 20%Cr-9%Ni-6%Mn.
- ( 2 ) High silicon level for increased puddle fluidity and toe wetting.
- ( 3 ) 6% Manganese (Mn) increases resistance to hot cracking.
- ( 4 ) Suitable for welding work hardening manganese steel and armor plate.
- ( 5 ) Designed for joining dissimilar stainless steel.

### Welding Position



### Welding Instruction

- ( 1 ) Use Ar+1~2%O<sub>2</sub> for spray transfer and Ar+1~2%CO<sub>2</sub> 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	0.82	6.10	0.018	0.012	19.22	8.10

### Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation
N/mm <sup>2</sup>	N/mm <sup>2</sup>	%
610	460	41

### Size and Suggested Operating Range (DC+)

Diameter (mm)	0.8	0.9	1.0	1.2	1.4	1.6	
Ar+1~2%CO <sub>2</sub>	Current (A)	40~120	60~140	80~160	100~210	-	-
	Voltage (V)	15~20	15~21	16~22	17~22	-	-
Ar+1~2%O <sub>2</sub>	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