

GMAW Solid Wire for Stainless Steel

KMS-253MA

Classification

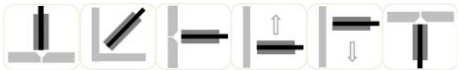
AWS	A5.9/A5.9M	-
JIS	Z3321	-
EN	14343-A	G 21 10 N
YB	T5092	-

Shielding Gas: Ar+1~2%O₂(CO₂)

Applications and Features

- (1) Weld metal is austenite structure with 20%Cr-9%Ni-N.
- (2) High oxidation and corrosion resistance at 1150°C. Also, high creep strength and excellent resistance to isothermal.
- (3) Suitable for welding 253MA™ Cr-Ni stainless steel and similar heat resistant steel, such as furnaces, high temperature flues, combustion chambers and burners.

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	N
0.09	1.42	0.55	0.012	0.009	20.07	9.66	0.13

Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation
N/mm ²	N/mm ²	%
680	440	38

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