

GMAW Solid Wire for Stainless Steel

KMS-320

Classification

AWS A5.9/A5.9M ER320

JIS Z3321 YS320

EN 14343-A -

YB T5092 H07Cr20Ni34Mo2Cu3Nb

Shielding Gas: Ar+1~2%O₂(CO₂)

Applications and Features

- (1) Weld metal is austenitic structure with 20%Cr-34%Ni-2.5%Mo-3.5%Cu-Nb.
- (2) Weld metal provides exceptionally good corrosion resistance to a wide range of chemical environments.
- (3) Ideal for welding similar metals in wrought and cast forms.

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	Mo	Nb	Cu
0.05	0.41	1.83	0.011	0.009	20.42	34.51	2.23	0.63	3.37

Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation
N/mm ²	N/mm ²	%
600	430	39

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