

## GMAW Solid Wire for Stainless Steel

# KMS-630

### Classification

AWS	A5.9/A5.9M	ER630
JIS	Z3321	YS630
EN	14343-A	-
YB	T5092	-

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

### Applications and Features

- (1) Weld metal is precipitation hardening martensitic structure with 16.5%Cr-4.7%Ni-3.6%Cu-Nb.
- (2) Used in as welded condition or may be heat treated to obtain higher strength
- (3) Suitable for welding ASTM 564/630, SUS630 and 17-4PH plate.

### 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	Nb	Cu
0.03	0.37	0.52	0.010	0.007	16.48	4.60	0.20	3.23

### Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation
N/mm <sup>2</sup>	N/mm <sup>2</sup>	%
990	850	10

### 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