

## KMS-385

### Classification

AWS	A5.9/A5.9M	ER385
JIS	Z3321	YS385
EN	14343-A	G 20 25 5 Cu L
YB	T5092	H02Cr20Ni25Mo4Cu

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-25%Ni-5%Mo-Cu.
- ( 2 ) Used in fabrication of equipment and vessels for handling and storage of sulfuric acid and phosphoric acid.
- ( 3 ) Used for welding materials of similar chemical composition (Type 904L).

### 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	Mo	Cu
0.02	0.41	1.73	0.010	0.010	20.33	25.05	4.55	1.52

### Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation
N/mm <sup>2</sup>	N/mm <sup>2</sup>	%
540	340	37

### 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