

GMAW Solid Wire for High Tensile Strength Steel

KM-51

Classification

AWS A5.18/A5.18M	ER70S-G/ ER49S-G
JIS Z3312	YGW15
EN ISO 14341-A	G42 2 M21 Z
GB T8110	ER50-G

Shielding Gas: 80%Ar+20%CO₂

Applications and Features

- (1) KM-51 is a copper coated wire for welding 490N/mm² grade steel.
- (2) Wide welding parameter range from short-circuit transfer at low current to spray transfer at high current.
- (3) Stable arc at high current due to special alloy design.
- (4) Ideal for welding automotive, shipbuilding, pipe, steel structure, bridge, and machinery.

Welding Position



Welding Instruction

Please refer to Appendix B.

Typical Chemical Composition of Wire (wt%)

C	Si	Mn	P	S
0.07	0.58	1.33	0.015	0.011

Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation	Charpy V-Notch	
N/mm ²	N/mm ²	%	°C	J
552	478	29	0	121
			-20	85

Size and Suggested Operating Range (DC+)

Diameter (mm)		1.2	1.4	1.6
Current (A)	F/HF	120~350	150~400	180~440
	H	120~300	150~320	180~350