TM-56

AWS A5.18 ER70S-6
EN ISO 14341-A G 42 4 C1 3Si1
EN ISO 14341-A G 46 4 M21 3Si1
JIS Z 3312 YGW12

Characteristics and Applications:

TM-56 is a solid wire for butt or fillet MAG welding of mild steel and 490N/mm^2 high tensile steel. Stable wire feeding is due to special wire surface treatment. Low spatter loss, stable arc and high deposition efficiency can be obtained. It is suitable for the welding of vehicles, ships, containers and industrial machinery.

Notes on usage:

1. E.S.O. (Electrode Stick Out) must be kept between 15-25mm.
2. Proper welding conditions must be adopted according to the purpose as the bead appearance and penetration are both varied widely.
3. Use 100% CO_2 or Ar + CO2 gas mixture as shielding gas.
4. Control within the optimal range of welding conditions for this wire as possible.

Typical chemical composition of wire metal (wt%):

	C	Mn	Si	P	S	Ni	Cr	Mo	V	Cu
AWS	0.06-0.15	1.40-1.85	0.80-1.15	≦0.025	≦0.035	≦0.15	≦0.15	≦0.15	≦0.03	≦0.50
EN ISO	0.06-0.14	1.30-1.60	0.70-1.00	≦0.025	≦0.025	≦0.15	≦0.15	≦0.15	≦0.03	≦0.35
Typical value	0.09	1.53	0.85	0.02	0.011	0.02	0.035	0.011	0.013	0.04

Typical mechanical properties of weld metal:

	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -30°C (-20°F)
AWS	≧400(58)	≧480(70)	≧22	-30℃ > 27J
EN ISO	≧460(67)	530-680(77-99)	≧20	-40℃ > 47J
Typical value	430(62)	520(75)	30	80(59)

Sizes and recommended current range (DC＜+＞):

Diameter (mm)	0.9	1.0	1.2	1.6
Amps	70-160	80-220	90-350	170-400

SOLID WIRES

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