

ED-FK1

Solid MIG (GMAW) Welding Wire

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CLASSIFICATIONS

AWS A5.28, ER110S-G
AS/NZS 2717.1, ESMG-GC/M W769AH
AS/NZS 16834-A, G69 4 M21 Mn3Ni1CrMo
AS/NZS 16834-A, G69 4 M13 Mn3Ni1CrMo
AS/NZS 16834-B, G76 4U M21G
AS/NZS 16834-B, G76 4U M13G

DESCRIPTION

ED-FK1 is a copper coated low alloy solid wire for all positional welding of high strength TMCP and Q & T steels requiring as-welded tensile strength up to 800N/mm² (110,000 psi min:) with good low-temperature toughness. Used DC positive, with Argon/5-25% CO₂ shielding gas, or other appropriate shielding gases, weld deposits with good appearance, penetration and low spatter loss can be achieved.

Note: For applications that require optimum low temperature toughness in the Post Weld Heat Treated (PWHT) condition SWP 110 solid wire is recommended instead.

TYPICAL APPLICATIONS

For joining of high strength steels such as:

NA-XTRA 60, 65, 70, 100 – (Great Lakes Steel)
USS T1, T1A, T1B – (US Steel)
HYSTAL 77 (British Steel)
BISALLOY 80
WELTEN 80
SSAB HARDOX HiTuf

Also used in weld reclamation applications where solid GMAW (MIG) wires are preferred.

TYPICAL ALL WELD METAL PROPERTIES

CHEMICAL COMPOSITION

Chemical (wt%):	C	Mn	Si	Ni	Cr	Mo	V	Fe
	0.09	1.60	0.50	1.40	0.30	0.25	0.09	Bal:

MECHANICAL PROPERTIES:**As-Welded:**
Ar-CO₂ (M21) Mixed Gas

YS	700 N/mm ²
UTS	790 N/mm ²
Elong:	18%
Impact (CVN)	0°C - 120 Joules
	-50°C - 80 Joules

Mechanical properties shown are typical when the wire is used with an Ar+18% CO₂ (M21) shielding gas. The use of other shielding gases such as less oxidising Argon based mixtures (E.g: Ar/O₂ or M13), or Welding Grade CO₂, will lead to a variation in weld metal mechanical properties. Consult your nearest SWP branch for full details.

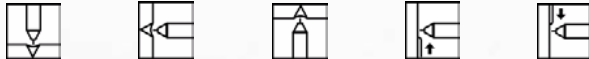
APPROVALS

TUV, DB

WIRE DIAMETERS & PACKAGING

0.9 mm	15 Kg spools. This size available on indent basis.
1.0 mm	15 Kg spools.
1.2 mm	15 Kg spools.
1.6 mm	15 Kg spools. This size available on indent basis.

Other forms of packaging, including bulk packaging, are available by special arrangement.

WELDING PARAMETER GUIDELINESPolarity - DC Electrode Positive (**DC+**).

Semi-Automatic Operation.

Shielding gas: Argon+ 5-25% CO₂.

Typical gas flow rate: 15-20 litres/minute.

Diameter	CURRENT (Amps)		VOLTAGE (Volts)		Polarity
	Range	Optimum	Range	Optimum	
1.0 mm	70-240	90-180 (Flat)	15-26	18-22 (Flat)	DC+
	-	70-110 (Position)	-	15-19 (Position)	
1.2 mm	90-350	200-300 (Flat)	15-32	22-26 (Flat)	DC+
	-	90-150 (Position)	-	15-20 (Position)	

Our products, and any recommended practices, should be tested by the user under actual service conditions to determine their suitability for any particular purpose. The results obtained using this product/information are affected by variables such as welding procedure, base material composition, operating temperature, weldment design, method of fabrication and service requirements which are beyond our control. It is the sole responsibility of the user to determine the serviceability of a structure using this product and the information contained in this data sheet.