DURAMAX™
Inspiring the future generations of welders

PRODUCT DATA SHEET

DM70S-3 Premium Welding Wire

Classification: **ER70S-3**

AWS A 5.18 / ASME SFA 5.18

DuraMax DM70S-3 is a deoxidized bare wire for GMAW and GTAW welding

Characteristics

DuraMax ER70S-3 is used for welding on all grades of carbon steel. It is generally used in root pass and to support the welding when back pass is impossible. It provides sufficient de-oxidation to allow welding over light mill scale. DM70S-3 has excellent mechanical and toughness properties in low temperature conditions.

Typical Applications on Usage

1) General & ornamental iron fabrication
2) Metal furniture, farm equipment, auto frames.

All Weld Chemical Composition (%)

C =	0.06 to 0.15	Mn =	0.90 - 1.40	Si =	0.45 - 0.75	P =	0.025 max
S =	0.035 max	Ni =	0.15 max	Cr =	0.15 max	Mo =	0.15 max
V =	0.03 max	Cu =	0.50 max				

All Weld Mechanical Properties

Tensile Strength MPa	Yield Strength MPa	Elongation (%)	CHARPY "V" NOTCH IMPACT AT
480 min	400 min	22 min	Minus -30°C : ≥ 27 (J)

Sizes Available and Recommended Welding Parameters

Process	Diameter	Amperage	Voltage	Gas/Flux
GTAW	.035	50 - 70	10 - 12	100% Argon
	.045	70 - 100	10 - 12	
	1/16	100 - 125	12 - 15	
	3/32	125 - 175	15 - 20	
	1/8	175 - 250	15 - 20	
	5/32	175 - 250	15 - 20	
GMAW Short Arc	.035	90 - 160	14 - 20	100% CO_2 or 75% Ar + 25% CO_2 80% Ar + 20% CO_2
	.045	120 - 180	16 - 22	
	1/16	160 - 200	16 - 22	
GMAW Spray Transfer	.035	165 - 200	25 - 28	98% Ar + 2% O_2
	.045	180 - 220	25 - 30	75% Ar + 25% CO_2
	1/16	230 - 260	26 - 36	75% Ar + 25% CO_2