

SPOOLARC 86

AWS A5.18: ER70S-6 H4

FEATURES

Spoolarc 86 is a copper-coated solid wire containing high levels of manganese and silicon. Spoolarc 86 is suitable for many carbon steel welding applications using the MIG/Gas Metal Arc Welding (GMAW) process. The high levels of deoxidizers in Spoolarc 86 provide excellent tolerance of rust and mill scale. The high levels of manganese and silicon also provide excellent wetting action and a highly fluid weld puddle. Shielding gas choices for Spoolarc 86 in the GMAW mode are 100% carbon dioxide, argon/carbon dioxide mixtures, argon/oxygen mixtures, and other argon based mixed gas blends. Spoolarc 86 excels in HVAC duct work, heavy equipment fabrication, structural, and other general steel fabrication.

CLASSIFICATIONS AND APPROVALS

- LR: 3S, 3YS (H15)
- ABS/AWS A5.18: ER70S-6 H4
- CAN/CSA-ISO14341,B-G 49A 3C G6 (ER49S-6)
- AWS/ASME SFA5.18: ER70S-6
- AWS/ASME SFA5.17: EH11K
- Certified by CWB to CSA W48
- MIL-E-23765/1: MIL-70S-6

WELDING PROCESS

- SAW (Sub Arc)
- GTAW (TIG)

INDUSTRIES

- Automotive
- Mobile Machinery
- General Fabrication
- Shipbuilding

TYPICAL MECHANICAL PROPERTIES

As Welded 75% Ar / 25% O ₂	
Yield Strength	72 ksi, 497 MPa
Tensile Strength	86 ksi, 593 MPa
Elongation in 2"	27%
As Welded CO ₂	
Yield Strength	68 ksi, 469 MPa
Tensile Strength	82 ksi, 563 MPa
Elongation in 2"	30%

CHARPY V-NOTCH PROPERTIES

Testing Temperature -20°F (-29°C)	
As Welded 75% Ar / 25% CO ₂	
	67 ft-lb, 91 J
As Welded CO ₂ Shielding Gas	
	45 ft-lb, 61 J

WELD METAL ANALYSIS

75% Ar / 25% CO ₂	
C	0.070%
Mn	1.19%
Si	0.62%
P	0.012%
S	0.011%
CO ₂	
C	0.090%
Mn	1.08%
Si	0.51%
P	0.014%
S	0.010%

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PART NUMBER / PRODUCT INFORMATION		
Part Number	Description	UPC
138YF28	86 1/16X36X10#T/60#CT F2 AWS	662303087913
1387F28	86 1/16X36X15#CT F2	662303084721
138YF30	86 3/32X36X10#T/60#CT F2 AWS	662303671099
138YF32	86 1/8X36X10#T/60#CT F2 AWS	662303671082
1387F32	86 1/8X36X30#CT F2	662303508234