

Classification					
AWS A5.18					
ER70S-G					
Characteristics and typical fields of application					
A copper coated, manganese-silicon alloyed GTAW wire for welding of all general engineering and structural steels with minimum yield strength of max 400 MPa. High levels of silicon and manganese for use on slightly contaminated base materials. Contains more deoxidizers than ER70S-3. The additional deoxidizers also provide better wetting, giving a flatter bead shape and the capability of faster travel speeds. The welding rod is suitable for joint welding in the construction of small diameter pipe and tubing, process piping, boilers, containers and offshore structures.					
Base Materials					
Steels up to a yield strength of 420 MPa (60 ksi) S235JR-S355JR, S235JO-S355JO, S235J2-S355J2, S275N-S420N, S275M-S420M, S275NLS420NL, S275ML-S420ML, P235GH-P355GH, P275NL1-P355NL1, P275NL2-P355NL2, P215NL, P265NL, P355N, P285NH-P420NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, L245MB-L415MB, GE200-GE240 ASTM A 106 Gr. A, B, C; A 181 Gr. 60, 70; A 283 Gr. A, C; A 285 Gr. A, B, C; A 350 Gr. LF1, LF2; A 414 Gr. A, B, C, D, E, F, G; A 501 Gr. B; A 513 Gr. 1018; A 516 Gr. 55, 60, 65, 70; A 573 Gr. 58, 65, 70; A 588 Gr. A, B; A 633 Gr. A, C, D, E; A 662 Gr. A, B, C; A 707 Gr. L1, L2, L3; A 711 Gr. 1013; A 841 Gr. A, B, C; API 5 L Gr. B, X42, X52, X56, X60					
Typical analysis of solid wire (wt.-%)					
C	Si	Mn	P	S	
0.07	0.85	1.48	≤ 0.020	≤ 0.015	
Mechanical properties of all-weld metal					
Heat treatment	Yield strength R _e N/mm ²	Tensile strength R _m N/mm ²	Elongation (L ₀ =4d ₀)	Impact work ISO-V KV J	Impact work ISO-V KV J
	MPa	MPa	%	-40 °C	-50 °C
As Welded	430	550	40	100	90
Operating data					
		Polarity DCEN	Shielding Gas : Argon		
Approval					
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Size and Packaging					
Size mm			Kg / Plastic tube		
1.60			5.0		
2.00			5.0		
2.40			5.0		
3.20			5.0		