



DATA SHEET
DS 062
Rev. 6 dd 13/05/2015
INEFIL B6

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CLASSIFICATION

APPROVALS

AWS SPECIFICATIONS	EN SPECIFICATIONS
AWS A 5.28: ER80S-B6	EN ISO 21952-A: G CrMo5Si
AWS A 5.28M: ER55S-B6	
ASME SFA 5.28: ER80S-B6	
ASME SFA 5.28M: ER55S-B6	

TÜV		

ALLOY TYPE

5Cr-0.5Mo content to be used for the welding of creep resistant steel.

APPLICATIONS

Low alloy copper-coated solid wire with 5% Cr and 0.5% Mo content to be used for the welding of creep resistant steel. It will find applications in chemical or petro-chemical industry and in the ammonia synthesis process. It is also used for heat exchangers, boilers, piping and pressure vessels for temperature service up to 600°C. The weld metal has also been used for subsequent nitriding in the petro-chemical industries; for example in the repair of some steels used for moulds for injection-moulding of plastics. To be used under the shield of Ar+O₂.

MATERIALS TO BE WELDED

ASTM		EN		Others
A 387 Gr 5	A 336 Gr F5	(DIN 12CrMo 19-5)	(BS 1504 Gr 625)	
A 335 Gr P5	A 217 Gr C5	(DIN X7CrMo 6-1)	(BS 3100 Gr B5)	
A 234 Gr WP5		(DIN X11CrMo 6-1)	(BS 3604 Gr HFS 625)	
A 199 Gr T5		(BS 1503 Gr 625)	(BS 3604 Gr CFS 625)	
A 213 Gr T5		(BS 1501 Gr 625)		
A 182 Gr F5				

WELDING GUIDELINES

Preheat and interpass temperature 200 ÷ 300°C. PWHT at 745°C for an hour.

TECHNICAL INFORMATION

Gas: Mix Ar- O₂ (EN 14175)
 Welding positions: all positions



WELDING PARAMETERS

Current	DC + Reverse polarity				
	0.8	1.0	1.2	1.6	
Diameter (mm)					
Volts (V)	16 ÷ 28	17 ÷ 32	18 ÷ 34	19 ÷ 38	
Intensity (A)	60 ÷ 200	80 ÷ 260	100 ÷ 360	130 ÷ 450	



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TYPICAL CHEMICAL COMPOSITION OF WIRE

C %	Mn %	Si %	S %	P %	Cr %	Ni %	Mo %	Cu %	
0.07	0.50	0.40	0.008	0.008	5.80	-	0.55	0.12	

TYPICAL MECHANICAL PROPERTIES

GAS		Yield strength	Tensile strength	Elongation on % 5d	Impact energy (Charpy V)				
		Rs	Rm	A 5d	+ 20°C	0°C	-20°C	-40°C	-60°C
		(MPa)	(MPa)	%	(Joule)	(Joule)	(Joule)	(Joule)	(Joule)
M22	after PWHT	500	620	22	70	-	-	-	-

PRODUCTS AVAILABLE

Process	Product	Classification AWS	Classification EN
MIG/MAG Solid wire			
TIG Rods	INETIG B6	AWS A 5.28: ER80S-B6	EN 21952-A: W CrMo5Si
SAW Submerged arc	INESUB EB6	AWS A 5.23 EB6	EN 24598-A: S CrMo5
FCAW Cored wire			
SMAW Electrodes	INE B6	AWS A 5.5: E8016-B6	EN 3580-A: E CrMo5