



**DATA SHEET**  
**DS 259**  
**Rev. 06 dd 15/01/2021**  
**INESUB EB6**

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**CLASSIFICATION**

**APPROVALS**

AWS SPECIFICATIONS	EN SPECIFICATIONS
AWS A 5.23: EB6	EN ISO 24598-A: S CrMo5
AWS A 5.23M: EB6	
ASME SFA 5.23: EB6	
ASME SFA 5.23M: EB6	

TÜV		

**ALLOY TYPE**

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

**APPLICATIONS**

Copper-coated solid wire for submerged arc welding with 5.5% 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 with basic fluxes, such as INEFLUX BHA.

**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°C. PWHT at 745°C for an hour.

**TECHNICAL INFORMATION**

Welding positions: flat and flat-frontal





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### WELDING PARAMETERS

Current	DC + Reverse polarity, AC					
Diameter (mm)	2.0	2.4	3.2	4.0		
Intensity (A)	300 ÷ 400	350 ÷ 450	430 ÷ 530	480 ÷ 580		
Volts (V)	26 ÷ 29	27 ÷ 30	27 ÷ 30	27 ÷ 30		

### TYPICAL CHEMICAL COMPOSITION OF WIRE

C %	Mn %	Si %	S %	P %	Cr %	Ni %	Mo %	Cu %	
0.07	0.50	0.40	0.010	0.010	5.50	-	0.55	0.15	

**NOTE:** refer to the results obtained with the relevant flux for the mechanical characteristics of the deposited metal.

### PRODUCTS AVAILABLE

Process	Product	Classification AWS	Classification EN
<b>MIG/MAG</b> Solid wire	INEFIL B6	AWS A 5.28: ER80S-B6	EN 21952-A: G CrMo5Si
<b>TIG</b> Rods	INETIG B6	AWS A 5.28: ER80S-B6	EN 21952-A: W CrMo5Si
<b>SAW</b> Submerged arc			
<b>FCAW</b> Cored wire			
<b>SMAW</b> Electrodes	INE B6	AWS A 5.5: E8016-B6	EN 3580-A: E CrMo5