	DATA SHEET **DS 258** **Rev. 05 dd 12/09/2013** **INESUB EB2**	I.N.E. S.p.A. Via Facca 10 35013 Cittadella (PADOVA) ITALY Tel. : +39 049/9481111 Fax: + 39 049/9400249 Internet: www.ine.it E mail: ine@ine.it

CLASSIFICATION

AWS SPECIFICATIONS	EN SPECIFICATIONS
AWS A 5.23: EB2	EN ISO 24598-A: S CrMo1
AWS A 5.23M: EB2	
ASME SFA 5.23: EB2	
ASME SFA 5.23M: EB2	

APPROVALS

TÜV		

ALLOY TYPE

1.25Cr-0.5Mo content to be used for the welding of creep resistant steel.

APPLICATIONS

Copper-coated solid wire for submerged arc welding with 1.25% Cr and 0.5% Mo content to be used for the welding of creep resistant steel. It is used in chemical industry and in the ammonia synthesis process, for heat exchangers, boilers, piping and pressure vessels for temperature service up to 550°C. It will also find applications in the petro-chemical industries, suitable for facing on casting and for casting repairs. To be used with basic fluxes.

MATERIALS TO BE WELDED

ASTM		EN		Others
A387 Gr 11&12	A200 T11	10028-2 13CrMo 4-5	(BS 1501 Gr 620 & 621)	
A182 F11 & F12	A213 T11 & T12	10083-1 25CrMo4	(BS 1502 Gr 620)	
A217 WC6 &WC11	A335 P11 & P12	10222-2 14CrMo 4-5	(BS 1503 Gr 620 & 621)	
A234 WP11 & WP12		(DIN 17210 16MnCr5)	(BS 1504 Gr 621)	
A199 T11		(DIN 13CrMo 4-4)	(BS 3100 Gr B2)	
		(DIN 16CrMo4-4)	(BS 3604 Gr 620/440)	
		(DIN 11CrMo 5-5)	(BS 3059 Gr 620/460)	

WELDING GUIDELINES

Preheat and interpass temperature 150 ÷ 200°C. PWHT at 690°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 %	
0.12	0.80	0.15	0.010	0.010	1.10	-	0.50	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
MIG/MAG	INEFIL B2	AWS A 5.28: ER80S-B2	EN 21952-B: G 1CM
Solid wire	INEFIL CROMO 1	AWS A 5.28: ER80S-G	EN 21952-A: G CrMo1Si
	INEFIL B2 L	AWS A 5.28: ER70S-B2L	EN 21952-B: G 1CML
TIG	INETIG B2	AWS A 5.28: ER80S-B2	EN 21952-B: W 1CM
Rods	INETIG B2 L	AWS A 5.28:ER70S-B2L	EN 21952-B: W 1CML
	INETIG CROMO 1	AWS A 5.28: ER80S-G	EN 21952-A: W CrMo1Si
SAW	INESUB EB2 R	AWS A 5.23: EB2R	EN 24598-A: S CrMo1
Submerged arc			
FCAW	INETUB B81T5-B2	AWS A 5.29: E81T5-B2	EN 17634-A: T CrMo1
Cored wire	INETUB M81TG-B2	AWS A 5.28: E80C-B2	EN 17634-A: T CrMo1
	INETUB R81T1-B2	AWS A 5.29: E81T1-B2	EN 17634-A: T CrMo1
SMAW	INE B2	AWS A 5.5: E8018-B2	EN 3580-A: E CrMo1
Electrodes	INE B2 L	AWS A 5.5: E7018-B2L	EN 3580-A: E CrMo1L