



DATA SHEET
DS 063
Rev. 6 dd 05/05/2015
INEFIL B8

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**APPROVALS**

AWS SPECIFICATIONS	EN SPECIFICATIONS
AWS A 5.28: ER80S-B8	EN ISO 21952-A: G CrMo9
AWS A 5.28M: ER55S-B8	
ASME SFA 5.28: ER80S-B8	
ASME SFA 5.28M: ER55S-B8	

ALLOY TYPE

9Cr-1Mo content to be used for the welding of creep resistant steel.

APPLICATIONS

Low alloy copper-coated solid wire with 9% Cr and 1% Mo content to be used for the welding of creep resistant steel. It will find applications in power plants, 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. Its corrosion resistance is higher than 5Cr-0.5Mo steels requirements. To be used under the shield of Ar+O₂.

MATERIALS TO BE WELDED

ASTM		EN		Others
A 387 Gr 9	A 336 Gr F9	(DIN X12CrMo 9-1)	(BS 3604 Gr CFS 629-470)	
A 335 Gr 9	A 217 Gr C12	(DIN X7CrMo 9-1)	(BS 3604 Gr HFS 629-470)	
A 234 Gr WP9		(DIN GS-12CrMo 10-1)	(BS 3604 Gr HFS 629-590)	
A 199 Gr T9		(BS 3100 Gr B6)	(BS 3604 Gr CFS 629-590)	
A 213 Gr T9			(BS 1504 Gr 629)	
A 182 Gr F9				

WELDING GUIDELINES

Preheat and interpass temperature 200 ÷ 250°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	9.00	-	1.00	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	630	23	60	-	-	-	-

PRODUCTS AVAILABLE

Process	Product	Classification AWS	Classification EN
MIG/MAG Solid wire			
TIG Rods	INETIG B8	AWS A 5.28: ER80S-B8	EN 21952-A: W CrMo9
SAW Submerged arc	INESUB EB8	AWS A 5.23: EB8	EN 24598-A: S CrMo9
FCAW Cored wire			
SMAW Electrodes	INE B8	AWS A 5.5: E8016-B8	EN 3580-A: E CrMo9