



DATA SHEET
DS 104
Rev. 6 dd 12/05/2015
INETIG D2

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CLASSIFICATION

APPROVALS

AWS SPECIFICATIONS	EN SPECIFICATIONS
AWS A 5.28: ER80S-D2 / ER90S-D2	EN ISO 636-B: W4M31
AWS A 5.28M: ER55S-D2 / ER62S-D2	
ASME SFA 5.28: ER80S-D2 / ER90S-D2	
ASME SFA 5.28M: ER55S-D2 / ER62S-D2	

ALLOY TYPE

Low-alloy copper-coated tig rod with 0.5% Mo content for welding high strength steels.

APPLICATIONS

Low-alloy copper-coated tig rod with 0.5% Mo content designed for welding low-alloy steels with high tensile strength and creep-resistant steels. Suitable for pipelines and pressure vessels with operating temperatures of about 500°C. Also finds applications for the repair of medium strength steel castings. Good impact strength at low temperatures.

MATERIALS TO BE WELDED

ASTM		EN		Others
AISI 4130		10028-2 P295 G H	10113-2 S420	
A 487 Gr 2A		10028-2 P355 G H	10113-3 S275	
A 487 Gr 2B		10028-2 16Mo2	10113-3 S355	
A 487 Gr 2C		10222-2 17Mo3	10113-3 S420	
		10222-2 14Mo6		
		10113-2 S275		
		10113-2 S355		

WELDING GUIDELINES

Preheat and interpass temperature 150°C. PWHT is not required.

TECHNICAL INFORMATION

Gas: Argon 100% (EN ISO 14175)
 Welding position: all positions



WELDING PARAMETERS

Current	DC - Straight polarity
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PACKAGING DATA

	1.2	1.6	2.0	2.4	3.2	4.0
Diameter (mm)	1.2	1.6	2.0	2.4	3.2	4.0
Length (mm)	1000	1000	1000	1000	1000	1000
Carton	5/25 Kg	5/25 Kg	5/25 Kg	5/25 Kg	5/25 Kg	5/25 Kg

* tolerances according to EN ISO 544 specification.



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TYPICAL CHEMICAL COMPOSITION OF WIRE

C %	Mn %	Si %	S %	P %	Cu %	Ni %	Cr %	Mo %	
0.08	1.90	0.70	0.010	0.010	0.15	-	-	0.50	

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	-50°C
		(MPa)	(MPa)	%	(Joule)	(Joule)	(Joule)	(Joule)	(Joule)
I1	as welded	610	700	24	150	-	-	40	35

PRODUCTS AVAILABLE

Process	Product	Classification AWS	Classification EN
MIG/MAG Solid wire	INEFIL D2	AWS A 5.28: ER80S-D2 AWS A 5.28: ER90S-D2	EN 14341-A: G 4Mo
	INEFIL G2MO	AWS A 5.28: ER70S-A1	EN 14341-A: G 2Mo EN 21952-A: G MoSi
TIG Rods	INETIG G2MO	AWS A 5.28: ER70S-A1	EN 636-A: W 2Mo EN 21952-A: W MoSi
SAW Submerged arc	INESUB S2MO	AWS A 5.23: EA2	EN 14171-A: S2Mo
	INESUB EA3	AWS A 5.23: EA3	EN 14171-A: S4Mo
FCAW Cored wire	INETUB M81TG-A1	AWS A 5.28: E80C-G	EN 17632-A: T Mo
	INETUB B81T5-A1	AWS A 5.29: E81T5-A1	EN 17634-A: T Mo
SMAW Electrodes	INE A1	AWS A 5.5: E7018-A1	EN 3580-A: E Mo