



DATA SHEET
DS 170
Rev. 05 dd 08/10/2013
INETUB ZN

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 5.20: E71T-G	EN ISO 17632-A: T 42 Z Z M 2 H10
AWS A 5.20M: E491T-G	
ASME SFA 5.20: E71T-G	
ASME SFA 5.20M: E491T-G	

APPROVALS

ALLOY TYPE

Flux cored wire for welding carbon and carbon-manganese steels.

APPLICATIONS

Flux cored wire designed for welding thin carbon and carbon-manganese steels in all positions. Easily removable slag, versatility and manuality; suitable for welding zinc-coated plates as well. Completely free of barium salts. It finds applications in car industry, shipyards and air conditioning equipments. To be used on DC- (DC operation, electrode negative polarity), under the shield of Ar+CO₂.

MATERIALS TO BE WELDED

ASTM		EN		Others
A139	A131 Gr A, B, D	10113-2 S275	10113-3 S420M	Fe 360
A210 Gr A1	API 5LX42	10113-2 S355	10113-3 S420ML	Fe 430
A210 Gr C	API 5LX46	10113-2 S420	10025 S185, S235	Fe 510
A36	API 5LX52	10113-3 S275M	10025 S275, S355	(steel group 1
A234 Gr WPB	API 5LX60	10113-3 S275ML	10208-1 L210, L240	EN 288/3)
A334 Gr 1		10113-3 S355M	10208-1 L290, L360	
A106 Gr A, B, C		10113-3 S355ML		

WELDING GUIDELINES

Preheat and PWHT are not required.

TECHNICAL INFORMATION



Gas: Mix Ar- CO₂ (EN ISO 14175)

Welding positions: all positions but vertical down

WELDING PARAMETERS

Current	DC - Straight polarity				
	0.8	0.9	1.0	1.20	
Diameter (mm)					
Volts (V)	18 ÷ 24	13 ÷ 27	14 ÷ 30	16 ÷ 35	
Intensity (A)	50 ÷ 200	70 ÷ 220	80 ÷ 240	90 ÷ 310	



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TYPICAL CHEMICAL COMPOSITION OF WELD METAL

GAS	C %	Mn %	Si %	S %	P %	Cu %	Ni %	Cr %	Al
MIX	0.15	1.00	0.30	0.012	0.012	-	-	-	0.80

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	-30°C	-40°C
		(MPa)	(MPa)	%	(Joule)	(Joule)	(Joule)	(Joule)	(Joule)
MIX	as welded	430	520	22	-	-	-	-	-

PRODUCTS AVAILABLE

Process	Product	Classification AWS	Classification EN
MIG/MAG Solid wire	INEFIL TITAN 1 INEFIL TITAN 1 OR INEFIL S2	AWS A 5.18: ER70S-G AWS A 5.18: ER70S-G AWS A 5.18: ER70S-2	EN 14341-A: G 2Ti
TIG Rods	INETIG S2	AWS A 5.18: ER70S-2	EN 636-A: W2Ti
SAW Submerged arc			
FCAW Cored wire			
SMAW Electrodes			