

## **TG 3**

TIG Welding Wire - Non Alloyed Steels

Standards	
AWS/ASME SFA - 5.18	ER70S-6
EN ISO 636 - A	W 46 3 W4Si1
TS EN ISO 636 - A	W 46 3 W4Si1
DIN M. No.	1.5130

#### **Properties and Applications**

GTA (TIG) welding rod for unalloyed steels, fine grained steels and pipes. Provides high mechanical properties. Particularly used in root and cap passes in chemical, petrochemical, water, natural gas pipes joints safely. Suitable also welding of thin metal plates, tanks, boilers and repair welds of them. Thin and homogeneous copper coating increase resistance to rusting.

Materials	
Width	DIN
S185 - P355T1	St 33.0 - St 52.0
S235J2 - S355J0	St 37.3 - St 52.3
S235TR2 - P2355T2	St 37.4 - St 52.4
P235G1TH - P255G1TH	St 35.8 - St 45.8
E295	St 50.2
P235GH - P265GH	HI-HII
P295GH, P355GH	17Mn4, 19Mn5
L210 - L360NB	StE 210.7 - StE 360.7
E 200, GE 240, GE 260	GS 38, GS 45, GS 52
S255N - S420N	StE 255 - StE 420
	A, B, D, E

Typical Chemical Features of the Welding Wire					
Type of Analysis	С	Si	Mn		
Welding Wire	0.07	0.9	1.65		

### Typical Mechanical Values of Weld Metal

Test Condition	Protection Gas	Yield Strength (N/mm²)	Tensile Strength (N/mm²)	Elongation A5 (%)	Charpy V-Notch Properties (J)
As welded	11	490	580	28	-30°C → 80

 $<sup>^{\</sup>star}$  Chemical compositon and mechanical properties are valid when using shielding gas EN ISO 14175 - I1 (%100 Ar) .

# **Application Information Welding Positions** Polarity: **Protection Gas:** PA PB Welding Parameters & Efficiency Diameter x Length (mm) 1.60x1000 2.00x1000 2.40x1000 3.20x1000

Packaging Information						
Product Code	Diameter x Length (mm)	Quantity per Box	Box Gross Weight (Kg)	Boxes per Outer Box	Outer Box Gross Weight (Kg)	Packaging Type
21103GBKM2	1.60x1000	5 KG	5.30	4	21.40	Cardboard Tube
21103HBKM2	2.00x1000	5 KG	5.30	4	21.40	Cardboard Tube
21103IBKM2	2.40x1000	5 KG	5.30	4	21.40	Cardboard Tube
21103LBKM2	3.20x1000	5 KG	5.30	4	21.40	Cardboard Tube

### Storage & Re-Drying Information

Shouldn t be exposed to high statical load and impact. It should be stored in a dry room (relative humidity < 50%, room temperature >  $20^{\circ}$ C) on wooden pallets.