

# TG 102

TIG Welding Wire - Non Alloyed Steels

### Standards

AWS/ASME SFA - 5.18	ER70S-2
EN ISO 636 - A	W 42 2 2Ti
TS EN ISO 636 - A	W 42 2 2Ti

### Properties and Applications

Micro-alloyed, GTA (TIG) welding rod for unalloyed steels. Due to its titanium (Ti) and aluminium (Al) micro alloy contents, particularly suitable for single pass welding of galvanized, pre-painted, rusty and dirty steels, welding low alloy steels in pipe-lines, boilers and tank construction. Suitable also welding in thin metal plates and repair welds. Thin and homogeneous copper coating increase resistance to rusting.

### Approvals & Certificates

CWB

### Materials

Width	DIN
S185 - P275T1	St 33.0 - St 44.0
P235G1TH - P255G1TH	St 35.8 - St 45.8
P235GH - P265GH	H I - H II
	A, B, D, E

### Typical Chemical Features of the Welding Wire

Type of Analysis	C	Si	Mn	Ti	Al	Zr
Welding Wire	0.05	0.70	1.20	0.13	0.10	0.08

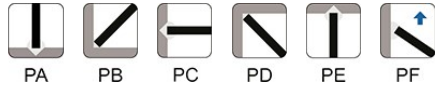
### Typical Mechanical Values of Weld Metal

Test Condition	Protection Gas	Yield Strength (N/mm <sup>2</sup> )	Tensile Strength (N/mm <sup>2</sup> )	Elongation A5 (%)	Charpy V-Notch Properties (J)
As welded	I1	520	620	23	-30°C → 60

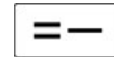
\* Chemical composition and mechanical properties are valid when using shielding gas EN ISO 14175 - I1 (%100 Ar).

### Application Information

#### Welding Positions



#### Polarity:



Protection Gas:

I1

#### Welding Parameters & Efficiency

Diameter x Length (mm)
1.60x1000
2.00x1000
2.40x1000
3.20x1000
4.00x1000

### 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
21100GBKM2	1.60x1000	5 kg	5.30	4	21.40	Cardboard Tube
21100HBKM2	2.00x1000	5 kg	5.30	4	21.40	Cardboard Tube
21100IBKM2	2.40x1000	5 kg	5.30	4	21.40	Cardboard Tube
21100LBKM2	3.20x1000	5 kg	5.30	4	21.40	Cardboard Tube
21100MBKM2	4.00x1000	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°C) on wooden pallets.