

# T-50

For mild steels and 490MPa tensile strength steel

## Classifications

EN ISO 636-A:2017	: W 46 3 3Si1
EN ISO 636-B:2017	: W 49A 3U W6
AWS A5.18:2005	: ER70S-6
KS D 7140:2005	: YGT50
JIS Z 3316:2011	: W 49 A 3U 6

## Approvals – I1 (100% Ar)

ABS	: 2Y
BV	: 4Y
DNV	: IV YM
LR	: 4YMH15
KR	: 4YSG(I)
RS	: 4Y

## Description

- For mild steel and 490MPa tensile strength steel welding of structural steels, machineries and vehicles
- Excellent mechanical and toughness properties in low temperature conditions
- It's generally used in root pass welding of pipes in all positions
- Proper tungsten electrode extension from the tip of torch is 4-6mm in general

## Operating data

Dia. (mm)	2.4 – 3.2
Current (Amp.)	200 - 300

## Polarity & shielding gas

- DCEN (DC-)
- Ar: 100% Ar (15 – 25 l/min)

## Typical chemical composition of rod (%)

C	Si	Mn	P	S
0.07	0.82	1.52	0.012	0.015

## Typical mechanical properties of all-weld metal

	Yield Strength	Tensile Strength	Elongation	Impact Value (J)	Remarks
	(MPa)	(MPa)	(%)	-30 °C	
AWS A5.18	Min. 400	Min. 480	Min. 22	≥ 27	Ar
EN 636-A	Min. 460	530-680	Min. 20	≥ 47	Ar
Example	490	580	30	130	Ar