UTP A 118

TIG rod

Classifications	
EN ISO 636-A	AWS A5.18
W 42 5 W3Si1	ER70S-6

Characteristics and field of use

GTAW solid rod for the welding with argon.
Typical fields of use: boiler, tank and pipeline constructions and apparatus engineering.

Base materials

Unalloyed structural steels acc. to EN 10025: S185, S235JR, S235JRG1, S235JRG2, S275JR, S235J0, S275J0, S355J0. Boiler steels P235GH, P265GH, P295GH, P355GH.

Fine grained structural steels up to S420N. ASTM A27 and A36 Gr. all; A214; A242 Gr. 1-5; A266 Gr. 1, 2, 4; A283 Gr. A, B, C, D; A285 Gr. A, B, C; A299 Gr. A, B; A328; A366; A515 Gr. 60, 65, 70; A516 Gr. 55; A570 Gr. 30, 33, 36, 40, 45; A572 Gr. 42, 50; A606 Gr. all; A607 Gr. 45; A656 Gr. 50, 60; A668 Gr. A, B; A907 Gr. 30, 33, 36, 40, A841; A851 Gr. 1, 2; A935 Gr. 45; A936 Gr. 50; API 5 L Gr. B, X42-X56.

Typical analysis in %

C	Si	Mn
0,08	0,85	1,50

Mechanical properties of the weld metal

Heat-treatment	Yield strength $R_{P0,2}$	Tensile strength R_m	Elongation A	Impact strength K_V	
	MPa	MPa	%	J [RT]	– 50 °C
as welded	440	560	25	130	50

Approvals

TÜV (No. 01656), DB (No. 42.132.119), DNV

Rod diameter x length [mm]	Current type	Shielding gas
1,6 x 1000	DC (-)	I 1
2,0 x 1000	DC (-)	I 1
2,4 x 1000	DC (-)	I 1
3,2 x 1000	DC (-)	I 1