

## Classifications

EN ISO 17632-A	AWS A5.36
T 46 4 P M 1 H10 / T 42 2 P C 1 H5	E71T1-M21A4-CS1-H8 / E71T1-C1A2-CS1-H4

## Characteristics and field of use

Rutile flux cored wire with fast freezing slag. Outstanding welding properties in all positions. Excellent mechanical properties and good slag detachability, low spatter losses, smooth, finely rippled seam surface, high X-ray security, notch-free weld toes. Out-of-position welding can be carried out with increased welding current, and therefore very economically with increased deposition rate.

## Base materials

Steels up to a yield strength of 460 MPa (67 ksi) (shielding gas M21)  
 S235JR-S355JR, S235JO-S355JO, S450JO, S235J2-S355J2, S275N-S460N, S275M-S460M, P235GHP355GH, P275NL1-P460NL1, P215NL, P265NL, P355N, P285NH-P460NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, L450QB, L245MB-L450MB, GE200-GE240, shipbuilding steels: A, B, D, E, A 32-E 36  
 ASTM A 106 Gr.A,B,C; A181 Gr.60,70; A283 Gr.A,C; A285 Gr.A,B,C; A350 Gr.LF1; A414 Gr.; A,B,C,D,E,F,G; A501 Gr.B; A513 Gr.1018; A516 Gr.55,60,65,70; A573 Gr.58,65,70; A588; Gr. A,B; A633 Gr.C,E; A662 Gr.B; A711 Gr.1013; A841 Gr.A; API 5 L Gr.B,X42,X52,X56,X60,X65

## Typical analysis in %

C	Si	Mn	Ti
0,06	0,5	1,2	0,05

## Mechanical properties of the weld metal

Welded condition	Yield strength R <sub>P0,2</sub>	Tensile strength R <sub>m</sub>	Elongation A	Impact strength K <sub>V</sub>		
				J [RT]	- 20 °C	- 40 °C
untreated <sup>1)</sup>	500	580	26	180	130	90
untreated <sup>2)</sup>	480	550	25	160	110	

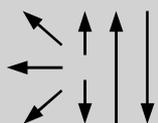
<sup>1)</sup> shielding gas Ar + 15-25% CO<sub>2</sub>

<sup>2)</sup> shielding gas 100% CO<sub>2</sub>

## Welding instruction

Redrying: – / If necessary: 150 °C/ 24 h / Welding with conventional MAG devices.

## Welding positions



Current type DC (+)  
 Shielding gases: Argon + 15-25% CO<sub>2</sub> / 100% CO<sub>2</sub>

## Approvals

TÜV (No.11164), DB (No. 42.014.35), ABS, GL, LR, DNV, BV, CRS, CE

## Recommended welding parameters

Wire diameter [mm]	Amperage [A]	Voltage [V]	Wire feed [m/min]
1,2	150-300	18-35	5-15
1,6	160-400	23-35	3,5-12