MIG (GMAW) wires for mild and low alloyed steel



ED-SG Mo		
Classification DIN EN ISO	Classification AWS	
14341-A G 42 2 C1 2Mo, 14341-A G 46 6 M21 2Mo, 21952-A GMoSi	A5.28 ER70S-A1, A5.28 ER80S-G	
Approvals	Material No.	
TÜV 03465.08, CE, DB 42.045.07	1.5424	

Characteristics and application

MIG/GMAW wire for 0.5%Mo steels, which are used at service temperatures up to 500°C and for some sub-zero structural applications. The 0.5% alloying improves creep performance compared to CMn steels and sees the alloy being used for boiler, pressure vessel and piping construction as well as in general structural engineering.

Base materials

For similar alloyed high temperature steels and cast steels, ageing resistant and steels resistant to caustic cracking.

P235G1TH-P255G1TH, P310GH, L320, L360NB-L415NB, 16Mo3

ASTM: A182/A336 grade F1, A204 grades A/B/C, A209/A250 grade T1, A217 grade WC1, A335 grade P1, A352 grade LC1

Typical analysis in %

c	Si	Mn	Мо
0,10	0,60	1,15	0,52

Typical heat treatment

Preheat temperature: Dependent on material thickness

Interpass temperature: max. 250°C

PWHT: AW or 650°C

Mechanical properties of the pure weld metal

Yield strength in Mpa	Tensile strength in Mpa	Elongation in %	Charpy-V-Value (ISO-V) in J
≥ 460	≥ 560	4d/5d: ≥22	RT ≥ 100 -40°C ≥ 47