

Classification DIN EN ISO

636-A W 46 4 2Mo, 21952-A W MoSi

Material No.

1.5424

Classification AWS

A5.28 ER70S-A1, A5.28 ER80S-G

Approvals

TÜV 03466, CE, DB 42.045.08

Characteristics and application

TIG/GTAW rod for 0.5%Mo steels. These steels are commonly 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. The good general mechanical properties also ensures use in general structural engineering applications.

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 F1, A204 grades A/B/C, A209/A250 T1, A217 WC1, A335 P1, A352 LC1

Typical analysis in %

C: 0,10

Si: 0,60

Mn: 1,15

Mo: 0,52

Yield strength in Mpa

≥ 460

Tensile strength in Mpa

≥ 560

Elongation in %

4d/5d: ≥ 22

Charpy-V-Value (ISO-V) in J

RT ≥ 60

-40°C ≥ 47

Typical heat treatment

Preheat temperature: Dependent on material thickness

Interpass temperature: max. 250°C

PWHT: AW or 650°C

Other products

SAW: UP-100 Mo (S2Mo), UP-101 Mo (S3Mo)

MIG/GMAW: ED-SG Mo

Gas welding: U 47 Mo (G IV)