

#### Classification DIN EN ISO

14341-A G 42 2 C1 2Mo, 14341-A G 46 6 M21 2Mo, 21952-A G MoSi

#### Material No.

1.5424

#### Classification AWS

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

#### Approvals

TÜV 03465, CE, DB 42.045.07

#### 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.

S355, 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: 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 ≥ 100

-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)

TIG/GTAW: WSG Mo

Gas welding: U 47 Mo (G IV)