WSG 3
TIG welding rods for mild and low alloyed steels

Classification DIN EN ISO

636-A W 50 5 4Si1

Material No.

1.5130

Classification AWS

A5.18 ER70S-6

Approvals

CE

Characteristics and application

TIG/GTAW rod for welding standard CMn structural steels. Typical applications would include shipbuilding, pressure vessels and construction.

Base materials

For steels up to a yield strength of 460MPa (65ksi).

S185-E360, S235JR-S355JR, S235J0-S450J0, S235J2-S355J2, S275N-S460N, S275M-S460M, S460Q, S460QL, P275N-P460N, P275NL1-P460NL1, P355M-P460M, P355ML1-P460ML1, P355Q-P460Q, P355QL1-P460QL1

ASTM: A36, A106 grades A/B/C, A139, A210 grades A1/C, A214, A216 grades WCA/WCB/WCC, A234 grade WPB, A334 grade 1

API: 5L grades X42-X60

Typical analysis in %

C: 0,09

Si: 0,95

Mn: 1,67

Yield strength in Mpa

≥ 500

Tensile strength in Mpa

≥ 560

Elongation in %

4d/5d: ≥18

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

RT ≥ 100

-50°C ≥ 80

Typical heat treatment

Preheat and PWHT are generally not necessary but actual requirements will depend on the grade and thickness of material being welded and any design codes that apply.

Other products

SAW: UP-99 (S1), UP-100 (S2), UP-101 (S3), UP-100Si (S2Si)

MIG/GMAW: ED-SG 1, ED-SG 1A, ED-SG 3

TIG/GTAW: WSG 1, WSG 1A, WSG 2, WSG 3

Gas welding: U 39 (G I), U 40 (G II), U 40 Ni (G III)