

Good toughness at temperatures as low as -45°C

CLASSIFICATION

EN ISO 14341-A (G 50 4 C1/M21 G3Ni1)
AWS A5.28 (ER80S-G)

GENERAL DESCRIPTION

TIG rod with 1%Ni for joining low-alloyed steel with good impact properties below zero °C
Applications from -45°C up to 400°C.

TYPICAL USE

Welding fine grained steel in offshore applications, crane building, pipelines, machine parts, shipbuilding.
TStE355 - P355NL1, TStE460 - P460NL1, N-AXTRA55 - 63, and so on.

CHEMICAL COMPOSITION (%) (Typical values, all weld metal)

C : 0.09	Si : 0.80	Mn : 1.50	Ni : 0.90	P & S : < 0.02
Al : < 0.02	Cu : < 0.40	Cr : < 0.40	Zr+Ti : < 0.15	

MECHANICAL PROPERTIES (Typical values, all weld metal)

Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation 5d (%)	Impact Strength Charpy V notch (ISO-V)
≥ 560 MPa	≥ 650 MPa	≥ 24%	≥ 47 J (-40°C)

GENERAL INFORMATION

Welding positions: NA

Shielding gas: Argon

Dia (x length) (mm): 1.6 - 3.2 (x 1.000)

Packing: 5 kg in a cardboard box

Polarity: DC, with the torch on the negative pole.

Tips & tricks: Preheating and post weld-heat treatment depending on the analysis of the parent metal (Preheat generally 150 °C (302°F)).

The information in this document is based on intensive tests and is accurate to the best of our knowledge. Do note that these values are only typical values for tests in accordance to prescribed standards. The suitability of the product should always be confirmed by qualification tests before use in any application. The information can be changed without previous notice.