

Technical data sheet

011121MBA

GTAW – Solid wire
WA TCS 70S-6**CLASSIFICATION**

| | |
|---------------------------------|---------------------------|
| ASME IIC SFA 5.18 / AWS A 5.18: | ER70S-6 |
| EN ISO 636-A: | W 46 2 W3Si1 |
| Material number: | 1.5125 |
| ASME IX Qualification | QW432 F-N° 6 QW442 A-N° 1 |

DESCRIPTION

- Mild steel copper coated solid GTAW rod for general use
- Single and multipass welding of CMn steels ($Rp0.2 \leq 460$ MPa)
- High deoxidation capacity with higher level of Mn and Si providing reliable impact toughness
- Excellent weldability, trouble free feeding and minimum spatters
- A thin and homogenous copper coating protects the wire from rusting

APPLICATIONS

Unalloyed constructional steel, boiler plate, pipe steels, fine-grained steels, shipbuilding steels, cast steel

Examples

| | | |
|-------------------------------|---------------|----------------------------------|
| Unalloyed construction steels | EN 10025 | S235JRG1 to S355J2G3 |
| Boiler plate | EN 10028-2 | P235GH to P355GH |
| Fine-grained steels | EN 10028-3 | P275N to P420N, P275NL to P420NL |
| | EN 10113 | S275N to S420N, S275NL to S420NL |
| Pipe steels | EN 10208 | L240NB to L415NB |
| | API 5L | X42, X46, X52, X60 |
| Pressure vessel plates | ASTM | SA516 Gr55 to Gr70 |
| Shipbuilding steels | A, E, A32-F40 | |
| Cast steels | DIN 1681 | GS-38, GS-45, GS-52 |

IS/TR 15608: Groups 1.1, 1.2, 1.3, 2.1 and 3.1

TYPICAL ALL-WELD METAL ANALYSIS [%]

| C | Mn | Si |
|------|------|------|
| 0.06 | 1.45 | 0.85 |

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

| Rm [MPa] | Rp 0.2% [MPa] | As [%] | CVN [J] |
|----------|---------------|--------|-----------|
| 510 | 450 | 26 | -30°C: 47 |

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

| Rm [MPa] | Rp 0.2% [MPa] | As [%] | CVN [J] |
|----------|---------------|--------|-----------|
| 560 | 480 | 28 | -30°C: 80 |

SHIELDING GAS

I1: pure argon
Flow rate: 7-10 l/min

OPERATING CONDITIONS

| Diameter [mm] | Amperage [A] | Voltage [V] |
|---------------|--------------|-------------|
| 1.6 | 100 - 125 | 10 - 12 |
| 2.4 | 125 - 175 | 15 - 20 |
| 3.2 | 175 - 250 | 15 - 20 |
| 4.0 | 175 - 250 | 15 - 20 |

Current type: DC-

WELDING POSITIONS

PA, PB, PC, PD, PE, PF

PACKAGING

| Diameter | 1.6 mm / 2.0 mm / 2.4 mm / 3.2 mm / 4.0 mm |
|----------|--|
| TUBE | 5 kg |

Other packaging and other diameters: please consult us

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.