

312 Tig

CATEGORY GMAW-GTAW Solid wires

TYPE Solid stainless steel welding wire for Tig welding

APPLICATIONS Buffer layers before hardfacing, armor plate, exhaust systems, high, Manganese austenitic steel, heterogeneous welding, difficult to weld and unknown steels.

PROPERTIES Scale resistance up to 1150°C, crack and wear resistant, suitable for rebuilding wornout parts. Excellent corrosion resistance against high temperature liquid acids.

CLASSIFICATION

| | |
|------------|-----------------------|
| AWS | A 5.9: ER 312 |
| EN ISO | 14343-A: W 29 9 |
| DIN: W.Nr. | 1.4337 |
| DIN | 8556: SG-X10CrNi 30 9 |

SUITABLE FOR Buffer layers, armor plate, 409, 304, difficult to weld steels such as: 25CrMo4, 42CrMo4, 50CrMo4, 42MnV7, 1.7218, 1.7225, 1.7228, 1.7223, AISI: 4130, 4140, 4150, C45, C60, tool steel repairs etc..

APPROVALS CE approved

WELDING POSITIONS:

WELD DEPOSIT ANALYSIS

| C | Cr | Ni | Mo | Mn | Si | P | S | Cu |
|-------|-----------|----------|-------|---------|-----------|-------|-------|-------|
| <0.15 | 28.0-32.0 | 8.0-10.5 | <0.75 | 1.0-2.5 | 0.30-0.65 | <0.03 | <0.03 | <0.75 |

MECHANICAL PROPERTIES

| Heat Treatment | Rp0,2 (N/mm ²) | Rm (N/mm ²) | A5 (%) | Impact Energy (J) ISO-V | | | Hardness HB |
|----------------|----------------------------|-------------------------|--------|-------------------------|-------|-------|-------------|
| | | | | +20°C | -40°C | -60°C | |
| AW | 640 | 800 | 22 | 50 | | | 240 |

AW: as welded

WELDING PARAMETERS / PACKING

| Welding Parameters | | Packing (kg) | Packing |
|--------------------|-----------------|--------------|---------|
| D (mm) | Current (A) DC- | Single | Master |
| 1.0 x 1000 | 20-50 | 5 | 25 |
| 1.6 x 1000 | 50-80 | 5 | 25 |
| 2.0 x 1000 | 70-110 | | 25 |
| 2.4 x 1000 | 110-180 | 5 | 25 |
| 3.2 x 1000 | 150-250 | | |

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: I1