

OK TIGROD S2

A Cu coated solid rod for GTAW

Classification AWS A5.18: ER70S-2
EN ISO 636-A: W 38 3 W2Ti

DESCRIPTION

OK TIGROD S2 is a copper coated Mn-Si alloyed solid rod for GTAW of non-alloyed steels, used in general construction, pressure vessel fabrication and shipbuilding. It is especially suitable for welding of light gauge non-alloyed steels in all positions and for a variety of applications, including root run for pipes & tubes.

APPROVALS: NPC & PDIL

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|------|--------------------------------|-----|
| C | 0.06 | YS (N/mm ²) | 420 |
| Si | 0.55 | UTS (N/mm ²) | 520 |
| Mn | 1.10 | Elongation (%) | 28 |
| | | Impact (CVN) @ -30°C (Joules) | 150 |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.5 | 1000 | ✓ |
| 3.15 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg and four of them in a cardboard box.

OK TIGROD S2 (SPL)

A Cu coated solid rod for GTAW

Classification AWS A5.18: ER70S-2
EN ISO 636-A: W 38 3 W2Ti

DESCRIPTION

OK TIGROD S2 (SPL) is a copper coated Mn-Si alloyed solid rod for the GTAW of non-alloyed and micro alloyed steels, used in general construction, pressure vessel fabrication and shipbuilding. OK TIGROD S2 (SPL) contains optimized manganese and silicon to provide good strength and impact toughness at sub-zero temperatures. The alloy meets NACE requirements.

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|------|--------------------------------|-----|
| C | 0.05 | YS (N/mm ²) | 420 |
| Si | 0.55 | UTS (N/mm ²) | 520 |
| Mn | 1.20 | Elongation (%) | 28 |
| Al | 0.13 | Impact (CVN) @ -46°C (Joules) | 60 |
| Ti | 0.08 | | |
| Zr | 0.07 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.5 | 1000 | ✓ |
| 3.15 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg and four of them in a cardboard box.



OK TIGROD 13.09

A Cu coated 0.5Mo alloyed solid rod for GTAW

Classification AWS A5.28: ER80S-G

DESCRIPTION

OK TIGROD 13.09 is copper coated 0.5Mo alloyed solid for the GTAW of creep-resistant steels of the same type, such as pipes in pressure vessels and boilers with a working temperature of up to about 500°C. The rod can also be used for high strength low alloy steels.

APPROVALS: CE, DB, DNV & VdTÜV

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|------|--------------------------------|-----|
| C | 0.10 | YS (N/mm ²) | 540 |
| Si | 0.60 | UTS (N/mm ²) | 630 |
| Mn | 1.10 | Elongation (%) | 25 |
| Mo | 0.50 | Impact (CVN) | |
| Cu | 0.15 | @ -40°C (Joules) | 90 |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.4 | 1000 | ✓ |
| 3.2 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD 13.16

A Cu coated 1.3Cr-0.5Mo alloyed solid rod for GTAW of creep resistant steels

Classification AWS A5.28: ER80S-B2

DESCRIPTION

OK TIGROD 13.16 is a copper coated chromium-molybdenum alloyed (1.3Cr-0.5Mo), solid rod for GTAW of creep resistant steels like SA387 Grade 11, A335 Grade P11 or similar materials. OK TIGROD 13.16 is a high purity wire with a guaranteed Brinell factor X<15.

APPROVALS: CE

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|------|--------------------------------|-----|
| C | 0.08 | YS (N/mm ²) | 640 |
| Si | 0.50 | UTS (N/mm ²) | 730 |
| Mn | 0.60 | Elongation (%) | 24 |
| Cr | 1.30 | Impact (CVN) | |
| Mo | 0.50 | @ -40°C (Joules) | 50 |
| Cu | 0.15 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.4 | 1000 | ✓ |
| 3.2 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD B2L

A Cu coated low carbon 1.3Cr-0.5Mo alloyed solid rod for GTAW of creep resistant steels

Classification AWS A5.28: ER70S-B2L

DESCRIPTION

OK TIGROD B2L is a low carbon GTAW solid rod suitable for welding creep resistant steels of the type 1.25Cr-0.5Mo. It provides excellent mechanical properties as well as high creep resistance.

WELDING CURRENT: DC-

SHIELDING GAS : Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|------|--------------------------------|-----|
| C | 0.03 | YS (N/mm ²) | 540 |
| Si | 0.60 | UTS (N/mm ²) | 630 |
| Mn | 0.60 | Elongation (%) | 25 |
| Cr | 1.30 | Impact (CVN) | |
| Mo | 0.50 | @ -20°C (Joules) | 150 |
| Cu | 0.15 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.4 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD 13.17

A Cu coated 2.5Cr-1Mo alloyed solid rod for GTAW of creep resistant steels

Classification AWS A5.28: ER90S-B3

DESCRIPTION

OK TIGROD 13.17 is a copper coated chromium-molybdenum alloyed (2.5Cr-1Mo), solid rod for GTAW of creep resistant steels like SA387 Grade 22, A335 Grade P22 or similar materials. The wire has high purity chemistry with a guaranteed Bruscato factor X < 15.

APPROVALS: CE

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|------|--------------------------------|-----|
| C | 0.09 | YS (N/mm ²) | 620 |
| Si | 0.50 | UTS (N/mm ²) | 730 |
| Mn | 0.60 | Elongation (%) | 22 |
| Cr | 2.40 | Impact (CVN) | |
| Mo | 1.00 | @ -40°C (Joules) | 50 |
| Cu | 0.15 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 2.0 | 1000 | ✓ |
| 2.4 | 1000 | ✓ |
| 3.2 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.



OK TIGROD B3L

A Cu coated low carbon 2.4Cr-1Mo alloyed solid rod for GTAW of creep resistant steels

Classification AWS A5.28: ER80S-B3L

DESCRIPTION

OK TIGROD B3L is a low carbon GTAW solid rod suitable for welding creep resistant steels of the type 2.25Cr-1Mo. It provides excellent mechanical properties as well as high creep resistance.

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|------|--------------------------------|-----|
| C | 0.03 | YS (N/mm ²) | 530 |
| Si | 0.60 | UTS (N/mm ²) | 630 |
| Mn | 0.60 | Elongation (%) | 24 |
| Cr | 2.40 | | |
| Mo | 1.00 | | |
| Cu | 0.15 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.4 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD 13.23

A Cu coated 0.9Ni alloyed solid rod for GTAW

Classification AWS A5.28: ER80S-Ni1

DESCRIPTION

OK TIGROD 13.23 is a copper coated 0.9Ni alloyed, solid rod for GTAW of low temperature and fine-grained steels. The wire provides good impact toughness down to -50°C and is especially suitable for use in the offshore industry.

APPROVALS: DNV

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|------|--------------------------------|-----|
| C | 0.08 | YS (N/mm ²) | 500 |
| Si | 0.70 | UTS (N/mm ²) | 600 |
| Mn | 1.00 | Elongation (%) | 25 |
| Ni | 0.90 | Impact (CVN) | |
| Mo | 0.25 | @ 0°C (Joules) | 230 |
| Cu | 0.15 | @ -20°C (Joules) | 200 |
| | | @ -46°C (Joules) | 140 |
| | | @ -60°C (Joules) | 90 |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.4 | 1000 | ✓ |
| 3.2 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD 13.28

A Cu coated 2.4Ni alloyed solid rod for GTAW

Classification AWS A5.28: ER80S-Ni2

DESCRIPTION

OK TIGROD 13.28 is a copper coated 2.4Ni alloyed, solid rod for GTAW of low-alloyed and low temperature steels in applications such as vessels, pipes and offshore industry with a minimum yield strength less than 470 MPa. The wire provides good impact toughness down to -60°C.

APPROVALS: VdTÜV

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|------|--------------------------------|-----|
| C | 0.10 | YS (N/mm ²) | 540 |
| Si | 0.60 | UTS (N/mm ²) | 630 |
| Mn | 1.10 | Elongation (%) | 30 |
| Ni | 2.40 | Impact (CVN) | |
| Cu | 0.15 | @ -20°C (Joules) | 200 |
| | | @ -40°C (Joules) | 180 |
| | | @ -60°C (Joules) | 150 |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.4 | 1000 | ✓ |
| 3.0 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD 13.32

A Cu coated 5Cr-0.5Mo alloyed solid rod for GTAW of creep resistant steels

Classification AWS A5.28: ER80S-B6

DESCRIPTION

OK TIGROD 13.32 is a copper coated 5Cr-0.5Mo alloyed, solid rod for the GTAW of creep resistant steels of similar composition. The rod is also suitable for welding of high strength steels with minimum yield strength less than 730 MPa.

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|------|--------------------------------|-----|
| C | 0.07 | YS (N/mm ²) | 580 |
| Si | 0.40 | UTS (N/mm ²) | 680 |
| Mn | 0.60 | Elongation (%) | 22 |
| Cr | 5.70 | Impact (CVN) | |
| Mo | 0.60 | @ +20°C (Joules) | 100 |
| Cu | 0.15 | @ -20°C (Joules) | 80 |
| | | @ -30°C (Joules) | 50 |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.4 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.



OK TIGROD 13.37

A Cu coated 9Cr-1Mo alloyed solid rod for GTAW of high temperature steels

Classification AWS A5.28: ER80S-B8

DESCRIPTION

OK TIGROD 13.37 is a copper coated 9Cr-1Mo alloyed, solid rod for the GTAW of high temperature steels and steels for hot hydrogen service, especially in oil refineries.

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|------|--------------------------------|-----|
| C | 0.08 | YS (N/mm ²) | 540 |
| Si | 0.40 | UTS (N/mm ²) | 660 |
| Mn | 0.60 | Elongation (%) | 26 |
| Cr | 9.00 | Impact (CVN) | |
| Mo | 1.00 | @ -20°C (Joules) | 140 |
| | | @ -40°C (Joules) | 120 |
| | | @ -60°C (Joules) | 90 |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.4 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD 13.38

A Cu coated 9Cr-1Mo-V-N alloyed solid rod for GTAW of high temperature steels

Classification AWS A5.28: ER90S-B9

DESCRIPTION

OK TIGROD 13.38 is a copper coated 9Cr-1Mo-V-N alloyed solid rod for the GTAW of high temperature steels and steels for hot hydrogen service, especially in oil refineries. It is preferably be used for 9Cr steels, such as P91/T91. The wire has extremely high purity chemistry and produces improved strength levels both at room temperature and higher temperatures.

APPROVALS: VdTÜV,

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|------|--------------------------------|-----|
| C | 0.10 | YS (N/mm ²) | 690 |
| Si | 0.30 | UTS (N/mm ²) | 790 |
| Mn | 0.50 | Elongation (%) | 20 |
| Cr | 8.90 | Impact (CVN) | |
| Ni | 0.80 | @ 0°C (Joules) | 180 |
| Mo | 1.00 | @ -20°C (Joules) | 150 |
| Nb | 0.06 | @ -40°C (Joules) | 90 |
| N | 0.04 | @ -60 C (Joules) | 70 |
| V | 0.20 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 2.0 | 1000 | ✓ |
| 2.4 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD 16.10

An extra low carbon stainless steel solid rod for GTAW of 18Cr-8Ni type steels

Classification AWS A5.9: ER308L

DESCRIPTION

OK TIGROD 16.10 is a corrosion resistant, chromium-nickel alloyed solid rod for welding austenitic chromium-nickel alloys of 18Cr-8Ni type. OK TIGROD 16.10 has good general corrosion resistance. The alloy has a low carbon content which makes it particularly suitable to the applications, where there is a risk of intergranular corrosion. The alloy is widely used in the chemical and food-processing industries, as well as for pipes, tubes and boilers.

APPROVALS: NPC, PDIL & TOYO

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|-------|--------------------------------|-----|
| C | 0.03 | YS (N/mm ²) | 400 |
| Si | 0.40 | UTS (N/mm ²) | 580 |
| Mn | 1.75 | Elongation (%) | 45 |
| Cr | 19.80 | Impact (CVN) | |
| Ni | 9.50 | @ -196°C (Joules) | 60 |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.5 | 1000 | ✓ |
| 3.15 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD 16.11

A Nb stabilized 20Cr-10Ni stainless steel solid rod for GTAW

Classification AWS A5.9: ER347

DESCRIPTION

OK TIGROD 16.11 is a corrosion-resistant, chromium-nickel alloyed solid rod for welding stabilized austenitic chromium-nickel alloys of 18Cr-8Ni type. OK TIGROD 16.11 has good general corrosion resistance. The alloy is stabilized with niobium to improve resistance to the intergranular corrosion of the weld metal. Due to the niobium content, this alloy is recommended for use at higher temperatures

APPROVALS: NPC & TOYO

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|-------|--------------------------------|-----|
| C | 0.04 | YS (N/mm ²) | 430 |
| Si | 0.40 | UTS (N/mm ²) | 620 |
| Mn | 1.50 | Elongation (%) | 35 |
| Cr | 19.50 | Impact (CVN) | |
| Ni | 9.50 | @ +20°C (Joules) | 100 |
| Nb | 0.50 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.5 | 1000 | ✓ |
| 3.15 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.



OK TIGROD 16.13

An austenitic stainless steel solid rod for GTAW of 25Cr-20Ni type steels

Classification AWS A5.9: ER310

DESCRIPTION

OK TIGROD 16.13 is a corrosion-resistant, chromium-nickel alloyed solid rod for welding heat-resistant austenitic stainless steels of 25Cr-20Ni type. OK TIGROD 16.13 has good general oxidation resistance, especially at high temperatures, due to its high Cr content. Common applications include industrial furnaces, boiler parts and heat exchangers.

WELDING CURRENT: DC-

SHIELDING GAS: Ar or He or Ar/He

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|-------|--------------------------------|-----|
| C | 0.09 | YS (N/mm ²) | 350 |
| Si | 0.45 | UTS (N/mm ²) | 550 |
| Mn | 1.75 | Elongation (%) | 32 |
| Cr | 26.70 | Impact (CVN) | |
| Ni | 20.60 | @ +20°C (Joules) | 120 |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.5 | 1000 | ✓ |
| 3.15 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD 16.30

An extra low carbon stainless steel solid rod for GTAW of 18Cr-12Ni-2.5Mo type steels

Classification AWS A5.9: ER316L

DESCRIPTION

OK TIGROD 16.30 is a corrosion resistant, chromium-nickel-molybdenum alloyed solid rod for welding austenitic stainless alloys of the 18Cr-8Ni and 18Cr-12Ni-2.5Mo types. The alloy has very good resistance to corrosion in acid and chlorinated environments. The alloy has a low carbon content which makes it particularly suitable to the applications, where there is a risk of intergranular corrosion. The alloy is widely used in the chemical and food-processing industries, as well as in shipbuilding and various types of architectural structures.

APPROVALS: NPC, PDIL & TOYO

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|-------|--------------------------------|-----|
| C | 0.03 | YS (N/mm ²) | 450 |
| Si | 0.40 | UTS (N/mm ²) | 630 |
| Mn | 1.60 | Elongation (%) | 32 |
| Cr | 19.00 | Impact (CVN) | |
| Ni | 11.80 | @ -196°C (Joules) | 50 |
| Mo | 2.10 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.5 | 1000 | ✓ |
| 3.15 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD 16.53

An extra low carbon 24Cr-13Ni stainless steel solid rod for GTAW

Classification AWS A5.9: ER309L

DESCRIPTION

OK TIGROD 16.53 is a corrosion resistant, chromium-nickel alloyed solid rod for joining stainless steels to non-alloy or low-alloy steels and for welding austenitic stainless alloys of the 24Cr-13Ni types. The alloy is also used for welding buffer layers on C-Mn steels.

APPROVALS: NPC, PDIL & TOYO

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|-------|--------------------------------|-----|
| C | 0.03 | YS (N/mm ²) | 410 |
| Si | 0.45 | UTS (N/mm ²) | 580 |
| Mn | 1.75 | Elongation (%) | 35 |
| Cr | 23.50 | Impact (CVN) | |
| Ni | 12.20 | @ -60°C (Joules) | 100 |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.5 | 1000 | ✓ |
| 3.15 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD 16.54

An extra low carbon corrosion resistant solid rod of the 309LMo type for GTAW

Classification AWS A5.9: ER309LMo (Nearest)

DESCRIPTION

OK TIGROD 16.54 is a corrosion resistant, chromium-nickel-molybdenum alloyed solid rod for welding dissimilar steels, such as 316L to unalloyed and low-alloyed steels and for overlay welding of unalloyed and low-alloyed steels when Mo is essential.

WELDING CURRENT: DC-

SHIELDING GAS: Ar

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|-------|--------------------------------|-----|
| C | 0.03 | YS (N/mm ²) | 400 |
| Si | 0.50 | UTS (N/mm ²) | 600 |
| Mn | 1.50 | Elongation (%) | 34 |
| Cr | 22.00 | Impact (CVN) | |
| Ni | 14.00 | @ +20°C (Joules) | 100 |
| Mo | 2.50 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.5 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD 1100

A soft aluminium solid rod for GTAW

Classification AWS A5.10: R1100

DESCRIPTION

OK TIGROD 1100 is highly resistant to chemical attack and weathering. It is a relatively soft alloy, easily formable and it is used extensively in thin - gauge and foil products. It has good welding characteristics. A desirable characteristic of the alloy is bright finish obtained by anodising. Non-heat treatable.

APPROVALS: CWB

WELDING CURRENT: AC

SHIELDING GAS: Ar or Ar/He

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|--------|--------------------------------|----|
| Mn | <0.05 | YS (N/mm ²) | 30 |
| Cu | 0.13 | UTS (N/mm ²) | 75 |
| Al | >99.00 | Elongation (%) | 35 |
| Zn | <0.10 | | |
| Si+Fe | <0.95 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 2.0 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.



OK TIGROD 4043

A Si alloyed general purpose aluminium solid rod for GTAW

Classification AWS A5.10: R4043

DESCRIPTION

OK TIGROD 4043 is one of the most widely used welding alloys. It is used for welding AlMgSi types and AlSi alloys (up to 7% silicon). Not recommended for anodising. Non-heat treatable.

APPROVALS: CE, CWB, DB

WELDING CURRENT: AC

SHIELDING GAS: Ar or Ar/He

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|-------|--------------------------------|-----|
| Si | 5.00 | YS (N/mm ²) | 55 |
| Mn | <0.05 | UTS (N/mm ²) | 165 |
| Cu | <0.10 | Elongation (%) | 18 |
| Ti | <0.15 | | |
| Zn | <0.10 | | |
| Fe | <0.60 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 2.0 | 1000 | ✓ |
| 2.4 | 1000 | ✓ |
| 3.2 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD 5183

A Mg-Mn alloyed aluminium solid rod for GTAW

Classification AWS A5.10: R5183

DESCRIPTION

OK TIGROD 5183 is designed to provide the highest possible strength in the as welded condition of alloy AA 5083 and similar high magnesium alloys. The alloy is typically used in marine and structural applications where high strength, high impact fracture toughness and exposure to corrosive elements are important. The alloy is not recommended for elevated temperature applications due to its susceptibility to stress corrosion cracking. The alloy is non-heat treatable.

APPROVALS: CE, CWB, DB & VdTÜV

WELDING CURRENT: AC

SHIELDING GAS: Ar or Ar/He

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|-------|--------------------------------|-----|
| Si | <0.40 | YS (N/mm ²) | 140 |
| Mn | 0.80 | UTS (N/mm ²) | 290 |
| Cr | 0.15 | Elongation (%) | 25 |
| Cu | <0.10 | Impact (CVN) | |
| Ti | <0.15 | @ +20°C (Joules) | 30 |
| Zn | <0.25 | | |
| Fe | <0.40 | | |
| Mg | 4.80 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (2.5 Kg.) |
|-----------|-------------|-------------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.4 | 1000 | ✓ |
| 3.2 | 1000 | ✓ |

PACKING: The rods are packed in 2.5 kg cartons and four of them in a Cardboard box.

OK TIGROD 5356

A Mg alloyed aluminium solid rod for GTAW

Classification AWS A5.10: R5356

DESCRIPTION

OK TIGROD 5356 is the most widely used welding alloy and can be classified as a general-purpose type filler alloy. OK TIGROD 5356 is typically chosen because of its relatively high shear strength. The 5XXX alloy base material, welded with OK TIGROD 5356, with weld pool chemistry greater than 3% Mg and service temperatures in excess of 65°C, is susceptible to stress corrosion cracking. The alloy is non-heat treatable.

APPROVALS: CE, CWB, DB & VdTÜV

WELDING CURRENT: AC

SHIELDING GAS: Ar or Ar/He

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|-------|--------------------------------|-----|
| Si | <0.25 | YS (N/mm ²) | 120 |
| Mn | 0.15 | UTS (N/mm ²) | 265 |
| Cr | 0.13 | Elongation (%) | 26 |
| Cu | <0.10 | | |
| Ti | 0.11 | | |
| Zn | <0.10 | | |
| Fe | <0.40 | | |
| Mg | 5.00 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.4 | 1000 | ✓ |
| 3.2 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD 5556A

A Mg-Mn alloyed aluminium solid rod for GTAW

Classification AWS A5.10: R5556

DESCRIPTION

OK TIGROD 5556A is a solid rod suitable for welding of aluminium alloys (approx. up to 5% Mg) that are not age hardenable and alloys where a high tensile strength is required. The corrosion resistance in a marine atmosphere is very good.

APPROVALS: VdTÜV

WELDING CURRENT: AC

SHIELDING GAS: Ar or He or Ar/He

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|-------|--------------------------------|-----|
| Si | <0.25 | YS (N/mm ²) | 145 |
| Mn | 0.80 | UTS (N/mm ²) | 295 |
| Cr | 0.13 | Elongation (%) | 25 |
| Cu | <0.10 | Impact (CVN) | |
| Ti | 0.13 | @ +20°C (Joules) | 25 |
| Zn | <0.20 | | |
| Fe | <0.40 | | |
| Mg | 5.30 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 1.6 | 1000 | ✓ |
| 2.0 | 1000 | ✓ |
| 2.4 | 1000 | ✓ |
| 3.2 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.



OK TIGROD 19.30

A Si-Mn alloyed copper solid rod for GTAW

Classification AWS A5.7: ERCuSi-A

DESCRIPTION

OK TIGROD 19.30 is a silicon-manganese alloyed copper solid rod, for welding of copper-silicon, copper-zinc and low alloyed copper alloys. OK TIGROD 19.30 has good flow properties. The alloy is widely used in the joining of zinc-coated steel sheets.

WELDING CURRENT: DC-

SHIELDING GAS: Ar or He or Ar/He

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|-------|--------------------------------|-----|
| Si | 3.40 | YS (N/mm ²) | 150 |
| Mn | 1.10 | UTS (N/mm ²) | 350 |
| Cu | >94 | Elongation (%) | 40 |
| Sn | <0.20 | | |
| Zn | <0.20 | | |
| Fe | <0.30 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 2.0 | 1000 | ✓ |
| 3.2 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.

OK TIGROD 19.40

An Al alloyed copper solid rod for GTAW of aluminium bronzes

Classification AWS A5.7: ERCuAl-A1

DESCRIPTION

An aluminium-bronze (CuAl8) rod for the GTAW of rolled and cast aluminium-bronze alloys. The alloy is noted for its high strength, good wear resistance and very good corrosion resistance, particularly in salt water.

WELDING CURRENT: DC-

SHIELDING GAS: Ar or He or Ar/He

TYPICAL PROPERTIES

| Wire Composition (Wt.%) | | All Weld Mechanical Properties | |
|-------------------------|-------|--------------------------------|-----|
| Si | <0.10 | YS (N/mm ²) | 175 |
| Mn | <0.50 | UTS (N/mm ²) | 420 |
| Cu | bal. | Elongation (%) | 40 |
| Al | 7.80 | | |
| Zn | <0.10 | | |
| Fe | <0.50 | | |

PACKING DATA

| Size (mm) | Length (mm) | Packing (5 Kg.) |
|-----------|-------------|-----------------|
| 2.4 | 1000 | ✓ |
| 3.2 | 1000 | ✓ |

PACKING: The rods are packed in tubes weighing 5 kg.