



OK AUTROD 16.10

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

Classification AWS A5.9: ER308L

DESCRIPTION

A corrosion resistant, chromium-nickel alloyed solid wire for welding austenitic stainless alloys of 18Cr-8Ni type. OK Autrod 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. OK AUTROD 16.10 can be used in combination with OK FLUX 10.92L.

TYPICAL PROPERTIES

Wire Composition (Wt.%)	
C	0.03
Si	0.45
Mn	1.80
Cr	20.70
Ni	9.80

PACKING DATA

Size (mm)	Packing 25 Kg
2.00	✓
2.50	✓
3.15	✓
4.00	✓

PACKING: The wire can be supplied in corrugated cardboard box weighing 25 Kg.

OK AUTROD 16.11

A Nb stabilized 20Cr-10Ni stainless steel solid wire for SAW

Classification AWS A5.9: ER347

DESCRIPTION

A corrosion-resistant, chromium-nickel alloyed solid wire for welding stabilized austenitic chromium-nickel alloys of 18Cr-8Ni type. OK AUTROD 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. OK AUTROD 16.11 can be used in combination with OK FLUX 10.92L.

TYPICAL PROPERTIES

Wire Composition (Wt.%)	
C	0.03
Si	0.40
Mn	1.30
Cr	19.50
Ni	9.50
Nb	0.40

PACKING DATA

Size (mm)	Packing 25 Kg
2.50	✓
3.15	✓
4.00	✓

PACKING: The wire can be supplied in corrugated cardboard box weighing 25 Kg.

OK AUTROD 16.13

An austenitic stainless steel solid wire for SAW of 25Cr-20Ni type steels

Classification AWS A5.9: ER310

DESCRIPTION

A corrosion-resistant, chromium-nickel alloyed solid wire for welding heat-resistant austenitic stainless steels of 25Cr-20Ni type. OK AUTROD 16.13 has good general oxidation resistance, especially at high temperatures, due to its high Cr content. The alloy is fully austenitic and is therefore sensitive to hot cracking. Common applications include industrial furnaces, boiler parts and heat exchangers. OK AUTROD 16.13 can be used in combination with OK FLUX 10.92L.

TYPICAL PROPERTIES

Wire Composition (Wt.%)	
C	0.10
Si	0.45
Mn	1.60
Cr	26.80
Ni	20.60

PACKING DATA

Size (mm)	Packing 25 Kg
2.50	✓
3.15	✓
4.00	✓

PACKING: The wire can be supplied in corrugated cardboard box weighing 25 Kg.



OK AUTROD 16.13

An austenitic stainless steel solid wire for GMAW of 25Cr-20Ni type steels

Classification AWS A5.9: ER310

DESCRIPTION

A corrosion-resistant, chromium-nickel alloyed solid wire for welding heat-resistant austenitic stainless steels of 25Cr-20Ni type. OK AUTROD 16.13 has good general oxidation resistance, especially at high temperatures, due to its high Cr content. The alloy is fully austenitic and is therefore sensitive to hot cracking. Common applications include industrial furnaces, boiler parts and heat exchangers.

WELDING CURRENT: DC+

SHIELDING GAS: Ar/O₂ or Ar/CO₂

TYPICAL PROPERTIES

Wire Composition (Wt.%)		All Weld Mechanical Properties	
C	0.09	YS (N/mm ²)	310
Si	0.40	UTS (N/mm ²)	510
Mn	1.60	Elongation (%)	32
Cr	26.00	Impact (CVN)	
Ni	20.50	@ +20°C (Joules)	120

CURRENT RANGE

Size (mm)	Current (Amp)	Voltage (V)
1.2	80-280	19-28

PACKING: The wire can be supplied in plastic spool packed in a cardboard box weighing 12.5/15.0 kg.

OK AUTROD 16.30

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

Classification AWS A5.9: ER316L

DESCRIPTION

A corrosion resistant, chromium-nickel-molybdenum alloyed solid wire 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.

WELDING CURRENT: DC+

SHIELDING GAS: Ar/O₂ or Ar/CO₂

TYPICAL PROPERTIES

Wire Composition (Wt.%)		All Weld Mechanical Properties	
C	0.03	YS (N/mm ²)	430
Si	0.40	UTS (N/mm ²)	620
Mn	1.70	Elongation (%)	35
Cr	18.50	Impact (CVN)	
Ni	11.80	@ -196°C (Joules)	50
Mo	2.70		

CURRENT RANGE

Size (mm)	Current (Amp)	Voltage (V)
0.8	50-180	16-22
1.2	80-280	19-28
1.6	100-380	19-33

PACKING: The wire can be supplied in plastic spool packed in a cardboard box weighing 12.5/15.0 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 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.