

#### **Spoolarc 29S**

Spoolarc 29S is a general purpose copper-coated wire suitable for many carbon steel welding applications using the Submerged Arc Welding (SAW) process. Spoolarc 29S contains moderate amounts of manganese and silicon to provide sufficient deoxidation over light mill scale. Spoolarc 29S can be combined with a variety of active and neutral bonded fluxes to achieve better welding performance over Spoolarc 81 wire. Spoolarc 29S is used in a wide variety of applications including heavy equipment, automotive parts, railcars, agricultural equipment, and sheet metal welding.

Classifications:	AWS A5.17:EM13K, ASME SFA 5.17			
Approvals:	CWB CSA W48, ABS 3SA,3YSA, CAN/CSA ISO 14341, B-G 49A 3C G6 (ER49S-6)			

Approvals are based on factory location. Please contact ESAB for more information.

Typical Wire Composition %					
С	Mn	Si	S	Р	Cu
0.08	1.15	0.5	0.006	0.013	0.06

### Spoolarc 53

Designed for single or multipass welding on carbon and low alloy steels. Provides higher strength deposits with moderate rust and mill scale tolerance. Produces good impact toughness. Applications include pressure vessel fabrication and offshore oil rig structures.

Classifications:	AWS A5.17:EH12K, ASME SFA 5.17			
Industry or Segmentation:	Automotive, Agricultural Equipment, Mobile Equipment, Industrial and General Fabrication			

Typical Wire Composition %					
С	Mn	Si	S	Р	
0.10	1.65	0.30	0.01	0.01	



### Spoolarc 71

Spoolarc 71 is a medium manganese and silicon subarc wire that has been microalloyed with titanium. Used with OK Flux 429, OK Flux 10.62, and OK Flux 10.71 fluxes, Spoolarc 71 will produce weld deposits with a minimum 70,000 psi tensile strength in the as welded condition or after eight-hours of stress relief. When used with OK Flux 10.62, weld deposits meet ASME A No. 1 chemistry requirements. Spoolarc 71 is used for welding pressure vessles and can be used for other applications requiring good mechanical properties after stress relieving.

Classifications:	AWS A5.17:EM14K, ASME SFA 5.17
Industry or Segmentation:	Pressure Vessels, Pipe Construction

Typical Wire Composition %					
С	Mn	Si	s	Р	Ti
0.10	1.22	0.55	0.01	0.01	0.07

## Spoolarc 81

Medium manganese and silicon wire - nominal rust and mill scale tolerance. Developed for general purpose welding on low and medium carbon steels. Applications include structural steels, medium strength pressure vessels, ship, barge and offshore oil rig fabrication. Use with OK Flux 429, 231, 350, 10.71, 10.72, and 10.62.

Classifications: AWS A5.17:EM12K, ASME SFA 5.17		
Approvals:	CWB CSA W48, ABS AWS A5.17: EM12K	
Industry or Segmentation:	Windtower, Pressure Vessels, Ship and Offshore Yards, Offshore Oil, Structural Steel Fabrication	

Typical Wire Composition %					
C Mn Si S P					
0.09	0.95	0.26	0.01	0.01	







### Alloy Shield 70S

Alloy Shield 70S is a metal-cored wire used for submerged arc welding applications. It is designed for similar applications as solid wire classification EM12K, including structural steel, shipbuilding, tank fabrication, wheel fabrication, heavy equipment, offshore fabrication, and transmission poles. It can be used to weld over light mill scale and rust while still producing quality welds.

Classifications:	AWS A5.17:EC1
Industry or Segmentation:	Structural Steel Fabrication, Ship/Barge Building, Tank and Vessel Fabrication, Heavy Equipment, Ship and Offshore Yards

Typical Weld Metal Analysis %					
С	Mn	Si	S	Р	
0.086	1.43	0.49	0.014	0.014	

## **Spoolarc ENi4**

Designed for single or multipass welding on high strength steels. Produces good low temperature toughness on a variety of base materials. Weld metal tensile strengths are in excess of 90 ksi (620 MPa) in both the as welded and stress relieved conditions. Applications include pressure vessels, offshore oil rigs, bridges, and other structural steel fabrication.

Classifications:	AWS A5.23:ENi4, ASME SFA 5.23
Approvals:	ABS AWS A5.23: ENi4
Industry or Segmentation:	Pressure Vessels, Offshore Oil, Bridge Construction, Structural Steel Fabrication

Approvals are based on factory location. Please contact ESAB for more information.

Typical Wire Composition %							
С	Mn Si S P Ni Mo						
0.17	0.73	0.19	0.00	0.00	1.74	0.17	0.06

# Spoolarc U515

Designed for use on low alloy steels up to 1.25% Cr - 0.5% Mo. Applications include process piping, heat exchangers and pressure vessel fabrication.

Classifications:	AWS A5.23:EB2R, ASME SFA 5.23
Industry or Segmentation:	Process, Pressure Vessels

Typical Wire Composition %						
с	Mn	Si	S	Р	Cr	Мо
0.10	0.70	0.15	0.01	0.01	1.20	0.47



### **Spoolarc 75**

Spoolarc 75 is a copper-coated 1% nickel solid wire for carbon steel and low alloy submerged arc welding applications. Spoolarc 75 produces a deposit that meets the weathering requirements of AWS D1.1 and D1.5 and is designed to weld weathering steels and/or where improved low temperature impact toughness is specified. Spoolarc 75 is typically used with a neutral flux such as OK Flux 429, 10.71, and 10.62. Spoolarc 75 is used for bridge and structural welding.

Classifications:	AWS A5.23:ENi1K, ASME SFA 5.23
Industry or Segmentation:	Mobile Equipment, Ship/Barge Building, Industrial and General Fabrication, Bridge Construction

Typical Wire Composition %							
С	Mn	Si	S	Р	Cr	Cu	Ni
0.08	0.89	0.46	0.01	0.00	0.04	0.07	0.98

### OK Autrod 12.24

OK Autrod 12.24 is a copper-coated, molybdenum-alloyed wire for the submerged arc welding of non-alloyed and low-alloyed steels. It can be combined with OK Flux 10.47, OK Flux 10.61, OK Flux 10.62, OK Flux 10.71, OK Flux 10.72, OK Flux 10.73, OK Flux 10.81 and OK Flux 10.83.

Classifications:	SFA/AWS A5.23:EA2

Typical Weld Metal Analysis %								
С	Mn	Si	S	Р	Ni	Cr	Мо	
0.10	1.06	0.15	0.014	0.013	0.02	0.04	0.50	

# OK Autrod 13.20 SC

OK Autrod 13.20SC is a Cr-, Mo-alloyed, copper-coated wire for Submerged Arc Welding. Very low level of impurities. X-factor (Bruscato-) max. 11. With OK Flux 10.63 for highest toughness requirements also after Step-Cooling; very clean weld metal with X-factor max. 15. Mainly for creep resistant steels (2,25% Cr, 1% Mo).

Classifications:	SFA/AWS A5.23:EB3R

Typical Weld Metal Analysis %							
С	Mn	Si	S	Р	Cr	Мо	
0.10	0.63	0.16	0.004	0.01	2.30	1.00	



### OK Autrod 16.97

OK Autrod 16.97 is an 18% Cr, 8% Ni, 6% Mo type of submerged arc wire, used in a wide range of applications throughout industry, such as joining austenitic-manganese, work-hardenable steels and heat-resistant steels. OK Autrod 16.97 is usully welded with OK Flux 10.93 or OK Flux 10.92.

Classifications Wire Electrode:	EN ISO 14343-A:S 18 8 Mn
Approvals:	VdTÜV 12101

Approvals are based on factory location. Please contact ESAB for more information.

Typical Wire Composition %						
С	Mn	Si	Ni	Cr		
0.07	6.5	0.4	8.2	18.9		

### **OK Autrod 308L**

A continuous solid corrosion resisting chromium-nickel wire. OK Autrod 308L has a good general corrosion resistance. The alloy has a low carbon content which makes this alloy particularly recommended were 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. The alloy has a low carbon content which makes this alloy particularly recommended were there is a risk of intergranular corrosion. OK Autrod 308L can be used in combination with OK Flux 10.92, OK Flux 10.93, OK Flux 10.99 or others.

Classifications Wire Electrode:	SFA/AWS A5.9:ER308L, EN ISO 14343-A:S 19 9 L
Approvals:	CE EN 13479, VdTÜV 12101, NAKS/HAKC 3.2-4.0 mm, DB 52.039.15

Typical Wire Composition %							
С	Mn	Si	Ni	Cr	N	Ferrite FN	
0.02	1.9	0.4	9.8	19.8	0.05	9	



### **OK Autrod 308H**

A continuous solid corrosion resisting chromium-nickel wire for the welding of austenitic chromium nickel alloys of the 18% Cr - 8% Ni type. OK Autrod 308H has a good general corrosion resistance. The alloy has a high carbon content which makes this alloy suitable for applications used at higher temperatures. The alloy is used in chemical and food processing industries as well as for pipes, tubes and boilers. OK Autrod 308H can be used in combination with OK Flux 10.93.

Classifications Wire Electrode:	SFA/AWS A5.9:ER308H, EN ISO 14343-A:S 19 9 H
Approvals:	VdTÜV 12101

Approvals are based on factory location. Please contact ESAB for more information.

Typical Wire Composition %						
С	Mn	Si	Ni	Cr		
0.05	1.9	0.5	9.2	19.8		

# **OK Autrod 309L**

A continuous solid corrosion resisting chromium-nickel wire for joining stainless steels to non-alloy or low-alloy steels as well as for welding austenitic stainless alloys of 24% Cr, 13% Ni types. OK Autrod 309L has a good general corrosion resistance. When used for joining dissimilar materials, the corrosion resistance is of secondary importance. OK Autrod 309L can be used in combination with OK Flux 10.93.

Classifications Wire Electrode:	SFA/AWS A5.9:ER309L, EN ISO 14343-A:S 23 12 L
Approvals:	CE EN 13479, VdTÜV 12101, NAKS/HAKC 3.2-4.0 mm

Typical Wire Composition %									
С	Mn	Si	Ni	Cr	Мо	N	Ferrite FN		
0.02	1.8	0.4	13.4	23.2	0.10	0.05	10		



#### **OK Autrod 309MoL**

OK Autrod 309MoL is a stainless steel, over-alloyed wire for submerged arc welding. Suitable for joining of stainless Cr-Ni and Cr-Ni-Mo steels 304, 309 or 316 to ensure corrosion resistance in e.g. the pulp and paper industry. Dissimilar steels when alloying with Mo is essential. OK Autrod 309MoL can be used in combination with OK Flux 10.93.

Classifications Wire Electrode:	SFA/AWS A5.9:ER309LMo (mod), EN ISO 14343-A:S 23 12 2 L			
Approvals:	VdTÜV 12101			

Approvals are based on factory location. Please contact ESAB for more information.

Typical Wire Composition %								
С	Mn	Si	Ni	Cr	Мо			
0.01	1.5	0.4	14.6	21.4	2.5			

### **OK Autrod 310**

A continuous solid corrosion resisting chromium-nickel wire for welding heat resistant austenitic steels of the 25% Cr, 20% Ni type. OK Autrod 310 has a good general oxidation resistance especially at high temperatures due to its high Cr content. The alloy is fully austenitic and therefore sensitive to hot cracking. Common applications are industrial furnaces and boiler parts as well as heat exchangers. OK Autrod 310 can be used in combination with OK Flux 10.93 or OK Flux 10.92.

Classifications Wire Electrode:		SFA/AWS A5.9:ER310, EN ISO 14343-A:S 25 20					
Typical Wire Composition %							
C Mn Si Ni Cr							
0.10	1.6		0.4	20.7	25.8		



### **OK Autrod 310MoL**

A continous solid corrosion resisting chromium-nickel-molybdenum wire for welding of austenitic manganese steels of 25% Cr, 22% Ni, 2% Mo types. OK Autrod 310MoL has a good resistance to pitting, intergranular corrosion and stress corrosion cracking. The alloy is used in acid rich environments, in the urea industry and in gas treatment plants. OK Autrod 310MoL can be used in combination with OK Flux 10.93.

Classifications Wire Electrode:			EN ISO 1	4343-A:S 25 22	2 N L			
Typical Wire Composition %								
C Mn Si Ni Cr Mo N Ferrite FN								Ferrite FN
0.01	4.5	0.1		22.0	25.0	2.0	0.14	0

#### OK Autrod 312

A continuous solid corrosion resisting chromium-nickel wire for welding stainless steels of the 29% Cr, 9% Ni type. OK Autrod 312 has a good oxidation resistance at high temperatures due to its high content of Cr. The alloy is widely used for joining dissimilar steels, especially if one of the component is fully austenitic, and for steels that are difficult to weld, eg/ machine components, tools, austenitic manganese steels. OK Autrod 312 can be used in combination with OK Flux 10.93.

Classifications Wire El	sifications Wire Electrode: SFA/AWS A5.9:ER312, EN ISO 14343-A:S 29 9							
<b>Typical Wire Comp</b>	Typical Wire Composition %							
С	C Mn Si Ni Cr							
0.10	1.6		0.4	8.8	30.7			



### **OK Autrod 316L**

A continous solid corrosion resisting chromium-nickel-molybdenum wire for welding of austenitic stainless alloys of 18% Cr - 8% Ni and 18% Cr - 8% Ni - 3% Mo-types. OK Autrod 316L has a good general corrosion resistance, in particularly the alloy has very good resistance against corrosion in acid and chlorinated environments. The alloy has a low carbon content which makes it particularly recommended were there is a risk of intergranular corrosion. The alloy is widely used in the chemical and food processing industries as well as in ship building and various types of architectural structures. OK Autrod 316L can be used in combination with OK Flux 10.93.

Classifications Wire Electrode:	SFA/AWS A5.9:ER316L, EN ISO 14343-A:S 19 12 3 L			
Approvals:	CE EN 13479, VdTÜV 12101, NAKS/HAKC 3.2-4.0 mm, DB 52.039.16			

Approvals are based on factory location. Please contact ESAB for more information.

Typical Wire Composition %									
С	Mn Si Ni Cr Mo N Ferrite FN								
0.01	1.7	0.4	12.0	18.2	2.6	0.04	7		

### **OK Autrod 316H**

A continous solid corrosion resisting chromium-nickel-molybdenum wire for welding of austenitic stainless alloys of 17% Cr 12% Ni 3% Mo types. OK Autrod 316H can be used in combination with OK Flux 10.93. OK Autrod 316H has a good general corrosion resistance The alloy has a high carbon content which makes this alloy suitable for applications used at higher temperatures. The alloy is used in the chemical and food processing industries as well as for pipes, tubes and boilers.

Typical Wire Composition %								
С	Mn	Si	Ni	Cr	Мо	N	Ferrite FN	
0.05	1.7	0.4	12.5	19.3	2.2	0.04	6	



### OK Autrod 16.38

A continuous solid corrosion resisting non-magnetic chromium-nickel-molybdenium wire for welding of stabilized and non-stabilized austenitic alloys of the same type as well as non magnetic steels. OK Autrod 16.38 can be used in combination with OK Flux 10.93 The alloy is corrosion resistant in seawater environment at temperatures below 350°C and has very good corrosion resistance to acids such as nitric acid. Excellent impact properties at low temperatures.

Classifications	Wire Electrode:	EN ISO 14343-A	A:S 20 16 3 Mn L				
Typical Wire	Typical Wire Composition %						
с	Mn	Si	Ni Cr Mo N				
0.01	6.9	0.4	16.5	19.9	3.0	0.18	

### **OK Autrod 317L**

A continous solid corrosion resisting chromium-nickel-molybdenum wire for welding of austenitic stainless alloys of 19% Cr 13% Ni 3% Mo types. OK Autrod 317L has a good resistance to general corrosion and pitting due to its high content of molybdenium. The alloy has a low carbon content which makes this alloy particularly recommended were there is a risk of intergranular corrosion. The alloy is used in severe corrosion conditions such as in the petrochemical and paper industries. OK Autrod 317L can be used in combination with OK Flux 10.93.

Classification	s Wire Electroo	de: EN ISO	14343-A:S 18 15	5 3 L, SFA/AWS	A5.9:ER317L			
<b>Typical Wire</b>	Typical Wire Composition %							
С	Mn	Si	Ni	Cr	Мо	N	Ferrite FN	
0.01	1.4	0.4	13.6	18.9	3.6	0.05	7	



OK Autrod 318 is an extra low carbon, stainless wire for the submerged arc welding of corrosion-resistant steels of the 18Cr12Ni3Mo type, such as AlSi 316 and 316L or somewhat lower alloyed types. OK Autrod 318 can be used in combination with OK Flux 10.93.

Classifications Wire Electrode:	EN ISO 14343-A:S 19 12 3 Nb, SFA/AWS A5.9:ER318
Approvals:	CE EN 13479, VdTÜV 12101, DB 52.039.11, NAKS/HAKC 4.0mm

Approvals are based on factory location. Please contact ESAB for more information.

Typical Wire Composition %									
С	Mn	Si	Ni	Cr	Мо	N	Nb	Ferrite FN	
0.04	1.8	0.4	11.5	18.9	2.6	0.04	0.7	11	

## **OK Autrod 347**

A continuous solid corrosion resisting chromium-nickel wire for the welding of austenitic chromium nickel alloys of the 18% Cr - 8% Ni type. OK Autrod 347 has a good general corrosion resistance. The alloy is stabilized with niobium to improve the resistance against intergranular corrosion of the weld metal. Due to the niobium content this alloy is recommended for use at higher temperatures. OK Autrod 347 can be used in combination with OK Flux 10.93.

Classifications Wire Electrode:	EN ISO 14343-A:S 19 9 Nb, SFA/AWS A5.9:ER347			
Approvals:	CE EN 13479, VdTÜV 12101, DB 52.039.07, NAKS/HAKC 2.4, 3.2, 4.0 mm			

Typical Wire Composition %								
С	Mn	Si	Ni	Cr	N	Nb	Ferrite FN	
0.04	1.4	0.4	9.5	19.2	0.05	0.6	7	



A continuous solid corrosion resisting chromium-nickel-molybdenum-copper wire for welding of austenitic stainless alloys of 20% Cr, 25% Ni, 5% Mo, 1,5% Cu, low C types. OK Autrod 385 weld metal has a good resistance to stress corrosion and intergranular corrosion and shows a very good resistance to attack in non-oxidizing acids. The resistance and crevice corrosion is better than for ordinary 18% Cr, 8% Ni, Mo steels. The alloy is widely used in many applications related to the process industry. OK Autrod 385 can be used in combination with OK Flux 10.93.

Classifications Wire Electrode:	SFA/AWS A5.9:ER385, EN ISO 14343-A:S 20 25 5 Cu L			
Approvals:	VdTÜV 12101			

Approvals are based on factory location. Please contact ESAB for more information.

Typical Wire Composition %								
С	Mn	Si	Ni	Cr	Мо	Cu	Ν	
0.01	1.7	0.4	25.0	20.0	4.4	1.5	0.05	

### **OK Autrod 2209**

A continous solid corrosion resisting Duplex wire for welding of austenitic-ferritic stainless alloys of 22% Cr, 5% Ni, 3% Mo types. OK Autrod 2209 has a high general corrosion resistance. In media containing chloride and hydrogen sulphide the alloy has a high resistance to intergranular, pitting and especially to stress corrosion. The alloy is used in a variety of applications across all industrial segments. OK Autrod 2209 can be used in combination with OK Flux 10.93.

Classifications Wire Electrode:	SFA/AWS A5.9:ER2209, EN ISO 14343-A:S 22 9 3 N L			
Approvals:	CE EN 13479, VdTÜV 12101, NAKS/HAKC 3.2-4.0mm			

Typical Wire Composition %								
С	Mn	Si	Ni	Cr	Мо	Ν		
0.01	1.5	0.5	8.5	22.7	3.2	0.17		



A continous, solid, corrosion-resistent duplex wire for welding austenitic-ferritic stainless alloys of 21% Cr, 1% Ni or 23% Cr, 4% Ni types. OK Autrod 2307 is overalloyed in Ni to ensure correct Ferrite balance in the weld metal. Lean duplex types is used for civil engineering, storage tanks, containers, etc. These steels have in general medium corrosion resistance and good strength properties. The welding should be done as for ordinary austenitic steels, but high amperages should be avoided and interpass temperature should be maximum 150°C.

Classifications	Wire Electrode:	EN ISO 14343-/	A:S 23 7 N L					
Typical Wire	Typical Wire Composition %							
с	Mn	Si	Ni	Cr	Cu	N		
0.01	1.4	0.5	7.1	23.2	0.2	0.15		

# **OK Autrod 2509**

A continous solid corrosion resisting "Super Duplex" wire for welding of austenitic-ferritic stainless alloys of 25% Cr, 10% Ni, 4% Mo, low C types. OK Autrod 2509 has a high intergranular corrosion resistance and pitting. The alloy is widely used in applications were corrosion resistance is of utmost importance. Pulp and paper industry, offshore and gas industry are areas of interest. OK Autrod 2509 can be used in combination with OK Flux 10.93 or OK Flux 10.94.

Classifications Wire Electrode:	EN ISO 14343-A:S 25 9 4 N L, SFA/AWS A5.9:ER2594
Approvals:	CE EN 13479, VdTÜV 12101

Typical Wire Composition %							
С	Mn Si Ni Cr Mo N						
0.01	0.4	0.4	9.4	25.2	3.9	0.24	



A continuous solid welding wire of 13% Cr type. OK Autrod 410 is used for welding of similar martensitic and martensitic-ferritic steels in different applications. OK Autrod 410 can be used in combination with OK Flux 10.93.

Classifications Wire Electroo	de: SFA/AWS A5.9:ER410	FA/AWS A5.9:ER410			
Typical Wire Composition	on %				
С	Mn	Si	Cr		
0.12	0.5	0.3	12.2		

# OK Autrod 410NiMo

A continuous solid corrosion resisting "410NiMo" type alloyed with 13 % Cr, 4.5 % Ni and 0.5 % Mo. This alloy is used for welding of similar martensitic and martensitic-feritic steels in different applications such as for example hydro-turbines. OK Autrod 410NiMo can be used in combination with OK Flux 10.93.

Classifications Wir	Classifications Wire Electrode: EN ISO 14343-A:S 13 4						
Typical Wire Co	mposition %						
С	C Mn Si Ni Cr Mo						
0.02	0.5	0.4	4.2	12.4	0.6		



A continous solid welding wire of 13% Cr type. OK Autrod 420 is used for welding of similar martensitic and martensitic-ferritic steels in different applications. The wire 420 type can be used in combination with OK Flux 10.93.

Classifications Wire Electroo	de: SFA	/AWS A5.9:ER420		
Typical Wire Compositi	on %			
С	Mn		Si	Cr
0.3	0.4		0.3	13.0

#### **OK Autrod 430**

A continous solid corrosion resisting 17% Cr wire for welding of stainless alloys of 13-18% Cr. OK Autrod 430 is used for cladding on un-alloyed and low alloyed steels. The wire can be used in combination with OK Flux 10.93.

<b>Classifications Wire Electroc</b>	le:	SFA/AWS A5.9:ER430		
Turniage Wire Compositi	op 9/			
Typical wire composition	011 70	,		
С	Mn		Si	Cr
0.02	0.4		0.3	16.8



### **OK Autrod NiCr-3**

OK Autrod NiCr-3 is a corrosion and heat resistant, nickel-chromium wire for submerged arc welding of high alloyed steel, heat resistant steel, corrosion resistant steel, 9Ni steels and similar steels with high notch toughness at low temperatures. OK Autrod NiCr-3 can be combined with OK Flux 10.90 or OK Flux 10.16.

Classifications Wire Electrode:	SFA/AWS A5.14:ERNiCr-3, EN ISO 18274:S Ni 6082 (NiCr20Mn3Nb)
Approvals:	VdTÜV 12101

Approvals are based on factory location. Please contact ESAB for more information.

Typical Wire Composition %						
С	C Mn Si Ni Cr Fe Nb+Ta					
0.04	3.0	0.2	bal	20.0	1.3	2.5

### **OK Autrod NiCrMo-3**

Ni-based solid wire for SAW welding. Corrosion and heat resistant. For welding of high alloyed steels, heat resistant steels, corrosion resistant steels, 9% Ni-steels and similar steels with high toughness at low temperatures. OK Autrod NiCrMo-3 shall be combined with OK Flux 10.90 or OK Flux 10.16.

Classifications Wire Electrode:	SFA/AWS A5.14:ERNiCrMo-3, EN ISO 18274:S Ni 6625 (NiCr22Mo9Nb)
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Typical Wire Composition %							
С	Mn	Si	Ni	Cr	Мо	Fe	Nb+Ta
0.02	0.04	0.06	Bal	22.7	8.6	0.3	3.5



#### **OK Autrod NiCrMo-4**

OK Autrod NiCrMo-4 is a corrosion and heat resistant, nickel-chromium wire for submerged arc welding of high alloyed steel, heat resistant steel, corrosion resistant steel, 9Ni steels and similar steels with high notch toughness at low temperatures. OK Autrod NiCrMo-4 can be combined with OK Flux 10.90 or OK Flux 10.16.

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Classifications Wire Electrode: SFA/AWS A5.14:ERNiCrMo-4, EN ISO 18274:S Ni 6276 (NiCr15Mo16Fe6W4)
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Typical Wire Composition %							
C Mn Si Ni Cr Mo Fe W							w
0.01	0.45	0.05	Bal.	15.5	16.1	5.8	3.5

## **OK Autrod NiCrMo-13**

OK Autrod NiCrMo-13 is a Nb-free, Ni-Cr-Mo wire for welding high-alloyed steels of the 20Cr25Ni4-6Mo type and nickel-based alloys of similar type. The wire can also be used for welding these steels with dissimilar steels. The weld metal has very good corrosion resistance in both oxidizing and reducing media. OK Autrod NiCrMo-13 can be combined with OK Flux 10.90 or OK Flux 10.16.

Classifications Wire Electrode: SFA/AWS A5.14:ERNiCrMo-13, EN ISO 18274:S Ni 6059 (NiCr23Mo16)							
Typical V	/ire Compo	osition %					
с	Mn	Si	Ni	Cr	Мо	AI	Fe
0.01	0.2	0.1	Bal	23.0	16.0	0.3	10