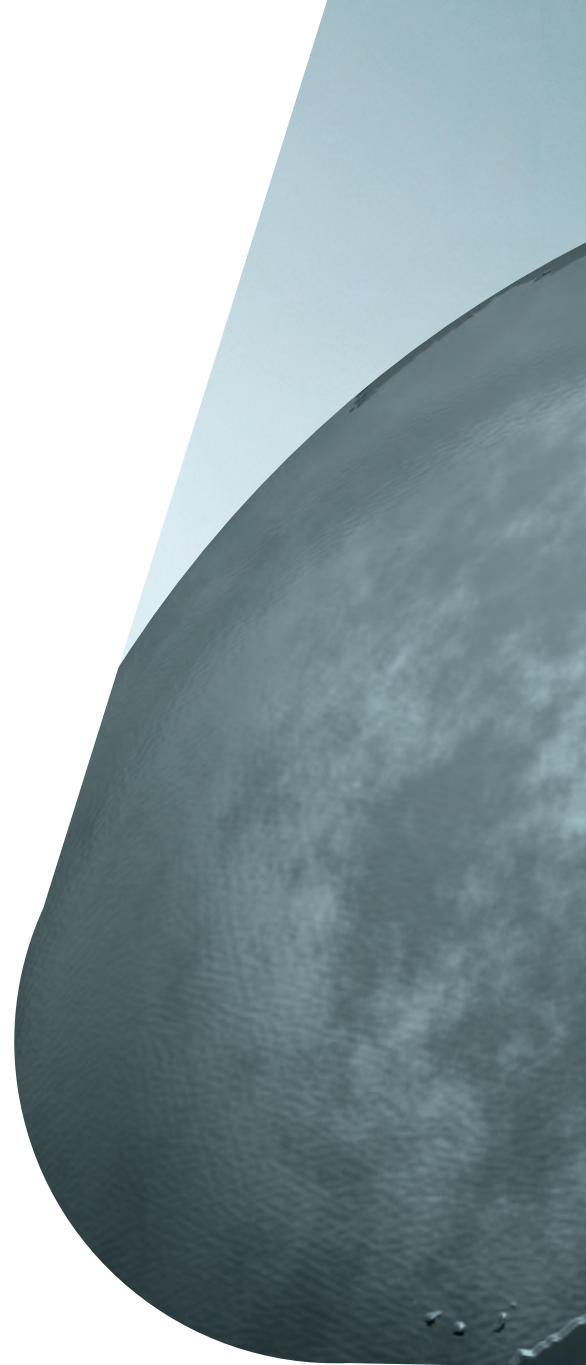
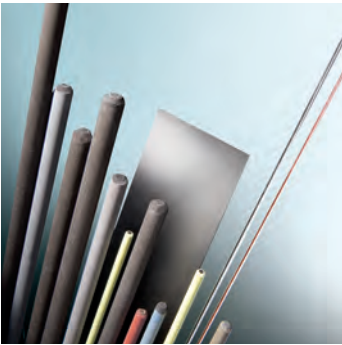


Tailor-Made Protectivity™ Cladding Filler Metals against Corrosion



Cladding Product Line

High-quality industrial-use cladding filler metals
for anti-corrosion applications



Tailor-Made Protectivity™

Industry experience and application know-how combined with innovative and custom (tailor-made) cladding products guarantee that our customers obtain the ideal combination of productivity and protection, within the shortest operating times and up to the maximum performance capacity of their products.

Cladding

Cladding is defined as the process of protecting one metal by bonding a second metal to its surface. Providing a corrosion or oxidation resistant surface on less corrosion resistant material, e.g. cladding of stainless steel or nickel-based layer on a carbon steel base.

Industry Focus

Oil & Gas Upstream, Oil & Gas Downstream, Chemical, Power Generation, Steelworks, Mining, Pumps, Valves & Fittings, Pulp & Paper



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Covered Electrodes for Cladding Applications (Anti-corrosion)

Name	Classification	Mechanical properties of the weld metal		Characteristics and field of use
UTP 68 rutile coated stick electrode	EN ISO 3581-A	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP 68 is suitable for joining and surfacing (cladding) of stabilized and non stabilized CrNi steels and CrNi cast steels.
	E 19 9 Nb R 3 2	> 380 MPa	> 590 MPa	
	AWS A5.4	Elongation A	Impact strength K_v	
	E 347-17	> 30 %	> 47 J (RT)	
UTP 68 LC low carbon stick electrode	EN ISO 3581-A	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP 68 LC, with a low carbon content, is used for repair and building up of identical low carbon, austenitic CrNi steels and CrNi cast steels.
	E 19 9 L R 3 2	> 350 MPa	> 520 MPa	
	AWS A5.4	Elongation A	Impact strength K_v	
	E 308 L-17	> 35 %	> 47 J (RT)	
UTP 68 Mo stabilized stick electrode	EN ISO 3581-A	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP 68 Mo is used for repair and surfacing of stabilized and non-stabilized CrNiMo steels and CrNiMo cast steels.
	E 19 12 3 Nb R 3 2	380 MPa	560 MPa	
	AWS A5.4	Elongation A	Impact strength K_v	
	E 318-16	30 %	55 J (RT)	
UTP 68 MoLC low carbon stick electrode	EN ISO 3581-A	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP 68 MoLC, with a low carbon content, is used for repair and surfacing of identical low carbon, austenitic CrNiMo steels and CrNiMo cast steels.
	E 19 12 3 L R 3 2	380 MPa	560 MPa	
	AWS A5.4	Elongation A	Impact strength K_v	
	E 316 L-17	30 %	60 J (RT)	
UTP 759 Kb basic coated NiCrMo stick electrode	EN ISO 14172	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP 759 Kb is employed primarily for welding components in environmental plants and plants for chemical processes with highly corrosive media. Cladding on low-alloyed steels.
	E Ni 6059 (NiCr23Mo16)	> 450 MPa	> 720 MPa	
	AWS A5.11	Elongation A	Impact strength K_v	
	E NiCrMo-13	> 30 %	> 60 J (RT)	
UTP 776 Kb basic covered electrode	EN ISO 14172	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP 776 Kb is employed primarily for joint welding of matching base materials, as Material-No. 2.4819 (NiMo16Cr15W) and surfacing (cladding) on low-alloyed steels.
	E Ni 6276 (NiCr15Mo15Fe6W4)	> 450 MPa	> 720 MPa	
	AWS A5.11	Elongation A	Impact strength K_v	
	E NiCrMo-4	> 30 %	> 70 J (RT)	
UTP 4225 basic covered electrode	EN ISO 14172	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP 4225 is suitable for joining and surfacing (cladding) of alloys of similar nature, such as e. g. NiCr21Mo, furthermore for welding of CrNiMoCu-alloyed austenitic steels used for high quality tank and apparatus construction in the chemical industry, corrosion resistance in media of sulphuric- and phosphoric acid.
	E Ni 8165 (NiCr25Fe-30Mo)	> 350 MPa	> 550 MPa	
		Elongation A	Impact strength K_v	
		> 30 %	> 80 J (RT)	
UTP 6222 Mo basic coated NiCrMo-stick electrode	EN ISO 14172	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP 6222 Mo is particularly suited for joining and surfacing (cladding) on nickel alloys, austenitic steels, low temperature nickel steels, austenitic-ferritic-joints and claddings of the same or similar nature, like 2.4856 (NiCr22Mo9Nb), 1.4876 (X30 NiCrAlTi 32 20), 1.4529 (X2 NiCrMoCu 25 20 5).
	E Ni 6625 (NiCr22Mo-9Nb)	> 450 MPa	> 760 MPa	
	AWS A5.11	Elongation A	Impact strength K_v	
	E NiCrMo-3	> 30 %	> 75 J (RT)/ > 45 J (-196 °C)	



TIG Rods for Cladding Applications (Anti-corrosion)

Name	Classification	Mechanical properties of the weld metal		Characteristics and field of use
UTP A 68	EN ISO 14343-A	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP A 68 is suitable for surfacing (cladding) in chemical apparatus and vessel construction for working temperatures of $-196\text{ }^{\circ}\text{C}$ up to $400\text{ }^{\circ}\text{C}$.
	W 19 9 Nb Si	> 420 MPa	> 600 MPa	
	AWS A 5.9	Elongation A	Impact strength K_v	
	ER 347 (Si)	> 30 %	> 100 J (RT)	
UTP A 68 LC	EN ISO 14343-A	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP A 68 LC is suitable for surfacing (cladding) in chemical apparatus and vessel construction for working temperatures of $-196\text{ }^{\circ}\text{C}$ up to $350\text{ }^{\circ}\text{C}$.
	W 19 9 L (Si)	400 MPa	600 MPa	
	AWS A5.9	Elongation A	Impact strength K_v	
	ER 308 L (Si)	35 %	100 J (RT)	
UTP A 68 Mo	EN ISO 14343-A	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP A 68 Mo is applicable for surfacing (cladding) of stabilized, corrosion resistant CrNiMo steels of similar nature in the construction of chemical apparatus and vessels up to working temperatures of $-120\text{ }^{\circ}\text{C}$ up to $400\text{ }^{\circ}\text{C}$.
	W 19 12 3 Nb (Si)	460 MPa	680 MPa	
	AWS A5.9	Elongation A	Impact strength K_v	
	ER 318 (Si)	35 %	100 J (RT)	
UTP A 68 MoLC	EN ISO 14343-A	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP A 68 MoLC is used for surfacing (cladding) of low-carbon, corrosion resistant CrNiMo steels exposed to high corrosion for working temperatures up to $350\text{ }^{\circ}\text{C}$.
	W 19 12 3 L (Si)	420 MPa	600 MPa	
	AWS A5.9	Elongation A	Impact strength K_v	
	ER 316 L (Si)	35 %	100 J (RT)	
UTP A 759	EN ISO 18274	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP A 759 is suitable for welding components in plants for chemical processes with highly corrosive media, for joining materials of the same or similar natures and materials with low alloyed steels as well as for surfacing (cladding) on low alloyed steels.
	S Ni 6059 (NiCr23Mo16)	> 450 MPa	> 720 MPa	
	AWS A5.14	Elongation A	Impact strength K_v	
	ER NiCrMo-13	> 35 %	> 100 J (RT)	
UTP A 776	EN ISO 18274	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP A 776 is suitable for joint welding of matching base materials, as 2.4819 NiMo16Cr15W UNS N10276 and surfacing (cladding) on low-alloyed steels.
	S Ni 6276 (NiCr15Mo16Fe6W4)	> 450 MPa	> 750 MPa	
	AWS A5.14	Elongation A	Impact strength K_v	
	ER NiCrMo-4	> 30 %	> 90 J (RT)	
UTP A 4221	EN ISO 18274	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP A 4221 is suitable for joining and surfacing (cladding) of alloys of similar nature, furthermore for welding of CrNiMoCu-alloyed austenitic steels used for high quality tank and apparatus construction in the chemical industry, corrosion resistance in media of sulphuric and phosphoric acid.
	S Ni 8065 (NiFe-30Cr21Mo3)	360 MPa	> 550 MPa	
	AWS A5.14	Elongation A	Impact strength K_v	
	ER NiFeCr-1 (UNS N08065)	> 30 %	> 100 J (RT)	
UTP A 6222 Mo	EN ISO 18274	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP A 6222 Mo has a high nickel content and is suitable for welding high-strength and high-corrosion resistant nickel-base alloys. It can be used for joining ferritic steel to austenitic steel as well as for surfacing (cladding) on steel. It is also possible to weld 9 % nickel steels using this wire due to its high yield strength.
	S Ni 6625 (NiCr22Mo9Nb)	> 460 MPa	> 740 MPa	
	AWS A5.14	Elongation A	Impact strength K_v	
	ER NiCrMo-3	> 30 %	> 100 J (RT)/ > 85 J ($-196\text{ }^{\circ}\text{C}$)	



Solid Wires for Cladding Applications (Anti-corrosion)

Name	Classification	Mechanical properties of the weld metal		Characteristics and field of use
UTP A 68	EN ISO 14343-A	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP A 68 is suitable for surfacing (cladding) in chemical apparatus and vessel construction for working temperatures of $-196\text{ }^{\circ}\text{C}$ up to $400\text{ }^{\circ}\text{C}$.
	G 19 9 Nb Si	> 420 MPa	> 600 MPa	
	AWS A5.9	Elongation A	Impact strength K_v	
	ER 347 (Si)	> 30 %	> 100 J (RT)	
UTP A 68 LC	EN ISO 14343-A	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP A 68 LC is suitable for surfacing in chemical apparatus and vessel construction for working temperatures of $-196\text{ }^{\circ}\text{C}$ up to $350\text{ }^{\circ}\text{C}$.
	G 19 9 L (Si)	400 MPa	600 MPa	
	AWS A5.9	Elongation A	Impact strength K_v	
	ER 308 L (Si)	35 %	100 J (RT)	
UTP A 68 Mo	EN ISO 14343-A	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP A 68 Mo is applicable for surfacing (cladding) of stabilized, corrosion resistant CrNiMo steels of similar nature in the construction of chemical apparatus and vessels for working temperatures of $-120\text{ }^{\circ}\text{C}$ up to $400\text{ }^{\circ}\text{C}$.
	G 19 12 3 Nb (Si)	460 MPa	680 MPa	
	AWS A5.9	Elongation A	Impact strength K_v	
	ER 318 (Si)	35 %	100 J (RT)	
UTP A 68 MoLC	EN ISO 14343-A	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP A 68 MoLC is used for surfacing (cladding) of low-carbon, corrosion resistant CrNiMo steels exposed to high corrosion for working temperatures up to $350\text{ }^{\circ}\text{C}$.
	G 19 12 3 L (Si)	420 MPa	600 MPa	
	AWS A5.9	Elongation A	Impact strength K_v	
	ER 316 L (Si)	35 %	100 J (RT)	
UTP A 786	EN ISO 18274	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP A 786 is particularly designed for claddings of desulphurization and waste incineration components, such as pipes and finned tubes made of heat resistant steels.
	S Ni 6686 (NiCr21Mo16W4)	> 450 MPa	> 760 MPa	
	AWS A5.14	Elongation A	Impact strength K_v	
	ER NiCrMo-14	> 30 %	> 50 J (RT)	
UTP A 4221	EN ISO 18274	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP A 4221 is suitable for joining and surfacing (cladding) of alloys of similar nature, furthermore for welding of CrNiMoCu-alloyed austenitic steels used for high quality tank and apparatus construction in the chemical industry, corrosion resistance in media of sulphuric and phosphoric acid.
	S Ni 8065 (NiFe-30Cr21Mo3)	360 MPa	> 550 MPa	
	AWS A5.14	Elongation A	Impact strength K_v	
	ER NiFeCr-1 (UNS N08065)	> 30 %	> 100 J (RT)	
UTP A 6222 Mo	EN ISO 18274	Yield strength $R_{p0.2}$	Tensile strength R_m	UTP A 6222 Mo has a high nickel content and is suitable for welding high-strength and high-corrosion resistant nickel-base alloys. It can be used for joining ferritic steel to austenitic steel as well as for surfacing (cladding) on steel. It is also possible to weld 9 % nickel steels using this wire due to its high yield strength.
	S Ni 6625 (NiCr22M-09Nb)	460 MPa	> 740 MPa	
	AWS A5.14	Elongation A	Impact strength K_v	
	ER NiCrMo-3	> 30 %	> 100 J (RT)/ > 85 J ($-196\text{ }^{\circ}\text{C}$)	

Cold & Hot Wire TIG Applications

Name	Classification	Characteristics and field of use
UTP A 6222 Mo-3	EN ISO 18274	UTP A 6222 Mo-3 has been developed for applications in the oil & gas industry, and is mainly used for cladding and joining of unalloyed and high strength low alloyed steel (HSLA) components. Typical applications are internal cladding of tubes & pipes, risers, and subsea components such as manifolds, BOPs, Christmas trees, well heads, flanges, valve bodies, blocks etc. to improve corrosion resistance to surfaces exposed to hydrocarbon and hydrogen sulphide.
	S Ni 6625 (NiCr22M-09Nb)	
	AWS A5.14	
	ER NiCrMo-3	

Gas Shielded Wires for Cladding Applications (Anti-corrosion)

Name	Classification	Hardness		Composition (All weld metal)														Characteristics and field of use
		HB	HRC	C	Mn	Si	Cr	Ni	Mo	Co	Nb	Ti	W	Al	V	B	Fe	
SK 430-G	DIN 8555 MF 5-GF-200-C	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Co	Nb	Ti	W	Al	V	B	Fe	Alloy depositing a ferritic steel containing 17 % Chromium designed to resist corrosion at high temperatures, particularly in presence of sulphurous gas.
		190		0,06	0,80	0,60	17,80						0,20					
SK 519-G	DIN 8555 MF 8-GF-C DIN 8556 MSG X2-CrNiMo- Cu 20-25	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Co	Nb	Ti	W	Al	V	B	Fe	For welding and cladding stainless steels of similar composition where corrosion resistance to hot sulphuric and cold hydrochloric acid is required.
				0,02	2,80	0,50	20,50	24,20	5,00									
SK 741-G	DIN 8555 MF 5-GF-40-C	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Co	Nb	Ti	W	Al	V	B	Fe	Alloy depositing a ferritic-martensitic steel containing 13 % Chromium, 5 % Nickel and 1 % Molybdenum. Designed to resist metal-to-metal wear, corrosion and thermal fatigue fire cracking. Field of use: surfacing (cladding) of continuous casting rollers of very small diameters (<150mm).
		41		0,06	0,50	0,60	13,00	5,50	0,80									
SK 768-G	DIN 8555 MF 5-GF-350-C	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Co	Nb	Ti	W	Al	V	B	Fe	Alloy depositing a ferritic-martensitic steel containing 13 % Chromium, 5 % Nickel and 2 % Molybdenum. Designed to resist metal-to-metal wear, corrosion and thermal fatigue fire cracking. Field of use: surfacing (cladding) of continuous casting rollers of very small diameters (< 150mm).
		34		0,02	0,30	0,30	14,50	6,30	2,50									
SK TOOL ALLOY Co-G	DIN 8555 MF 23-GF-200- CKZ	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Co	Nb	Ti	W	Al	V	B	Fe	NiCrMo alloy with addition of Cobalt. Designed for hard-surfacing of parts subject to oxidation, corrosion and mechanical stresses at high temperature (1,100 °C). For reduced levels of dilution and an improved weldability, we recommend using a pulsed MIG welding mode. Field of use: punches for extrusion of steel pipes, hot working tools.
		220		0,03	1,30	0,70	16,00	Bal.	16,00	2,50			4,00					
SK U 521-G	DIN 8555 MF 23-GF-200-TZ	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Co	Nb	Ti	W	Al	V	B	Fe	Nickel-base super-alloy with addition of Cobalt providing the most powerful strengthening effect at high temperature due to the precipitation of Ni3 (AlTi) phase. Enhanced weldability. Field of use: rebuilding of forging hammers.
		200		0,01		0,30	18,50	Bal.	4,50	12,50		3,50		1,00				
SK STELKAY 1-G	DIN 8555 MF 20-GF-55-CTZ	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Co	Nb	Ti	W	Al	V	B	Fe	Cobalt base alloy providing excellent resistance to metal-to-metal wear, oxidation and high stress abrasion wear, in corrosive environments at high temperature. For reduced levels of dilution and an improved weldability, we recommend using a pulsed MIG welding mode. Field of use: mill guides, palm nut oil extruder, plastic extrusion screws, mixer blades, scrapers, rubber mixer.
		54		2,30	0,80	1,60	26,50			Bal.			11,50					
SK STELKAY 6-G	DIN 8555 MF 20-GF-40-CTZ	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Co	Nb	Ti	W	Al	V	B	Fe	Cobalt base alloy providing excellent resistance to metal-to-metal wear, oxidation, thermal cycling and impact in corrosive environments at high temperature. For reduced levels of dilution and an improved weldability, we recommend using a pulsed MIG welding mode. Field of use: valves, valve seats in motor vehicles, hot shear blades, extruder screws, clack valves and seats, dies, punches.
		40		0,95	0,80	1,40	30,00			Bal.			4,20					
SK STELKAY 6 A-G	DIN 8555 MF 20-GF-45-CTZ	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Co	Nb	Ti	W	Al	V	B	Fe	Cobalt base alloy providing excellent resistance to metal-to-metal wear, oxidation, thermal cycling and impact in corrosive environments at high temperature. For reduced levels of dilution and an improved weldability, we recommend using a pulsed MIG welding mode. Field of use: valves, valve seats in motor vehicles, hot shear blades, extruder screws, clack valves and seats, dies, punches.
		43		1,35	0,80	1,50	27,00			Bal.			3,50					

Name	Classification	Hardness		Composition (All weld metal)														Characteristics and field of use
SK STELKAY 6 T-G	DIN 8555 MF 20-GF-40- CTZ	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Co	Nb	Ti	W	Al	V	B	Fe	Cobalt base wire designed to be used with the GTAW process (TIG). Alloy providing excellent resistance to metal-to-metal wear, oxidation, thermal cycling and impact in corrosive environments at high temperature. Field of use: valves, valve seats in motor vehicles, hot shear blades, extruder screws, clack valves and seats, dies, punches.
			40	0,95	0,80	0,80	31,50				Bal.			5,00				
SK STELKAY 21-G	DIN 8555 MF 20-GF-300- CTZ	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Co	Nb	Ti	W	Al	V	B	Fe	Cobalt base alloy providing excellent resistance to metal-to-metal wear, thermal shocks, oxidation in corrosive environments at high temperature. For reduced levels of dilution and an improved weldability, we recommend using a pulsed MIG welding mode. Field of use: extrusion dies, hot working tools, turbine injectors, valve seats, ingot tong bits.
			32	0,27	1,00	1,20	28,00	2,40	5,00	Bal.								



Open Arc Cored Wires for Cladding Applications (Anti-corrosion)

Name	Classification	Hardness		Composition (All weld metal)														Characteristics and field of use
SK 714 N-O	DIN 8555 MF 5-GF-45	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Nb	Ti	W	V	N	Fe	Alloy depositing a ferritic-martensitic steel with addition of nitrogen, designed to resist metal-to-metal wear, corrosion and thermal fatigue. Field of use: cladding of continuous casting rollers.		
			44	0,03	1,00	0,60	13,00	4,20	0,50					0,10	Bal.			
SK 741-O	DIN 8555 MF 5-GF-45-C	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Nb	Ti	W	V	B	Fe	Alloy depositing a ferritic-martensitic steel containing 13 % Chromium, 5 % Nickel and 1 % Molybdenum designed to resist metal-to-metal wear, corrosion and thermal fatigue fire cracking. Field of use: cladding of continuous casting rollers.		
			43	0,02	0,60	0,60	12,60	5,20	0,80						Bal.			

SAW Solid Wires for Cladding Applications (Anti-corrosion)

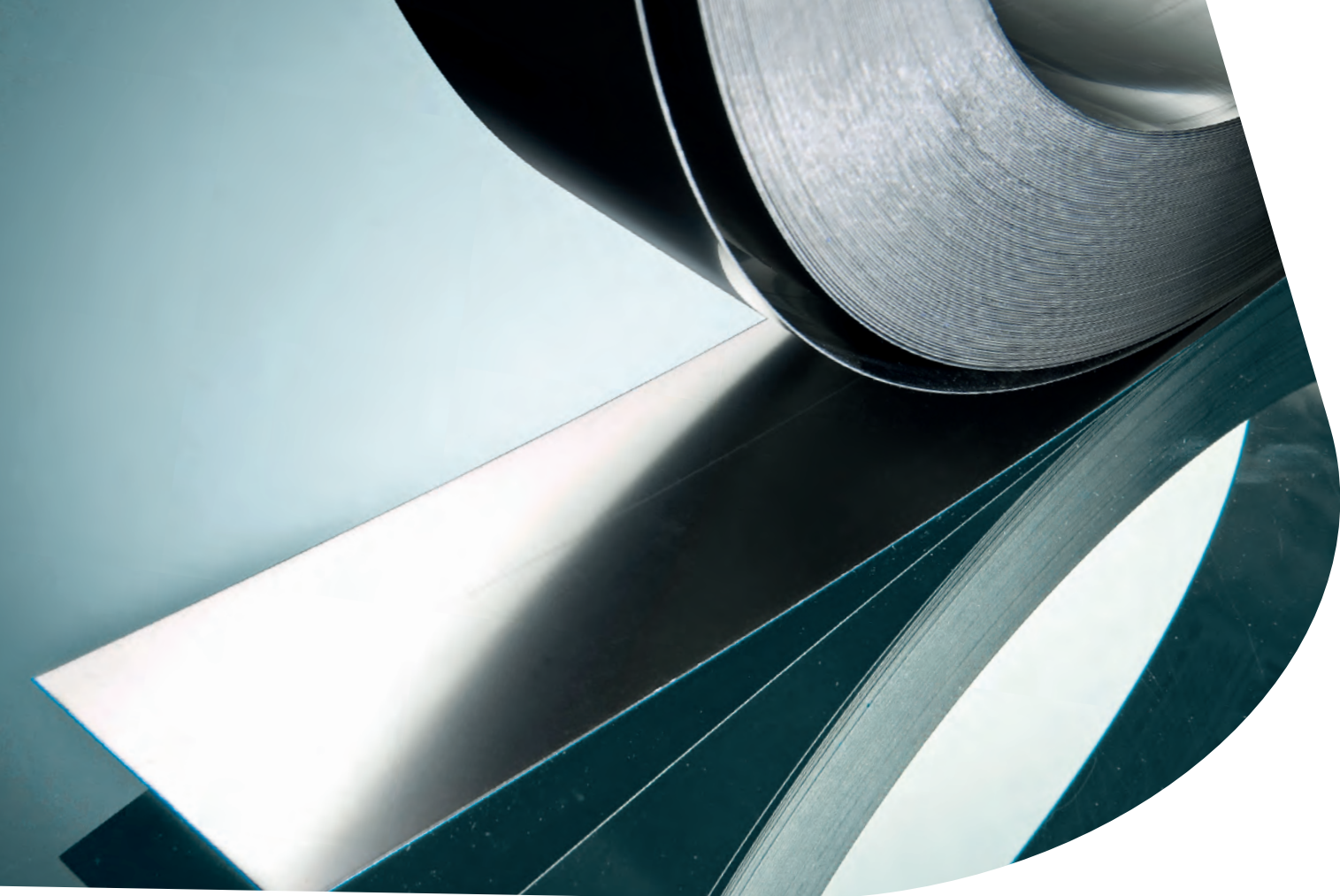
Name	Classification	Composition (All weld metal)		Characteristics and field of use
UTP UP 776 + RECORD Flux (1)	EN ISO 18274	Yield strength R _{p0,2}	Tensile strength R _m	UTP UP 776 is suitable for joining and surfacing (cladding) on matching and similar alloys such as 2.4819 NiMo16Cr15W UNS N10276 and surface claddings on low-alloyed steels.
	S Ni 6276 (NiCr15Mo16Fe6W4)	> 450 MPa	> 690 MPa	
	AWS A5.14	Elongation A	Impact strength K _v	
	ER NiCrMo-4	> 35 %	> 70 J (RT)	
UTP UP 6222 Mo + RECORD Flux (1)	EN ISO 18274	Yield strength R _{p0,2}	Tensile strength R _m	UTP UP 6222 Mo is applied for joint welding of base materials with the same or with a similar composition, e.g. Alloy 625 (UNS N06625) or NiCr22Mo9Nb, Material-No. 2.4856 or mixed combinations with stainless steels and carbon steels. UTP UP 6222 Mo is also applied on alloyed or unalloyed steels for cladding of corrosion resistant plants.
	S Ni 6625 (NiCr22Mo9Nb)	460 MPa	725 MPa	
	AWS A5.14	Elongation A	Impact strength K _v	
	ER NiCrMo-3	40 %	> 80 J (RT)/ 65 J (-196 °C)	

(1) Please contact your sales representative for the matching wire / flux combination

SAW Cored Wires for Cladding Applications (Anti-corrosion)

Name	Classification	Hardness		Composition (All weld metal)													Characteristics and field of use
SK 410 NiMo-SA + RECORD SA	DIN 8555 UP 5-GF-40-C	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Nb	Ti	W	V	B	Fe	Alloy depositing a ferritic-martensitic steel containing 13 % Chromium, 5 % Nickel and 1 % Molybdenum. Designed to resist metal-to-metal wear, corrosion and thermal fatigue fire cracking. Field of use: continuous casting rollers.	
			39	0,05	1,00	0,30	12,50	5,00	0,90								Bal.
SK 415-SA + RECORD SA RECORD SK	DIN 8555 UP 5-GF-45-C	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Nb	Ti	W	V	B	Fe	Alloy depositing a ferritic-martensitic steel designed to resist metal-to-metal wear, corrosion and thermal fatigue. Field of use: continuous casting rollers.	
			42	0,08	0,90	0,40	13,50	2,10	1,10	0,20			0,30		Bal.		
SK 420-SA + RECORD SA	DIN 8555 UP 6-GF-55-C	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Nb	Ti	W	V	B	Fe	Alloy depositing a martensitic steel containing 13 % Chromium giving a good resistance to metal-to-metal wear and corrosion. Field of use: dredging pump casings, continuous casting rollers.	
			53	0,27	1,30	0,30	13,50								Bal.		
SK 430C-SA + RECORD SA RECORD SK	DIN 8555 UP 5-GF-200-C	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Nb	Ti	W	V	B	Fe	Alloy depositing a ferritic steel containing 17 % Chromium. Designed to resist corrosion at high temperatures, particularly in presence of sulphurous gas. Field of use: continuous casting rollers situated at the top of the line.	
			175	0,04	0,90	0,50	19,50								Bal.		
SK 461C-SA + RECORD SA RECORD SK	DIN 8555 UP 6-GF-50-C	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Co	Ti	W	V	B	Fe	Alloy depositing a ferritic-martensitic steel designed to resist metal-to-metal wear, corrosion and thermal fatigue fire cracking. Field of use: continuous casting rollers.	
			54	0,26	0,90	0,50	12,20	0,40	1,40	1,80		0,90	1,00		Bal.		
SK 742 N-SK + RECORD SK	DIN 8555 UP 5-GF-45-C	HB	HRC	C	Mn	Si	Cr	Ni	Mo	Nb	Ti	W	V	B	Fe	Alloy depositing a ferritic-martensitic steel with addition of Nitrogen. Designed to enhance the resistance to thermal fatigue and intragranular corrosion by reducing the formation of carbides at grain boundaries. Field of use: continuous casting rollers.	
			44	0,04	1,20	0,40	13,50	3,30	1,30	0,10			0,15	0,06	Bal.		

Please contact your sales representative for the matching wire / flux combination



Our SOUDOTAPE Strips and Record fluxes are summarized in the special brochure “Strips and Fluxes for Electroslag and Submerged Arc Welding”.

UTP Maintenance offers a full and unique strip & flux product portfolio for electroslag and submerged strip cladding of all types of alloys:

- unalloyed and low alloyed
- martensitic alloys (420, 430, 410NiMo ...)
- standard stainless steels (308L, 316, 347 ...)

- special stainless steels (317L, 318, 904L, duplex, superduplex ...)
- Nickel alloys (600, 625, 825, C22, C276, alloy 59, alloy 400 ...)
- Cobalt alloys and CuNi alloys

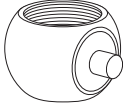
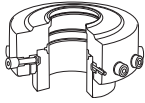
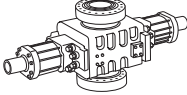
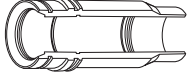
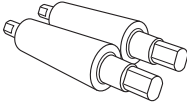
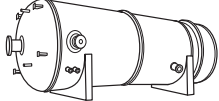

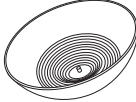
UTP Maintenance also offers specially designed cladding nozzles to perform strip cladding from small pipes to very large vessels (SK 30ES2-300, SK 60 ES3-207, SK 125 ES1-300 ...).

Just contact us for additional information, further technical data or any questions regarding strips and fluxes.

Alloy	Type of strip	Type of flux		C	Mn	Si	Cr	Ni	Mo	Nb	Fe	Cu	FN	Hardness
316L	SOUDOTAPE 21.13.3L	RECORD EST 122	ESW/ single layer	0,03	1,30	0,40	18,20	12,60	2,60		R		6,00	
347	SOUDOTAPE 21.11.LNb	RECORD EST 122	ESW/ single layer	0,03	1,40	0,40	19,00	10,10		0,50	R		7,00	
410NiMo	SOUDOTAPE 430	RECORD RT 152	SAW/2 layer	0,04	0,50	0,90	13,90	3,80	0,90		R			390 HB
904L	SOUDOTAPE 20.25.5LCu	RECORD EST 385-1	ESW/ single layer	0,02	2,50	0,10	19,40	25,00	4,40		R	1,30		
825	SOUDOTAPE 825	RECORD EST 138	ESW/ single layer	0,02	0,60	0,60	22,30	R	2,80		34,00	1,50		
625	SOUDOTAPE 625	RECORD EST 625-1	ESW/ single layer	0,03	0,20	0,30	21,50	R	9,00	3,50	7,90			

Please contact your sales representative for further information.

Solutions for Cladding

	UTP Maintenance Product	Process
Ball Valves	UTP A 6222 Mo	GTAW & GMAW
	UTP A 6222 Mo-3	Cold and Hot Wire GTAW/TIG
	SOU DOTAPE 625 + RECORD Fluxes	ESW/SAW Strip Cladding
Wellhead Connectors	UTP A 6222 Mo-3	Cold and Hot Wire GTAW/TIG
		
Blow Out Preventer "BOP"	SOU DOTAPE A + RECORD NiMoT	SAW Strip Cladding
		
Wellhead Housing	UTP A 6222 Mo-3	Cold and Hot Wire GTAW/TIG
		
Continuous Casting Rollers	SK 741-G	FCAW-G
	SK 714 N-O	FCAW-O
	SK 742 N-SK + RECORD SK	SAW
	SOU DOTAPE 430 + RECORD RT152	SAW Strip Cladding
Vessels	SOU DOTAPE Strips and RECORD Fluxes	ESW/SAW Strip Cladding
	alloy 316, 347, 625, 825, NiCu ...	
Pipes	UTP A 6222 Mo	GTAW & GMAW
	UTP A 6222 Mo-3	Cold and Hot Wire GTAW/TIG
	SOU DOTAPE 625/825 + RECORD Fluxes	ESW/SAW Strip Cladding
Tube Sheet	SOU DOTAPE Strips and RECORD Fluxes	ESW/SAW Strip Cladding
	alloy 316, 347, duplex, alloy 600, 625, 825, 59, NiCu ...	

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Welding know-how joins steel

With over 100 years of experience, voestalpine Böhler Welding is the global top address for the daily challenges in the areas of joint welding, wear and corrosion protection as well as brazing. Customer proximity is guaranteed by more than 40 subsidiaries in 25 countries, with the support of 2,200 employees, and through more than 1,000 distribution partners worldwide. With individual consultation by our application technicians and welding engineers, we make sure that our customers master the most demanding welding challenges. voestalpine Böhler Welding offers three specialized and dedicated brands to cater for our customers' and partners' requirements.



Lasting Connections – More than 2,000 products for joint welding in all conventional arc welding processes are united in a product portfolio that is unique throughout the world. Creating Lasting Connections is the brand's philosophy in welding and between people.



Tailor-Made Protectivity™ – Decades of industry experience and application know-how in the areas of repair of cracked material, anti-wear and cladding, combined with innovative and custom-tailored products, guarantee customers an increase in the productivity and protection of their components.



In-Depth Know-How – Through deep insight into processing methods and ways of application, Fontargen Brazing provides the best brazing and soldering solutions based on proven products with German technology. The expertise of this brand's application engineers has been formulated over many years of experience from countless application cases.

