



voestalpine Böhler Welding

# Welding Solutions for the Steel Industry



# Join Expertise – Don't let your productivity wear down

To provide solutions for the Steel industry is a special competence of voestalpine Böhler Welding. We offer you a wide range of long-life filler metals that help you increase productivity and optimize maintenance, repair, wear and surface protection. Rely on:

- Tailored products to the exact needs of the Steel industry
- Consistently high product quality
- Worldwide distribution and a global service network
- Individual technical support by application specialists and welding engineers
- Decades of experience and application know-how in the Steel industry



## Forging Parts

UTP 7000  
SK TOOL ALLOY C-G  
SK 520-CO  
SK 258 L-SA  
SK 385-SA



## Looper Rollers

SK 258L-SA  
SK 430C-SA  
SK 385-SA  
SK 253 NBC-SA



## Blast Furnace Wear Plates

SK A45-O  
SK A43-O  
SK 866-O  
SK ABRA-MAX-O/G  
UTP Ledurit 65  
Abrasodur 43+  
UTP Ledurit 61



# voestalpine Böhler Welding

Metallurgical Expertise for Best Welding Results

voestalpine Böhler Welding (formerly Böhler Welding Group) is a leading manufacturer and worldwide supplier of filler materials for industrial welding and brazing applications.

As a part of the voestalpine Group, Austria's largest steel manufacturer and one of the world's leading suppliers of specialized steel products, we are a part of a global network of metallurgy experts.

#### **Our customers benefit from:**

- Comprehensive welding and steel know-how under one roof
- Coordinated complete solutions comprised of steel and welding filler metals
- A partner offering maximum economic stability and technological expertise

#### **Customer First**

Absolute customer focus is our guiding principle. We see ourselves as a provider of solutions to challenging welding projects. We ensure that our customers get the right filler metals, use them correctly, and that all welding process parameters are adjusted for the best possible performance. We consider it as our responsibility to guarantee that we deliver to our customers, now and in the future, the best possible solutions. We also strive to develop new products, optimize existing products, and streamline processes so as to achieve very short turn-around times. We focus on technologically advanced industrial sectors and provide products that are geared to their specific requirements.

#### **Three Competences – Three Brands**

In our efforts to afford our customers the best possible support and promote development in line with specific targets, we have built our core competences within Joint Welding, Repair & Maintenance Welding and Soldering & Brazing.

This way we offer our customers the largest and most comprehensive product portfolio of filler materials within our three brands:

- Böhler Welding
- UTP Maintenance
- Fontargen Brazing



**Table Rolls**

SK 385-SA  
SK 742N-SK  
SK 714N-O



**Continuous Casting Rollers**

SOUDOTAPE 430 + RECORD RT 152  
SOUDOTAPE 430L + RECORD RT 168



**Forging Matrix**

STELKAY 25-G  
UTP 73 G2

	Product	Hardness	Description
Impact resistance	SK 258 L-SA	45 HRC	Martensitic alloy giving a very good resistance to metal-to-metal and low stress abrasive wear at high temperature. The deposit is crack-free, heat treatable and forgeable. APPLICATIONS: Steel mill rolls, blast furnace bells (seat area), dredger-buckets cylinders...
	SOUDOTAPE 258 / RECORD EST 122	50 HRC	
	SK 258 TIC-O	57 HRC Wear Index 4	Martensitic Chromium-Titanium alloy designed to resist high stress abrasion with heavy impact. Deposits usually do not relieve check. APPLICATIONS: Crusher rolls, crusher hammers, asphalt mixer blades, agricultural tools, shovel bucket teeth and lips, bulldozer blades, cane knives and shredders, bed knives in the wood pulp industry...
Abrasion resistance	SK 866 - O	62 HRC Wear Index 2	Alloy designed to resist high stress grinding abrasion with low impact. The deposits will readily stress relief check crack. APPLICATIONS: Palm oil expeller screws, groundnut oil expeller screws, cement conveyors screws, catalytic pipes, dredge pump impellers, dredge cutters, shovel bucket teeth...
	SK A43 - O	63 HRC Wear Index 0,3	Chromium-Niobium alloy designed to resist high stress grinding abrasion at service temperature not exceeding 450°C. The deposits will stress relief check readily. APPLICATIONS: Wear plates, groundnut oil expeller screws, screen in the coal industry, bucket teeth on bucket-wheel excavators, shovel bucket teeth and lips...
	SK A45 - O	63 HRC Wear Index 0,2	Chromium-Niobium-Molybdenum alloy with addition of Tungsten and Vanadium designed to resist high stress grinding abrasion with low impact and solid erosion at service temperatures up to 650°C. The deposits will readily stress relief check crack. APPLICATIONS: Wear plates, sinter finger crushers, exhaust fan blades in pellet plants, perlite crushers, bucket teeth and lips on bucket-wheel excavators in phosphate mines, boiler fan blades in the sugar cane industry, burden area in blast furnace bells, wear plates in blast furnace bell-less top charging systems...
	SK ABRAMAX-O/G	70 HRC	New development available with borocarbides in austenitic matrix and complex carbides designed to resist to very high stress abrasion at high temperature up to 750°C.
Metal-to-metal fire crack	SK 768-G/S	34 HRC	Alloy depositing in second layer on roll of diameter 100 mm 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. APPLICATIONS: Surfacing of continuous casting rollers of very small diameter (<150 mm)
	SK 742N - SK SK 714N - O	43 HRC 40 HRC	Alloy depositing a ferritic-martensitic steel designed to enhance the resistance to thermal fatigue and intragranular corrosion by reducing the formation of M23C6 carbides at grain boundaries. APPLICATIONS: Continuous casting rolls...
	SOUDOTAPE 430 / RECORD RT 152	39 HRC	
	SOUDOTAPE 430 L / RECORD RT 168		
	SK 258 L-SA	45 HRC	Alloy depositing a martensitic steel designed to have a good resistance to metal-to-metal wear, corrosion and thermal fatigue. APPLICATIONS: Refurbishing rollers from the coil box: pinch rollers, bending rollers, deflector rollers, looper rollers...
	SK 385 - SA	54 HRC	
SK 430C - SA	180 HB	Alloy depositing a ferritic steel containing 17% chromium designed to resist corrosion at high temperatures, particularly in presence of sulphurous gas. APPLICATIONS: Continuous casting rolls situated at the top of the line, valves, steam and gas turbine parts, valve seats...	
Nickel base	SK TOOL ALLOY C-G	200 HB	Nickel base alloy of the "HASTELLOY C" type, designed for hard surfacing parts subject to oxidation, corrosion and mechanical stresses at high temperature (1100°C). APPLICATIONS: Hot shear blades, pits points, mill guides, drawing guides, hot extrusion dies, blast furnace bell seats...
Cobalt base	SK STELKAY 25-G	200 HB	Cobalt base alloy providing excellent resistance to metal-to-metal wear, thermal shocks, oxidation in corrosive environments at high temperature. APPLICATIONS: Hot working tools, forging hammers...
	SK STELKAY 6-G	40 HRC	Cobalt base alloy providing excellent resistance to metal-to-metal wear, oxidation, thermal cycling and impact in corrosive environments at high temperature. APPLICATIONS: Can be used with shielding gas or with flux. Valves, valve seats in motor vehicles, hot shear blades, extruder screws, clack valves and seats, dies, punches.

	Product	Hardness	Description
CuAlMn bronze adhesive wear	UTP 34 N	220 HB	Basic coated complex aluminium-bronze electrode with 13% Mn. APPLICATIONS: Claddings on shafts, bearings, stamps, deep drawing tools and all kind of gliding surface.
Cast iron	UTP 86 FN	220 HB	Graphite-basic coated ferro-nickel electrode with high mechanical values for repair and construction. Bimetallic core wire. APPLICATIONS: Joining and surfacing of grey and nodular cast iron. Universally applicable for repair, construction and production welding.
	UTP 8	180 HB	Graphite-basic coated electrode for cast iron cold welding. APPLICATIONS: Cold welding of grey and malleable cast iron, cast steel and for joining these base metals to steel, copper and copper alloys.
General repair	UTP 65	240 HB	Rutile coated austenitic-ferritic-steel electrode with optimal welding and mechanical properties. APPLICATIONS: Austenitic and ferritic steels, high-manganese steels with alloyed and non-alloyed steels, heat-treatable and tool steels.
	UTP 068 HH	-	Basic coated NiCrFe electrode for high corrosion and high temperature resistant materials. APPLICATIONS: Joining similar heat resistant Ni-base alloys, heat resistant austenites, cold tough Ni-steel, and for joining heat resistant austenitic-ferritic materials.
Tool steels	UTP 7000	220/450 HB	Rutile-basic coated high efficiency electrode on NiCrMoW base for heat resistant hardfacings on hot work tools. APPLICATIONS: forging jaws, forging dies, forging saddles, hot piercing plugs, hot cutting tools, hot trimming tools, roll mandrils, hot moulding plugs.
	UTP 73 G2	55-58 HRC	Basic coated electrodes for wear resistant surfacings on hot work tool steels exposed to impact, compression and abrasion. APPLICATIONS: Hot shears blades, gate shear, forging saddles, hammers, forging dies, AI-die cast moulds.
	UTP 73 G3	45-50 HRC	
	UTP 73 G4	38-42 HRC	
UTP 7010	230/450 HB	Cobalt base, basic coated electrode for heat resistant and thermal shock resistant claddings. APPLICATIONS: Hot working tools, rolls, mandrils.	
Hardfacing abrasive wear	Abrasodur 43+	62-63 HRC	Basic-coated electrode for hardsurfacing. APPLICATIONS: Brick presses, refractory press-screws, conveyor screws, mixer blades, palm-nut etc...
	UTP Ledurit 61	60 HRC	Rutile-basic coated hardfacing electrode for high abrasion and medium impact loads. APPLICATIONS: conveyor screws, scraper blades, digging teeth, mixer wings.
	UTP Ledurit 65	65 HRC	High-efficiency electrode without slag resisting extreme abrasion at elevated temperatures. APPLICATIONS: Radial breakers and revolving-bar screens of sintering plants.

Legend: O: open arc, G: gas shielded, S: submerged arc (SAW), A: solid rods & wires (GTAW/GMAW), no letter: stick electrodes

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## Böhler Welding know-how joins steel

Customers in over 120 countries join the expertise of voestalpine Böhler Welding (formerly the Böhler Welding Group). Focused on filler metals, voestalpine Böhler Welding offers extensive technical consultation and individual solutions for industrial welding and soldering applications. Customer proximity is guaranteed by 40 subsidiaries in 28 countries, with the support of 2,200 employees, and through more than 1,000 distribution partners worldwide.



**Böhler Welding** – 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.



**UTP Maintenance** – Decades of industry experience and application know-how in the areas of repair as well as wear and surface protection, combined with innovative and custom-tailored products, guarantee customers an increase in the productivity and protection of their components.



**Fontargen Brazing** – 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.

forwarded by:

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