utp maintenance
by voestalpine

Tailor-Made Protectivity™

SOLUTIONS FOR THE RAILWAY INDUSTRY

voestalpine Böhler Welding
www.voestalpine.com/welding

voestalpine
ONE STEP AHEAD.

TAILOR-MADE PROTECTIVITY™

UTP Maintenance ensures an optimum combination of protection and productivity with innovative and tailor-made solutions. Everything revolves around the customer and their individual requirements. That is expressed in the central performance promise: Tailor-Made Protectivity™.

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 Railway 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

CUSTOMIZED PRODUCTS OF SUPERIOR QUALITY

We continuously adapt our product portfolio of about 600 products to customer and industry specifications, while ensuring that we meet the highest quality specifications.

From its in-house production facilities, UTP Maintenance delivers innovative, tailor-made welding filler metals for: unalloyed and fine-grained structural steel, low-grade alloyed steels, stainless and heat-resistant steels, nickel-based alloys, cast iron, copper and copper alloys, manganese steels, tool steels, and cobalt steels.

The product portfolio comprises:

- Stick electrodes
- Solid wires and rods
- Flux cored wires
- Submerged arc wires and fluxes
- Submerged arc strips and fluxes
- Spraying- and PTA-powders

SOLUTIONS AT EVERY POINT ON THE GLOBE

UTP Maintenance provides products and services through the global branches of voestalpine Böhler Welding and its dealer network in more than 150 countries throughout the world. A team of welding engineers stands at the customer's side, providing advice and support in all matters related to the challenges of welding technology.

Crossings
SK 218-O
SK 14 Mn-O
SK AP-O
UTP CHRONOS
UTP 7200
UTP BMC

Rails	
SK 242-O	UTP DUR 250
SK BU-O	UTP DUR 300
SK 232-O	UTP DUR 350
SK 309L-O	UTP 614 Kb
SK 402-O	UTP 630
SK 402-G	
SOUDOTAPE 309L + RECORD EST 307	

	FCAW STRIP ESW	Hardness	Description
Crossings	SK 218-O	As welded: approx. 200 HB After work hardening: up to 450 HB	Maintenance of austenitic manganese castings
	SK 14 Mn-O	As welded: approx. 195 HB	Rebuilding of 14% manganese steel parts.
	SK AP-O	As welded: approx. 205 HB After work hardening: up to 525 HB	Rebuilding and joining of carbon and 14% manganese steels, buffer layer prior to deposit hard overlay, hard facing of castings and rails either, welding castings to rails
Rails	SK 242-O	As welded: approx. 40 HRC	Maintenance and hardfacing of underground rails, wheels rebuilding
	SK BU-O	As welded: approx. 280 HB	Rebuilding alloy for Carbon steel parts. Can also be used as buffer layer prior to hard overlay.
	SK 232-O	As welded: approx. 170 HB	Maintenance and hardfacing of underground rails, wheels rebuilding
	SK 309L-O	As welded: approx. 170 HB	Corrosion resistant overlays on rail heads submitted to corrosive action, repair, surfacing or welding of rails or austenitic manganese casting either. Switch blades rebuilding, rust resisting deposit for tract circuiting.
	SK 402-O	As welded: approx. 160 HB	Repair, surfacing or welding of rails or austenitic manganese casting either. Switch blades rebuilding, rust resisting deposit for tract circuiting.
	SK 402-G	As welded: approx. 170 HB	Austenitic alloy type CrNiMn designed for joining dissimilar metals and for buffer layer deposits prior to hard surfacing.
	SOUDOTAPE 309L + RECORD EST 307	–	Top rail corrosion resistant overlaying in a single layer using electroslag stripcladding at high deposition rates

	SMAW	Hardness	Description
Crossings	UTP CHRONOS	As welded: approx. 220 HB After work hardening: up to 550 HB	Welding consumable suitable for buildups on high Mn-steel of the same and of similar nature and on C-steels.
	UTP 7200	As welded: approx. 200 – 250 HB After work hardening: 48 – 53 HRC	Basic coated, CrNi alloyed Mn hard-steel stick electrode for joining and surfacing against extreme impact, compression and shock.
	UTP BMC	As welded: approx. 260 HB After work hardening: 48 – 53 HRC	Welding consumable designed for buildups on parts made of high Mn-steel subject to high compression and impact in combination with abrasion.
Rails	UTP DUR 250	As welded: approx. 270 HB 1 layer on steel with C = 0.5 % approx. 320 HB	Basic coated stick electrode for tough, easily machinable buildups.
	UTP DUR 300	As welded: approx. 300 HB 1 layer on steel with C = 0.5 % approx. 350 HB	Basic coated stick electrode for wear resistant surfaces on low alloyed steel parts.
	UTP DUR 350	As welded: approx. 300 HB 1 layer on steel with C = 0.5 % approx. 420 HB	Basic coated electrode for wear resistant surfaces on carbon low alloyed steel parts.
	UTP 614 Kb	–	Double coated stick electrode for highly stressed joints. Particularly suited for rail joint welds.
	UTP 630	As welded: approx. 200 HB After work hardening: up to 350 HB	Fully austenitic welding electrode for buffer layers and crack resistant joints.

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

JOIN! voestalpine Böhler Welding

We are a leader in the welding industry with over 100 years of experience, more than 50 subsidiaries and more than 4,000 distribution partners around the world. Our extensive product portfolio and welding expertise combined with our global presence guarantees we are close when you need us. Having a profound understanding of your needs enables us to solve your demanding challenges with Full Welding Solutions - perfectly synchronized and as unique as your company.

Lasting Connections – Perfect alignment of welding machines, consumables and technologies combined with our renowned application and process know-how provide the best solution for your requirements: A true and proven connection between people, products and technologies. The result is what we promise: Full Welding Solutions for Lasting Connections.

Tailor-Made Protectivity™ – The combination of our high-quality products and application expertise enables you to not only repair and protect metal surfaces and components. Our team of engineers, experienced in your specific applications, offer you customized solutions resulting in increased productivity for your demanding challenge. The result is what we promise: Tailor-Made Protectivity™.

In-Depth Know-How – As a manufacturer of soldering and brazing consumables, we offer proven solutions based on 60 years of industrial experience, tested processes and methods, made in Germany. This in-depth know-how makes us the internationally preferred partner to solve your soldering and brazing challenge through innovative solutions. The result is what we promise: Innovation based on in-depth know-how.

The Management System of voestalpine Böhler Welding Group GmbH, Peter-Mueller-Strasse 14-14a, 40469 Duesseldorf, Germany has been approved by Lloyd's Register Quality Assurance to: ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007, applicable to: Development, Manufacturing and Supply of Welding and Brazing Consumables.
More information: www.voestalpine.com/welding

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