

ToolNews

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Modern riveting technology: See it in action at the SmartFactory in Urdorf, Switzerland.

Tools. Next level.

Riveting technology

Everything you need for the perfectly designed riveting workplace

At Brütsch/Rüegger Tools, riveting technology is represented equally in two product groups; one is the field of assembly tools and the other the field of standard parts. Our specialists are always up to date with the latest connection technologies and are happy to pass on their knowledge to you. You can get personal advice or examine a selection of devices for yourself at your site!

Complete range

As a basis, we offer a comprehensive product portfolio consisting of riveting devices from a wide range of brands across all price categories and a large standard parts range with all kinds of rivet types and nuts. In the ToolShop, you can also find out about our extensive range of hand riveting and hand setting pliers, mandrel and toggle presses, cordless blind rivet guns, pneumatic rivet guns and hand rivet tools. Also included are the riveting pins and rivet setters from our in-house brand FUTURO.

We are here for you!

We look forward to hearing from you via sales@brw.ch or +41 44 736 63 63. Contact us for useful tips!

IN THE SPOTLIGHT



Process-monitored riveting "NutBee" and "RivBee" series

The new cordless riveting device series "NutBee" and "RivBee" from HS-Technik consist of three and four different versions respectively. The precise devices monitor the riveting process according to the version and transfer the results to an end device for processing via USB or WiFi. This allows the riveting device to ensure lasting quality assurance for all work processes associated with riveting. The devices can be programmed via USB using the "HST-Tool-Manager". HS-Technik paid particular attention to the economic aspect when developing the two series. The rechargeable batteries in the riveting devices impress with their high cycle life and are also protected against deep discharge.

The benefits at a glance

- Programmable parameters: Power, current, path, speed and time
- Two different setting strategies
- Six-stage programming
- Quick-change system
- Blind rivet nut counting function
- Recovery (counter memory function)
- 100 individual programmes
- Storage of at least 150,000 results including setting curve (current/path)
- Process documentation and quality inspection with force-path curve
- Documentation (date/time)

Set rivet elements reliably

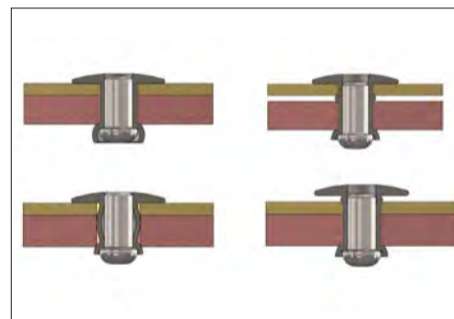
Riveting is considered one of the oldest methods of connection. Popular since the early ages of industry, the technique has continued to be employed well into the digital age. It is no coincidence that rivet connections are still used frequently today in applications such as lightweight construction. They are considered a comparatively simple and cost-effective alternative to welding or joining different materials.

Today, manufacturing companies have numerous simple and robust pneumatic riveting devices for a wide variety of applications. Whereas the alternative "cordless riveting device" was previously considered too slow, modern electric models now offer the same setting speeds with a far greater level of functionality, especially when it comes to monitoring.

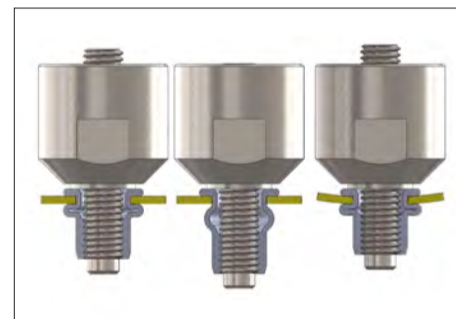
While parameters are already specifically adjusted and monitored for the relevant process in other joining methods, controlled riveting remains the exception. It is highly desirable to monitor force, distance and setting speed while processing a blind rivet, a lockbolt or a blind rivet nut. If these parameters are not optimally aligned to the riveting point, faulty connections can occur, which can lead to expensive reworking or even product failures.

Example 1: Blind rivet nut

The blind rivet nut is usually used where a normal thread is useless. This is either due to a lack of material thickness or an existing material mix that is unsuitable for a thread, such as a carbon fibre compound. If the setting force is too high during riveting or if the path is not monitored, the thread can become compressed and the screw connection can be impaired. Conversely, a lower force input may result in the failure of the rivet connection. As a result, the screw connection either subsequently does not reach the required pre-clamping force or the screwdriving process is reported as defective due to an incorrect tightening angle.



A perfectly set rivet element (top left) and three faulty "setting scenarios". (Image: HS-Technik GmbH)



Set blind rivet nuts: Perfect (left), wrong (centre) and too far (right). (Image: HS-Technik GmbH)



High performance: Cordless blind rivet gun "AccuBird" by Gesipa.



Pneumatic rivet gun for setting "POP" and "IMEX" blind rivets.

Example 2: Blind rivet or lockbolt

The control and monitoring of the force (kN) and the distance (mm) is also required for the blind rivet or lockbolt. If the mandrel wears out without reaching the clamping force, a faulty rivet connection is detected. An incorrectly or loosely placed rivet tends to make rattling noises and will not fulfil the task it is intended to perform. If the rivet connection is exposed to forces in the "operation of the end product", failure of the riveting element is all the more likely. Ideally, the path should also be monitored — in particular, to prevent the joining of incorrect or incomplete components. In the case of safety-critical connections, the riveting results should be documented by the tool.

Riveting technology 4.0

It is no wonder that even smaller companies are discovering the potential of monitored riveting processes and are replacing conventional pneumatic devices with modern cordless riveting systems. The new documentation options lead to increases in quality and safety — for processes and end products. In addition, connections to MES or ERP solutions are an increasing point of focus for users. And last but not least, the simpler handling of battery devices offers a number of advantages: The laborious process of guiding metre-long pneumatic hoses over edges and corners to the furthest corner of a sheet metal construction is therefore a thing of the past. Even pneumatic connections are becoming obsolete — while motivation and productivity remains unimpaired.

Measurement Technology



Roughness measuring instrument MITUTOYO SJ-210



Promotion

The mobile roughness measuring instrument MITUTOYO SURFTEST SJ-210 offers a great deal of functionality and versatility. The three different feed units (standard, R or S) can be used with the main unit. Various probes are available as accessories, e.g. for taking measurements in small holes or in grooves. The LCD colour display provides a clear overview and supports the simple menu navigation. Data can optionally be stored on a microSD card. It is possible to transfer data from/to a PC via a USB cable. We will be happy to advise you. Contact: katharina.vogt@brw.ch
148461.0100 SJ-210 Standard for the **promotional price** of **CHF 1899.00** instead of CHF 2592.00, valid until 31.12.2020 or while stocks last.

Wireless data transfer with IBR



The ISM radio module series is used to transmit measured values to a PC wirelessly. The base station **154740.1200** (receiver) is connected to the PC via a USB port. The base station allows communication with up to 500 measuring devices. In addition, the measuring devices used must be equipped with radio modules (transmitters). Numerous brand-independent radio modules are available for this purpose (Digimatic, MarConnect, Opto-RS232, Power-RS232, Proximity, etc.). The required software "IBR_Simkey" is included with delivery and enables data transfer of the measured values by pressing the data key on the measuring device or radio module to Windows programmes (Excel, Access, etc.).

Apprentice brochure 2020

Benefit from numerous offers on manual measuring equipment and measuring tool sets from our **apprentice brochure 2020 until 30.09.2020**. You can find the brochure in the ToolShop www.brw.ch under Downloads in the MEASUREMENT TECHNOLOGY section. This includes items such as the measuring tool set SYLVAC BASIC-DIGITAL BLUETOOTH® as a starting point for wireless data transmission with BLUETOOTH® technology.
113655.1000 for the **promotional price** of **CHF 299.50** instead of CHF 657.00, while stocks last.



Spring balances PESOLA

The LIGHT/MICRO and MACRO-LINE spring balances from PESOLA are quality products made in Switzerland. The spring balances are made of corrosion-free materials and are always ready to weigh, without batteries. Thanks to the numerous accessories, you can adapt the balances to your application. The MACRO-LINE spring balances can be converted into a pressure force measuring device in a few simple steps using the pressure accessory set.

173100/173120/173170 with **15% discount** until 31.10.2020.

Promotion



Handy tape measure in high quality

BMI's tape measures are characterised by durability in harsh industrial and craft applications. The clear white lacquer on the free-running tape measure (EC accuracy class II) is 10 times more abrasion-resistant than conventional paint. The ABS plastic housing with viewing window for internal measurements and the metal base guarantee a long service life.
159490.0100 2 m for the **promotional price** of **CHF 9.95** instead of CHF 12.10, **159490.0200** 3 m for the **promotional price** of **CHF 12.15** instead of CHF 14.70, valid until 31.10.2020.



Promotion



Stereo microscopes FUTURO

Robust stereo microscopes for inspection tasks in production. **152320.0500** 2x lens revolver and large-field eyepieces (20x/40x). **152350.0500** zoom lens, infinitely adjustable (7x to 45x), adjustable incident and transmitted light, adjustable eyepiece distance from 50 to 75 mm.

152320.0500 fixed tripod with fine adjustment for the **promotional price** of **CHF 262.00** instead of CHF 338.00

152350.0500 tripod with quick adjustment for the **promotional price** of **CHF 492.00** instead of CHF 635.00
 Valid until 31/10/2020 or while stocks last.

Production Technology



ALLMATIC Telecentric, efficient conversion



APPLICATION ADVICE
 We are happy to provide you with advice on selecting and using machining tools, even at your own site!
+41 44 736 63 63
verkauf.fertigungstechnik@brw.ch

The **centric vice TeleCentric** from ALLMATIC **411000** is a clever, well-designed solution for clamping on modern five-axis machines, with two special highlights:
 One is the **central telescopic spindle**, with inner and outer threaded spindles that run into each other. This design guarantees a minimum interference contour with the best possible accessibility to the machine spindle and the tool. Due to the centric function, no zero point has to be shifted and the material dimensions can easily be halved through symmetrical distribution.
 The other highlight is the standard **quick jaw change system**. The vice can be converted extremely quickly without the need for any tools. This means the workpiece can be processed efficiently from initial clamping with GRIPP jaws (no pre-stamping necessary) on the sixth side due to the quick changing in a shaped jaw. Tool-free change takes just ten seconds with the **ALLMATIC TeleCentric 411000** for each pair of jaws.

Our application engineers will be happy to provide you with a demonstration and consultation.
Take advantage of the promotion until 31.11.2020

Micro-drill FUTURO

THE micro-drill FUTURO **255500** is excellently suited for use in the **ISO-N** field, non-ferrous and light metals as well as in the **ISO-O** field, for non-reinforced plastics.

For an optimal result, highly accurate concentricity is necessary. For example, the DIEBOLD CentroGrip® can be used for this purpose. Achieve maximum cooling on the cutting edge in combination with the ER-MB micro-collet chuck **339050**.



FUTURO
 performance and perfection



REGO-FIX

Optimum cooling with micro-tools

The collet chuck ER-MB from REGO-FIX **339050** provides you with optimum cooling for your micro-tools. The micro drill holes in the collet chuck direct the coolant directly to the tool and increase its service life significantly.

Specially developed for the smallest tool shafts of 0.2–0.9 mm in diameter, these are available in the versions ER 8, ER 11 and ER 16.

Ultra-precise clamping with DIEBOLD CentroGrip®

The DIEBOLD CentroGrip® chucks are high-precision collet chucks with a system accuracy of 0.003 mm. This precision level is guaranteed with the collet chucks MR **339090**, clamping nuts and milling cutters with the correct tightening torque. High-precision tool holders improve your milling processes, increase tool life and extend the service life of the machine spindle. Holders are available in **HSK-A: 333730, HSK-E: 334030, SK: 330110** and **BT: 332030**.



diebold
 Goldring-Werkzeuge

Optimum space for turning



When performing turning operations with the tip positioned at an angle, the space is not exactly optimal. This is significantly easier with the new extra-slim revolving centre **344505**. With the 60°/30° double cone and the specially designed bearing, we achieve a minimum interference contour and do so with a concentricity of **max. 0.003 mm**.

Take advantage of the promotion until 31.11.2020

Assembly Technology



Hand cleaning wipe FUTURO

New



Clever Clean, the unique hand and parts cleaning system for even the most demanding applications
By combining an effective liquid formula and a durable, roughened cloth surface, the system achieves optimum cleaning performance. It removes grease, tar, oil, copper paste, brake and coal dust, paints and varnishes, ink, grass stains and many other stains without leaving any residue and does not damage skin or scratch surfaces.

The **smooth side of the cloth** can be used to clean hands carefully and thoroughly.

The individual cloths have a pleasant orange scent and are microperforated to ensure that substances can be removed easily. The cleaning cloths can be used for completely thorough yet gentle cleaning in any application at any workplace, without leaving any residue.

551235.0100 Practical dispenser bucket with 72 cloths
(Coupon mass 300 x 260 mm)

Marking spray NERIOX

Fluorescent colours for marking surfaces of all kinds such as tarmac, soil, trees, lawns, sand, snow, concrete, mineral surfaces, etc. Durable colour, weather-resistant, adheres well even to damp surfaces.

The **special 360° spray head that can also be used upside down** is integrated into the protective ergonomic cap. Excellent luminosity and coverage and minimal mist. Quick-drying and cold-resistant.
526740 Spray cans in 500 ml, available in neon red, neon blue and neon yellow.



New



New

Disinfectant dispenser

With the automatic disinfectant dispenser **551920**, there's no need for unnecessary contact! Hold your hands underneath the unit and an optimal dose of hand disinfectant will be dispensed. Refillable with 1 litre of liquid, robust and low-maintenance, no socket required, is operated with 4 x LR6/AA batteries. Adjustable infrared sensor: Quantity control and no accidental incorrect doses.

You can find a suitable table or floor stand and various disinfectants in our Toolshop!

Workbench vice FUTURO

Vice with reverse opening, **made of special cast iron**. Ideal as a standard workbench vice with a **high level of clamping accuracy**. Interchangeable jaws with a serrated surface. Long and precise prismatic guide. Stable, concealed spindle bearing protects against dirt. Smooth-running spindle with trapezoidal thread ensures the jaws open extra rapidly.

413970 Jaw widths from 80 mm to 150 mm
You can find suitable accessories such as turning parts and vice lifts in our Toolshop!



New

Hot air blower WELDY

A powerful hot-air dryer with infinitely adjustable temperature between 80°C and 600°C plus dual-setting blower. Whether it is used for removing dyes or paints, applying and shrinking plastic films, or restoring plastic parts using hot air or defrosting pipes — this handheld hot-air device makes tasks involving hot air easy thanks to its excellent heat and blowing power, low weight and ergonomic design.
572565.0100 WELDY HG 330-S with pipe nozzle, spoon reflector and glass protection nozzle.



Standard Parts



Pneumatic systems brochure

Promotion



A wide selection and a high level of safety! Focus on safety in the field of pneumatic systems and benefit from our promotional prices in the Pneumatic Systems brochure. The following products can be found in the current brochure valid between **01.09.2020 and 30.09.2020**.

579000 TURBO compressor from **CHF 435.00**
870000 Maintenance unit CEJN from **CHF 142.00**
870030 Safety hose retractor CEJN, for compressed air from **CHF 253.00**

In our ToolShop at www.brw.ch under Standard parts > Compressed air and pneumatics, you will find an overview of all our products, where you can browse for the right components for your application and select the desired dimensions. Here, you will also find drawings and technical data for the respective products. Download the brochure in our ToolShop www.brw.ch under Downloads. Are you looking for advice regarding the design and selection of the right components in the pneumatic sector?

Our sales specialists are available to answer any questions you may have at any time, by telephone at +41 44 736 63 63 or by email: verkauf.normteile@brw.ch.

Quick-release safety couplings CEJN

Safety quick-release couplings CEJN in various versions. One-hand operable, robust, solid metal clutch. Decoupling takes place in two stages, preventing the hose from suddenly flying away. ISO Standard 4414/EN 983, Suva-approved. Connections such as external threads, hose connections and union nuts are available from stock in Urdorf. Order the right nipple for each series and get going. All promotions and new products can be found in our ToolShop www.brw.ch



Promotion



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You can find a suitable table or floor stand and various disinfectants in our Toolshop!

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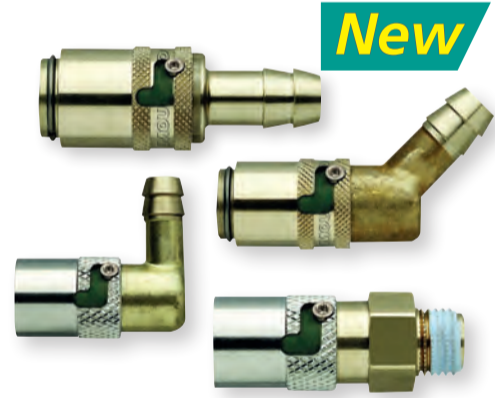
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572565.0100 WELDY HG 330-S with pipe nozzle, spoon reflector and glass protection nozzle.



New

Safety first!

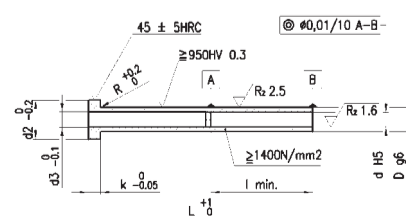
New to the range: Safety couplings TS with automatic locking mechanism to prevent accidental disconnection. Equipped with high-quality Hitec-FKM O-rings, the couplings are the ideal connection for operating temperatures in continuous operation up to +160°C (water) and +200°C (oil). Thanks to complete compatibility with common standards and competitive products—"form H" and "form D"—the plug nipple does not need to be changed. Choose safety!

Multi-couplers

Moulds with many cooling connections can be time-consuming to assemble and disassemble and may lead to incorrect connections. Save time and money by connecting all circuits in a single operation and avoiding incorrect connections! Customise your own connection package according to your needs:

- Coupling plates **838980** (machine side)
- and **838984** (tool side)
- Couplings **838982**
- Plug **838986**

For all connection options, visit: www.brw.ch.



High quality at low prices!

High-quality ejector sleeves at Brütsch/Rüegger Tools!
Our range, hardened or nitrided ground, has been completely revised and expanded to include more than 600 dimensions. Thanks to new sources of supply, we deliver within one week. You will receive stock items the next day. Do you require ejector sleeves that need to be manufactured outside of the standard? We will be happy to provide you with an offer according to your drawings within the shortest time at top prices.

Personal Protective Equipment



Protect yourself and your employees



Weitere Schutzartikel
Tel.: 044/736 63 55

Due to the current situation, hygiene and protection against infections are top priority — both at work and at leisure. The Swiss Federal Office of Public Health recommends regular handwashing, keeping distance and wearing face coverings if distance cannot be observed. We carry a wide range of hygiene masks, which you can use to protect yourself and your employees against infection. Furthermore, we offer disinfectants in all container sizes at attractive prices. For example, you can set up a dispenser in the entrance area and other locations throughout your company, or provide your employees with handy disinfectant container sizes so that protection is always within reach. Skin care is just as important and should not be neglected. In the case of disposable products (gloves/clothes) and FFP masks, capacity on the world market has run short and not all types are manufactured in a way that allows for a ramp-up in production capacity. Many large manufacturers have sold out of such goods and there are concerns about the guarantee of supply in the long term. However, we can assure you that Brüttsch/Rüegger Tools has provided for its customers and we have ensured that our warehouses are well stocked in this regard. Thanks to our long-standing relationships, we can also procure additional supplies in a timely manner. Feel free to call us on +41 44 736 63 55 and we will be happy to advise you!

Which hygiene mask?

The variety of offers on the market is overwhelming. What type is intended for which use? Cloth masks and uncertified hygiene masks protect against infection if everyone wears one in situations where distance cannot be maintained. Better protection can be achieved with the certified mouth covering according to EN 14683 type II and type II R **533021**. This product is distinguished from other mask types with regard to its permeability to splashes (e.g. droplet infection or blood).



Weitere Schutzartikel
Tel.: 044/736 63 55



UVEX G2 for even more comfort

The new UVEX low-cut safety shoe is lighter and more flexible. The new UVEX i-PUREnj sole technology with the best shock-absorbing properties in the forefoot and the heel ensures a good return of the step energy (rebound) over the entire midsole and optimal stability through the foamed heel basket. The G2 is available in sizes 35–52, versions S1 **534254** and S2 **534255**.

Call us on +41 (0) 44 736 63 55 to request a pair to test.

Disinfection for hands and surfaces

This disinfectant from Maxolen is suitable for hand and surface disinfection and can also be used safely in contact with food. Maxolen is an officially approved sanitiser for fighting influenza and coronaviruses (Swiss FOPH listing) and offers hygienic disinfection. The disinfectant Maxolen G460 **537283** can be obtained from Brüttsch/Rüegger Tools as a spray bottle in sizes 200 ml, 500 ml or 1 litre or as a canister in containers of 5 litres or 10 litres.



Eclipse vs. FFP masks

A single virus can cause numerous shutdowns. The consequences? A shortage in required protective masks. Factories are focusing on producing fewer types of FFP masks to boost capacity. Note that N95/KN95 masks do not protect against aerosols. However, Brüttsch/Rüegger Tools has taken precautions in this regard. We now have the Eclipse **533321** in our range, which is more comfortable to wear than a FFP mask, has a replaceable FFP3 filter and also comes with a cost saving of 50%.



Last Minute



Promotion

Articulated stand FISSO STRATO μ-Line

The Fisso Strato μ-Line is the perfect solution for high-precision measurements. The granite base is ground within 0.01 mm and slides excellently on hard stone slabs for such purposes as checking parallelism. The purely mechanical clamping system with short clamping path fixes and releases all three joints, ensuring maximum operating comfort without sacrificing stability. Dial gauges and dial test indicators can be clamped with dovetail in the combined holder. Experience Swiss quality for yourself. Find out more at www.brw.ch. **126532.0200** for the promotional price of **CHF 760.00** instead of CHF 845.00, valid until 30.09.2020.

Collet chuck range NERIOX

The new collet chuck set NERIOX **339211** is available in ER 11, ER 16, ER 20, ER 25, ER 32 and ER 40.

Take advantage of this promotion until 30.11.2020 from **CHF 89.00** per piece.

Promotion



NERIOX

Promotion



Cordless drill/driver BOSCH

Bosch GSR 12V-15, practical, compact power pack. Shortest head length and low height for working in hard-to-reach places, two-speed gearbox for screwdriving and drilling, 20 torque levels and drill setting, infinitely adjustable speed, motor brake, integrated LED light.

597410.0100 for the promotional price of **CHF 134.95** instead of CHF 265.00 Valid until 30.09.2020

With 2 x 2.0 Ah Li-Ion batteries GBA 12 V, quick charger GAL 12V-20, 43-piece bit and socket wrench set, tool bag.

Levelling elements at top prices

Disturbing vibrations and shocks occur in many areas. Improved material utilisation, higher-quality materials, lightweight design and increasingly powerful systems further increase susceptibility to vibrations. Whether precision levelling wedges, positioning elements or insulation steel springs are needed, we have the right solution ready for you to counteract these problems!

Benefit from top promotional prices across the whole range until 31.10.20.

Promotion



Hygiene masks and disinfectants

Hygiene masks and disinfectants at particularly enticing prices.

- 533022** Hygiene mask STENSO, box of 50 pcs, for **CHF 14.90**
- 537288** Hand disinfectant MOTOREX Desicid, 100 ml, for **CHF 6.50**
- 537286** Hand disinfectant TUNAP, 5 l canister, for **CHF 63.00**
- 597255** Surface disinfectant TUNAP, 5 l canister, for **CHF 63.00**

Offer valid while stocks last!

OUR PARTNER



SERVICE BOX



ToolBook, Edition 19, The tool catalogue with the complete range on 3200 pages:

CH-DE **999002.0300**
CH-FR **999002.0400**



NERIOX booklet, 2019 edition

CH-DE **999065.0100**
CH-FR **999065.0200**



FUTURO booklet, 2017 edition

CH-DE **999050.0500**
CH-FR **999050.0510**



Joining Technique, Edition 2019

CH-DE **999040.0900**
CH-FR **999040.1000**



For the operating theatre: The mechanical design of this device assembly comes from Schwarz AG Feinblechtechnik.

Sheet metal processing Modernisation that's paid off

Founded in Zurich in 1954, Ernst Schwarz manufactured train rear lamps, oil and carbide lamps as well as soft lamps for the Swiss Federal Railways (SBB). As part of the move to Würenlingen in the canton of Aargau not much later, where the company has been based since 1974, he invested relatively early in the latest production equipment. He commissioned one of the first CNC laser cutting machines in Switzerland.



First product: SBB lamp from 1954.

Pillar of the railway industry

In 1993, Rolf W. Schwarz took over the company and from then on, it was known as Schwarz AG Feinblechtechnik (fine sheet metal technology). In 2009, the company obtained certification for the rail vehicle welding standard DIN EN 15085-2 CL2. The company grew strongly in the field of riveted housings for traction converters for locomotives, regional trains and high-speed trains. Last year, Schräfli Holding AG took over the sheet metal processing company—which has come to employ more than 90 people—including its subsidiary Lasergraph AG.



Schwarz AG Feinblechtechnik.

Schwarz AG Feinblechtechnik: First class housing

From the Appenzell Railway to the Moscow Airport Shuttle: It is always impressive to find out the role of Swiss manufacturing companies in applications throughout Europe. Here, we are talking about Schwarz AG Feinblechtechnik, which has made a name for itself particularly in the field of railway technology. Enclosures for ticket machines, power converters and switch cabinets for locomotives, fully arranged assemblies for trains: All these and more comprise the range of this system partner that supplies renowned customers such as Stadler Rail.

However, companies in the fields of electrical engineering, mechanical engineering and apparatus construction as well as medical technology also rely on the high-quality fine sheet products produced by this Aargau-based company. Along with such elements as a sophisticated visible component for a coffee machine or a hospital trolley with an operating camera system, machine casings are among the typical application parts that it manufactures. The majority of major customers who value design, development support, short deadlines and reliability in delivery order from Schwarz. This also extends to developers who want to get the most out of their projects in terms of cost, quality and logistics.

A powerful fleet of machinery

With 4000 large orders per year and 150 active customers, Schwarz AG is among the highest class of sheet metal processors. The public sector, construction and telecommunications sectors also draw on the broad know-how that is still present in structured project management. This ensures a high development speed without any loss of quality. In order to meet the order volume, production runs on a 24-hour basis. A high degree of automation enables unmanned shifts. In addition to core processes such as CNC punching, laser cutting and edging (partially automated), the entire range of sheet metal processing procedures is covered: Rolling, straightening, deburring, drilling, riveting, rounding, pressing and grinding. Robots and laser cutting systems are also used in numerous welding applications. Production is performed in a consistently networked environment with linked CAD and ERP processes. This guarantees the necessary level of productivity and process reliability.



Efficient material flow: Laser cutting system directly connected to the high-bay warehouse.



High-quality welding technology: A robot ensures high quality that corresponds to the railway standard.



Precisely manufactured operator panels for mechanical engineers or medical technology.



Aluminium converter housing for a locomotive roof: Contains the drive and control electronics.

Additional services that distinguish Schwarz AG from the rest

With its specially created logo "Feinblech*", the system partner emphasises its additional services, which regularly go beyond traditional engineering services. A total of six engineers develop, optimise or standardise projects in close collaboration with the respective customers. For the design FMEA and individual cost optimisation, interdisciplinary teams are set up that consist of designers and experts from other technology divisions. This has resulted in a great deal of success: Every now and again, a prototype produced for an industrial designer or a development company has gone into series production. The high flexibility and excellent customer service of the sheet metal specialists allow for a large variety of versions and small batch sizes. The assemblies, products and special control cabinets—which are usually made of steel, chrome steel or aluminium—are tested, checked in accordance with standards and delivered just-in-time to the customer's final assembly.

Cooperation with Brütsch/Rüegger Tools

For more than 15 years, Brütsch/Rüegger Tools has been supplying Schwarz AG with a wide variety of products such as drills, torches and operating equipment. The Würenlingen-based company also appreciates the services provided in the field of measurement technology: The measuring and test equipment monitoring of around 50% of all devices is carried out via Brütsch/Rüegger Tools. This includes the calibration and recalibration of height measuring devices, torque wrenches and thread plug gauges. Bekim Ahmetaj, Production Manager and Member of the Executive Board at Schwarz AG, is delighted by this: "We are very satisfied with the cooperation. The specialists from Urdorf always support us competently and quickly, even in an emergency." Concerning a training session recently carried out in-house on the application of torque wrenches, Bekim Ahmetaj adds: "The course was very well received by our 17 participants. We have all benefited from an extremely professional training session."