



# Vogt AG Verbindungstechnik



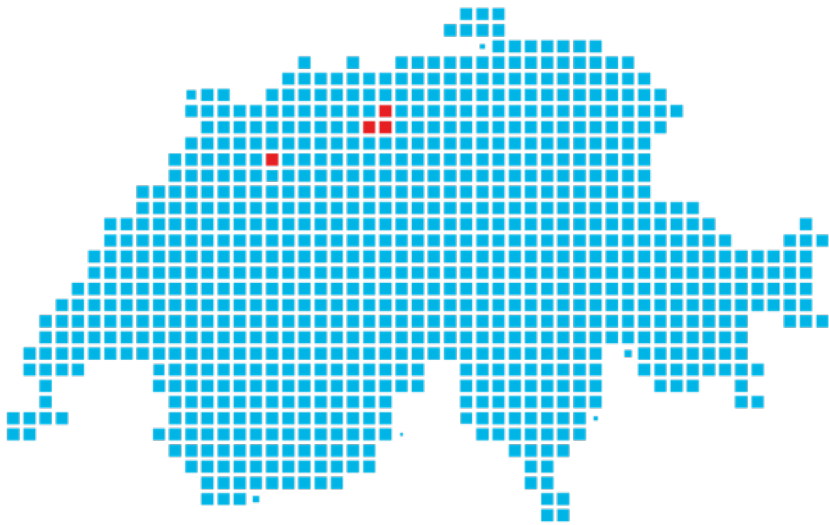
**creating connections**



# COMPANY PROFILE

## Swiss quality at fair prices

- Founded in 1962
- Around 120 employees
- 4 production facilities in Switzerland
- 1 billion parts per year
- Worldwide network of representatives
- Focus on core competency and niche markets



# The best from

## STAMPING



**+ 3,800 items**

## PIPE



**+ 2,700 items**

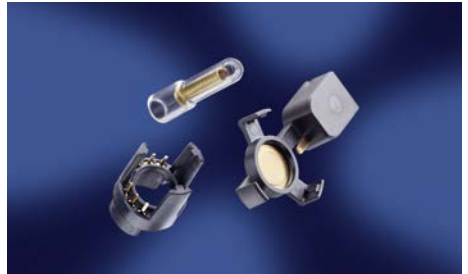
## ... Four product categories

### WIRE



**+ 270 items**

### PLASTIC



**+ 740 items**







# SPECIAL PRODUCTS

## **Tailored to your wishes...**

We respond to increased customer demand with specific products from our own production that are precisely tailored to your needs.





# STANDARD PRODUCTS

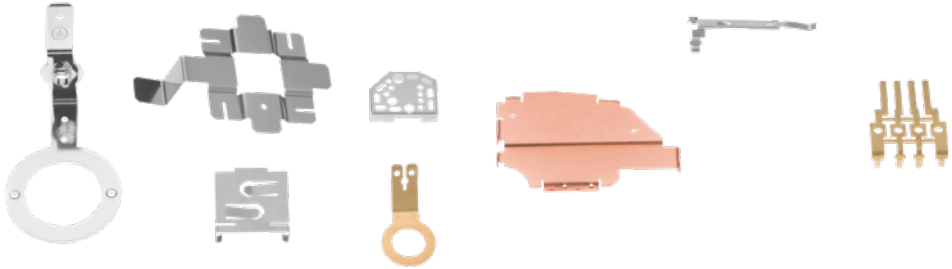
## **... or from the standard product range**

You are guaranteed to find the product you are looking for among our product range of more than 10,000 items for electromechanical press-fit technology.





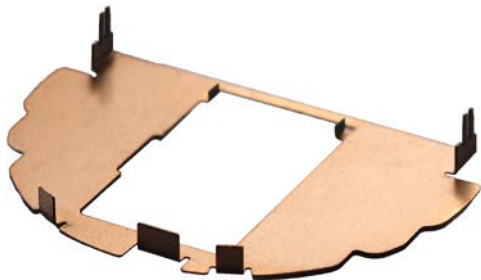
# STAMPING



- Standalone stamping factory
- From the idea to the finished product
- Experienced, in-house toolmaking
- State-of-the-art CAD tools



# STAMPING



From your initial idea to the finished product, and with no limits to complexity and amount, we produce premium-quality precision items on 20 Swiss stamping machines with state-of-the-art control units.







# STAMPING

Dimensions of stamped parts	
Area	max. 80 × 50 mm
Bandwidth	6 to 90 mm
Size of slits/holes	min. 1.2 × material thickness

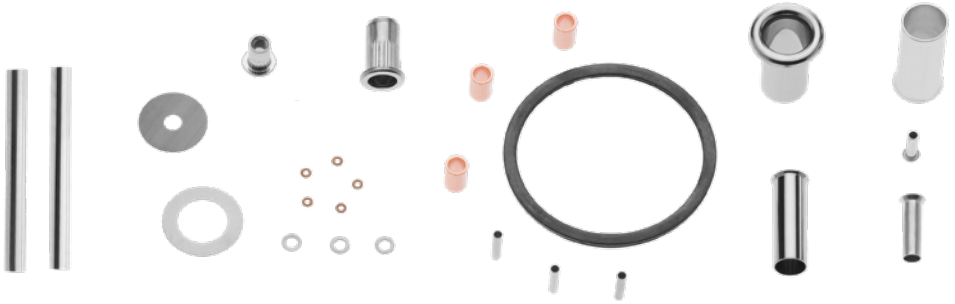
Material thickness	
Individual parts	min. 0.2 mm / max. 2.0 mm
Rolled products	min. 0.1 mm

Tool types
Channel cuts, complete cuts, progressive tools, and tools with an integrated thread-shaping unit.



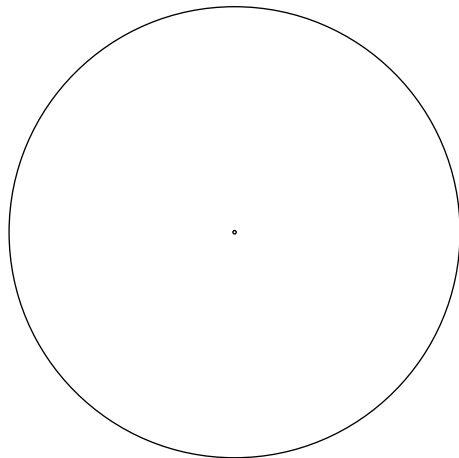


# PIPE



- Fully-automatic pipe processing
- Coil or bar material and profiles
- Fine pipe processing: Sawing, reshaping, chamfering, widening, slitting and deforming
- Alternatives to turned parts

# PIPE



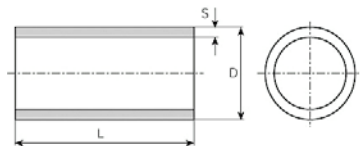
Smallest/largest Ø 1:1

Our pipe processing includes sawing, reshaping (crimping), chamfering, widening, slitting, and deforming. Thanks to the high precision, we are able to manufacture alternatives to turned parts. These processes produce products such as spacer tubes, crimp sleeves, wire-end ferrules and tubular rivets.



# PIPE

Crimp sleeves		
$\varnothing D$	1 mm	to 20 mm
s	0.2 mm	to 0.9 mm
L	2 mm	to 160 mm



Always includes the right processing tools, from a simple hand tool to the processing machine.

Special die possible on request



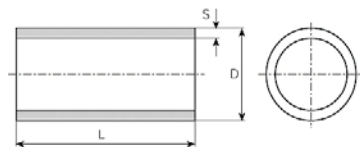






# PIPE

Standard pipe sections		
ØD	0.8 mm	to 33.0 mm
s	0.15 mm	to 5.0 mm
L	2.0 mm	to 160.0 mm



Special tubular part manufacturing available upon request			
ØD	10.0 mm	to 60.0 mm	
s	1.0 mm	to full material	
L	10.0 mm	to 35.0 mm	to diameter D max. 20 mm
L	35.0 mm	to 350 mm	for diameter D 10 mm–60 mm

Processing on both sides such as chamfering, etc. upon request. Low-burr edge processing  $\pm 0.05$  mm. Other types of post-processing available on request.



# PIPE

Tubular rivets according to DIN	
Diameter	min. Ø 0.80 mm up to max. Ø 16 mm
Wall thicknesses	min. 0.15 mm to max. 1.0 mm



Form A



Form B



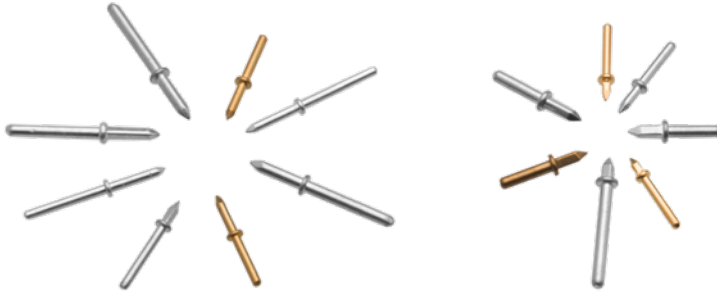
Form C

Special versions and lengths upon request



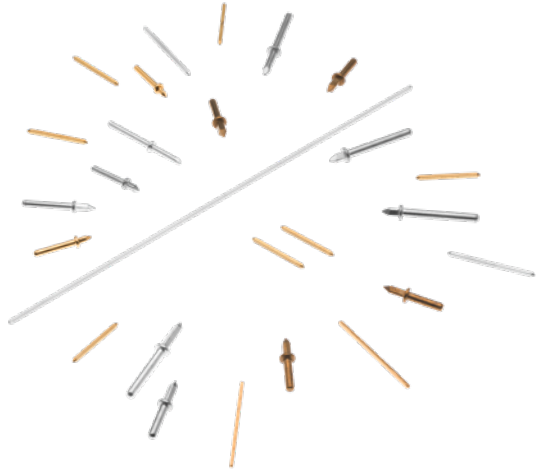


# WIRE

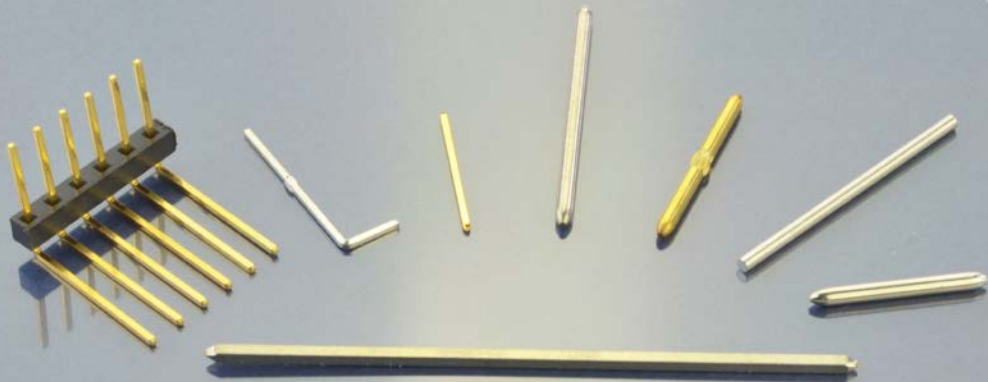


- Manufacturing of round and square wire pins
- Straight wire parts through to products with compressed collar
- Angled wire parts
- Further processing of components such as headers
- Numerous optional extras

# WIRE



We process round or square wire pins in common metals, such as copper and copper alloys, aluminium, reels of steel or stainless steel on our specially designed systems and devices.







# METAL/PLASTIC COMPOSITE PARTS



Our production is seeing steady growth in the manufacture of plastic parts. Extrusion-coated tube and stamped parts play an increasingly important role. A large part of our product portfolio is also made up of pure plastic parts.





# PLASTIC

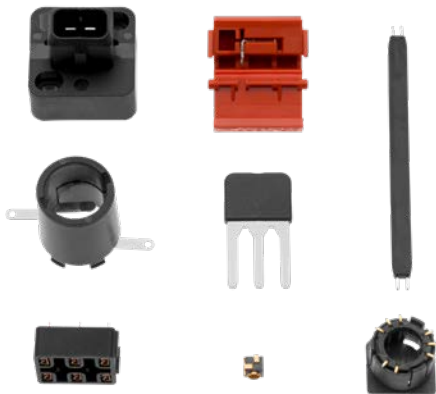
<b>Overmoulding of metal parts</b>	
Material	all metallic materials
Further processing	on rotary tables, push-in cartridge tools or fully automated systems

<b>Material</b>	<b>Polypropylene to polyetherimide</b>
Part weight	0.02 to 200 g
Closing force	25 to 80 tons

Processing methods	drilling, milling, turning, grinding, EDM
Post-operations	module assembly, customised packaging available



# PLASTIC

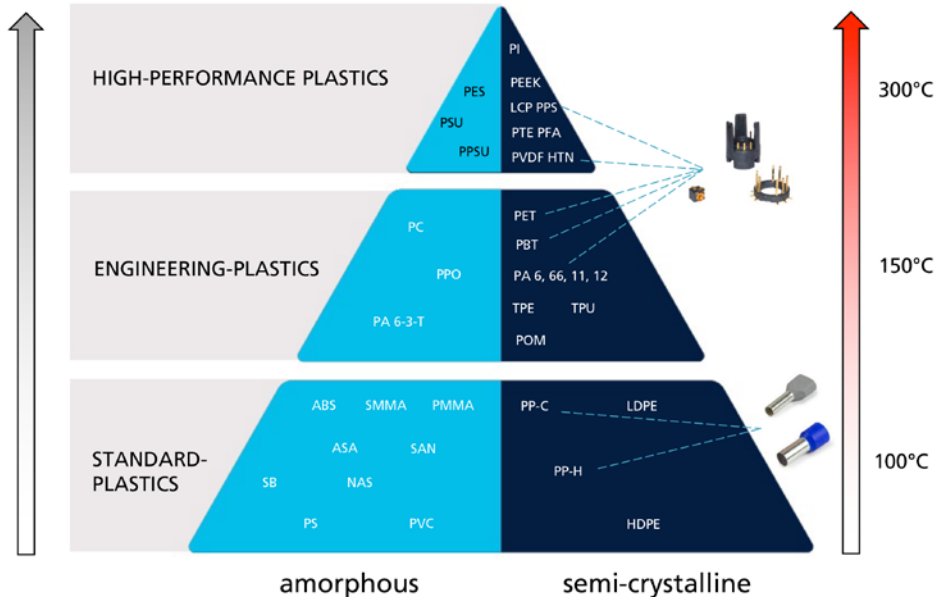


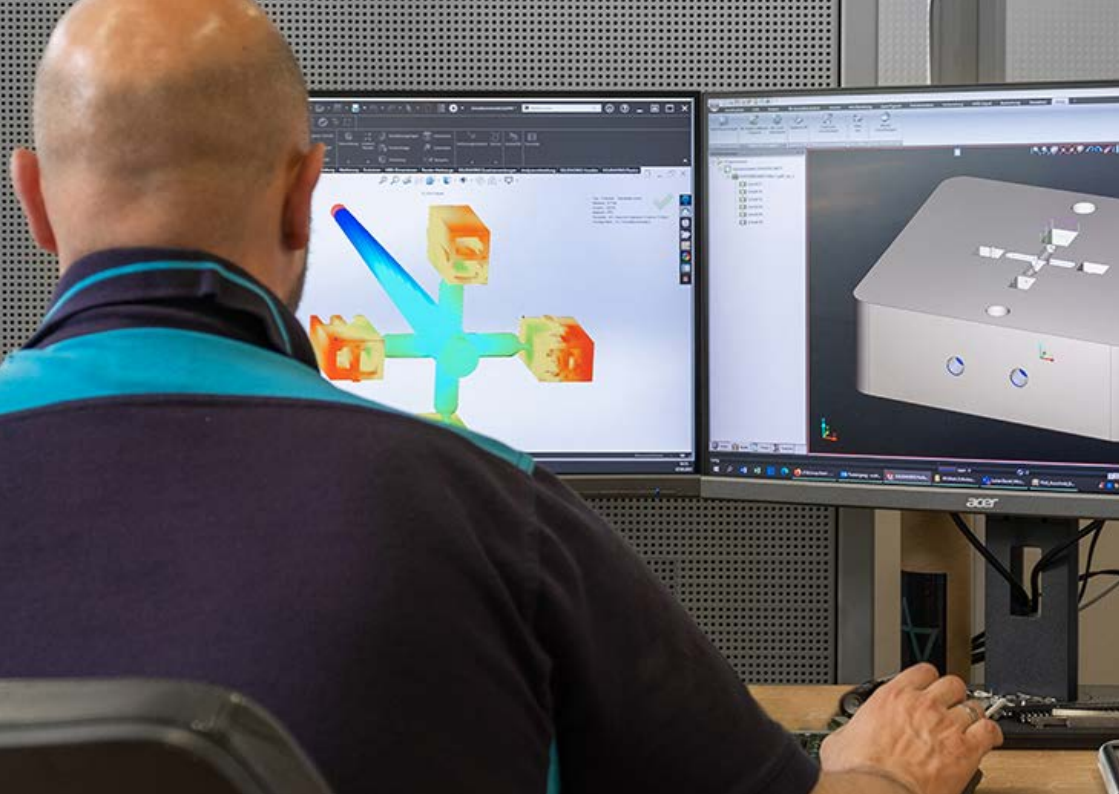
We process thermoplastics and thermoplastic elastomers, such as:

- **PA** Polyamide
- **PC** Polycarbonate
- **PP** Polypropylene
- **PS** Polystyrene
- **PPS** Polyphenylene sulphide
- **PET** Polyethylene terephthalate
- **PEI** Polyetherimide
- **LCP** Liquid crystal polymer

Price/Performance

Temperature





# MOLD FLOW

For feasibility studies and for perfecting plastic parts in series production, our toolmaking team works with the Mold Flow simulation tool. The simulation encompasses digital construction of parts, analysis of plastic melt distribution and analysis and evaluation of, e.g., filling and cooling times, geometry, shrinkage and conditions like injection pressure.

This reduces the need for prototype construction, lowers tool costs and speeds up market launch. Mold Flow enables us to optimise different aspects of production, such as choosing the right plastic, achieving a higher quality standard, correct filament orientation, compliance with tolerances, reduced requirements for prototypes, lower tool costs and faster market launch.



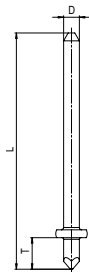




# ROUND WIRE PLUG PINS

Round plug pins	
ØD	1 mm / 1.3 mm / 1.32 mm / 1.56 mm
L	max. 20 mm
T	2.5 mm to 10.0 mm

with collar



straight



embossed under the collar



Other diameters and lengths available on request



## SQUARE WIRE PLUG PINS

Square plug pins	
□	0.63 mm / 1.1 mm / 1.14 mm
L	6 mm to 70 mm

Other cross-sections and lengths available on request



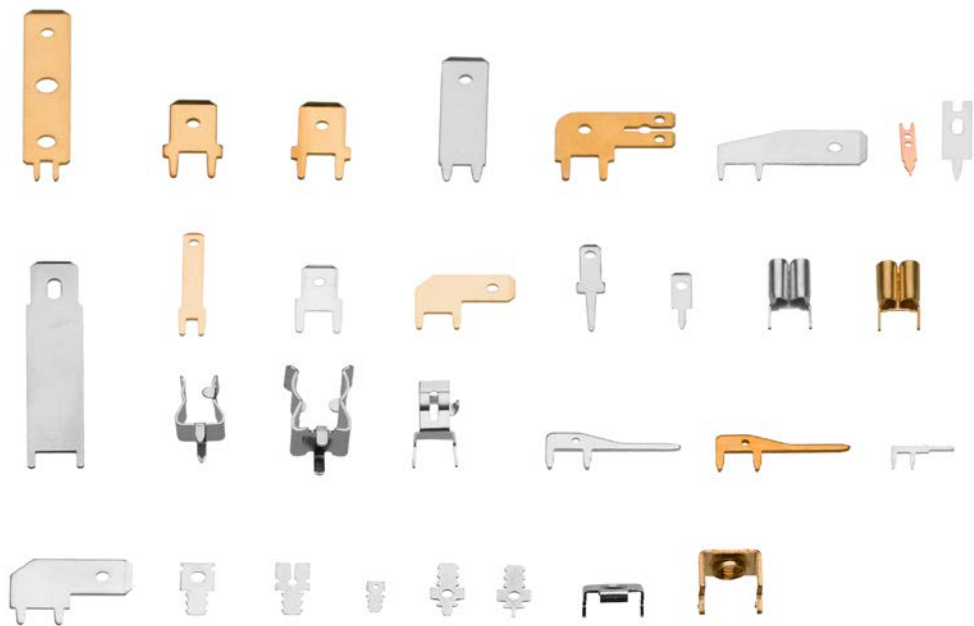
# THT MODULES FOR PCBs

Nominal dimensions
2.8 mm
4.8 mm
6.3 mm
9.5 mm

## Tabs / Receptacles for pins

1-pin / 2-pin / multiple  
Straight and angled

Special sizes available on request





# SMD MODULES FOR PCBs

**Blade terminals / Screw fixations / Contact bridges / Clamping spring**



Special sizes available on request

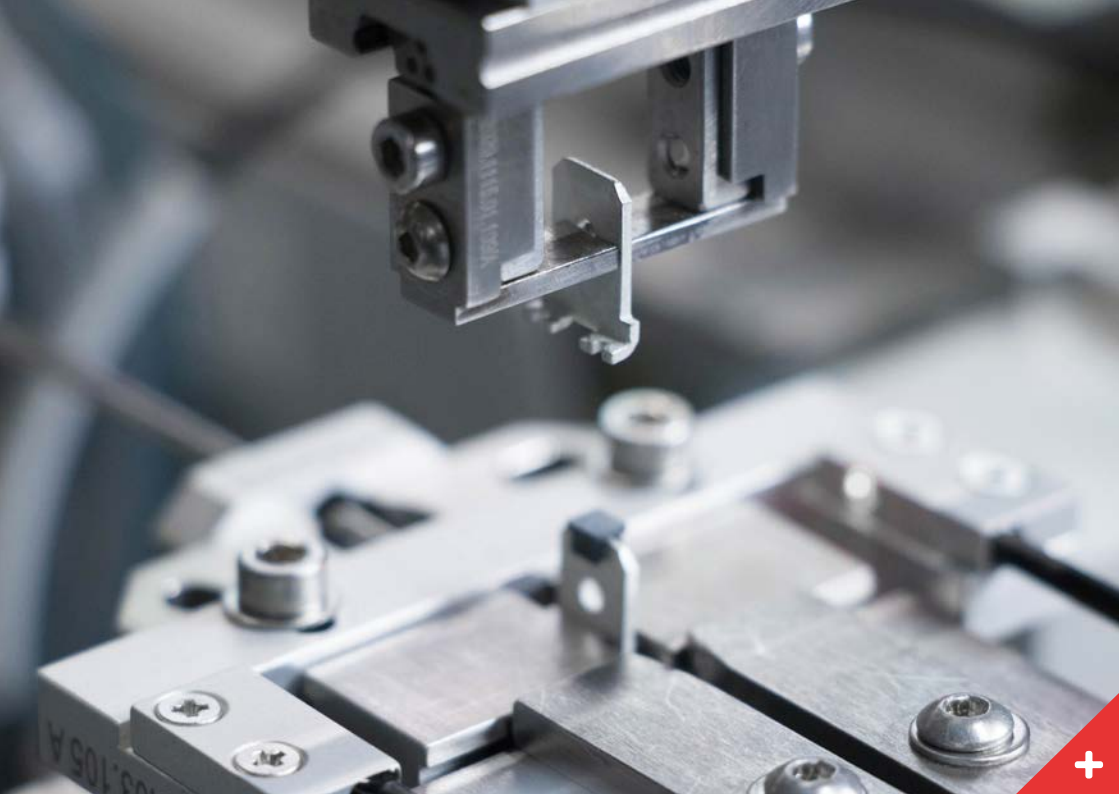


# BLISTER / AUTOMATED ASSEMBLY

For THT and SMD parts









# CABLE TERMINALS / TABS

Nominal dimensions	2.8	4.8	6.3
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Other designs on request



# CABLE TERMINALS / RECEPTACLES FOR PINS

<b>Nominal dimensions</b>	2.8	4.8	6.3
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Cable cross-section 0.14 mm<sup>2</sup> to 6 mm<sup>2</sup>

non-insulated



part insulated

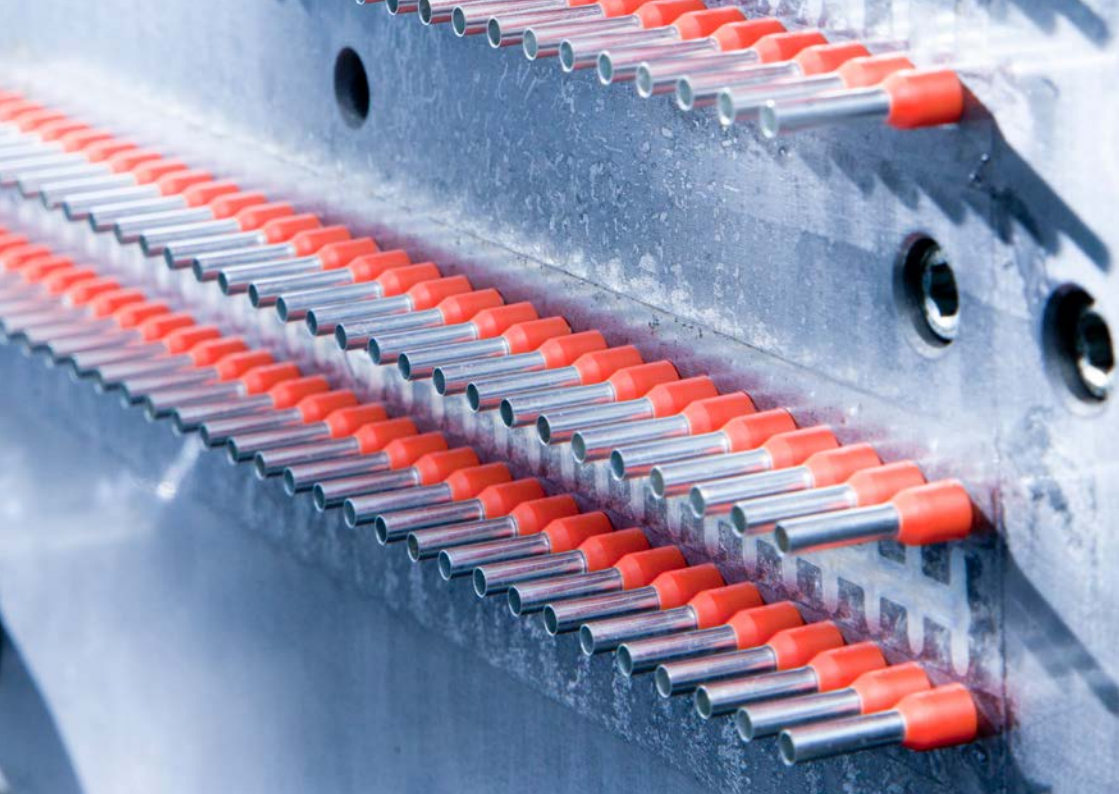


fully insulated



Other designs on request





# CABLE TERMINALS / WIRE-END FERRULES

Cable cross-section 0.25 mm<sup>2</sup> to 70 mm<sup>2</sup>

individual  
with PP



in strips and  
chain from  
with PP



double with PP



Short and  
ground fault-  
proof with PA



Other designs on request





The quality and safety of a UL-standard cable connection is only guaranteed with the correct flex conductor category and length of stripping and if the correct tool according to the requirements is used with a tested wire-end ferrule.



## UL RANGE

UL (Underwriters Laboratories) is a global safety company with 120 years' experience in standards, product testing and certification. The UL mark stands for high-quality certification. Unlike other standards, products and their production processes are assessed in detail to meet the UL standard. Regular inspection visits ensure adherence to US and Canadian standards.

Wire-end ferrules from Vogt AG correspond to UL standard 486F and CSA C22.2 no. 219-14, so they guarantee safety and quality for regulatory authorities, consumers, manufacturers and traders.





# CABLE TERMINALS / CABLE LUGS – AND SPLICES

Solderless terminals   Crimp terminals



Tubular terminals



Cable cross-section 0.25 mm<sup>2</sup> to 300 mm<sup>2</sup>

Butt-splices with or without insulation





# RANGES

Our practical product range boxes contain a varied selection of wire-end ferrules, cable-end ferrules and cable terminals. They ensure clean and safe press-fit technology and are ideal for professionals and do-it-yourself enthusiasts. The components are neatly arranged and well made to make your work easier and guarantee reliable results. Perfect for anybody who values quality!



Scatter tins



Assortments



Refill bags

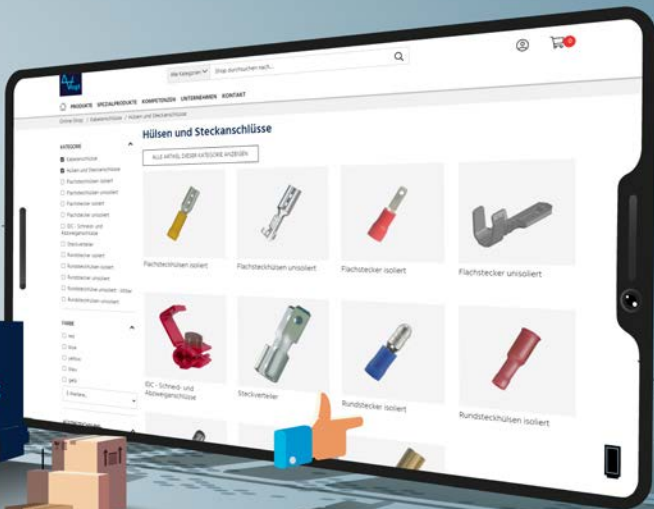
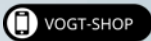


# VOGT SHOP

Our modern online shop has around 10,000 readily available items and we are happy for you to use it for reference. Clear categorisation makes it easy to find the product you need from our wide range.

Plus, the shop also has a sophisticated search function to make your search easier. You can also filter the search results according to specific criteria to refine your search even more. If you find several suitable items, a product comparison function will help you make the right choice.

Availability of items is updated every day.



[www.vogt.shop](http://www.vogt.shop)



# SOLUTIONS FOR SPLICING PROJECTS

Can't find the part you want in the standard range of products?

We can make individual products for you and your application.  
Our team is happy to advise you!

- **Your contact**
- **No interfaces**
- **Individual and hybrid parts as well as modules**
- **Individual designs**
- **Flexible batch sizes and number of parts**





## 3D PRINTING

Vogt AG Verbindungstechnik uses additive manufacturing in plastic injection moulding to meet growing industrial demands. The company supports its customers, from product development to implementation, with modern 3D printing technology.



- **Rapid prototyping for feasibility testing**
- **Manufacturing of near-net shape tooling inserts**
- **Synergies with other technologies**
- **Cost-effective pilot and small batches**
- **Full service from prototype to large-scale production**





# CONTRACT PRODUCTION

State-of-the-art technology and many years of expertise enable us to guarantee precise and high-quality processing that exceeds your requirements. Our range of services includes CNC machining technology for complex shapes, as well as customised solutions. We offer complete solutions under one roof, from planning to the finished product.



- **Highest standards of precision and reliability**
- **Efficient processes for short delivery times**
- **Experience and expertise in various areas**
- **Committed to customer satisfaction and sustainability**





# TOOLMAKING

Our aim is to offer our customers the best possible service with a treasure chest of ideas, right from the word go. Build on our manufacturing know-how.

- **Support in the development and construction of customer solutions**
- **Prototypes and series tools**
- **High level of expertise in the manufacture of individual components to complete modules**



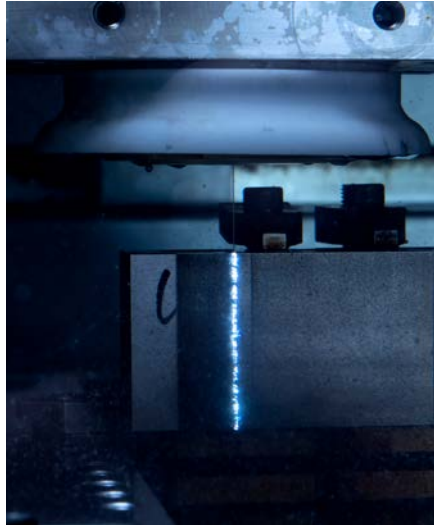




# WIRE EDM AND SINK EROSION

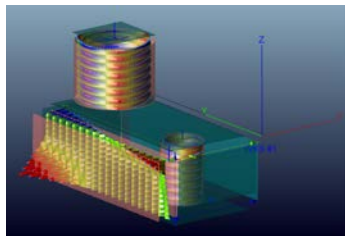
We can precisely manufacture complex components thanks to our state-of-the-art wire EDM and sink erosion technology. Customers benefit from our expertise and modern technology to realise even the most demanding projects.

- **Micron precision processing**
- **Maximum flexibility**
- **Fast turnaround times**
- **Highest surface quality**

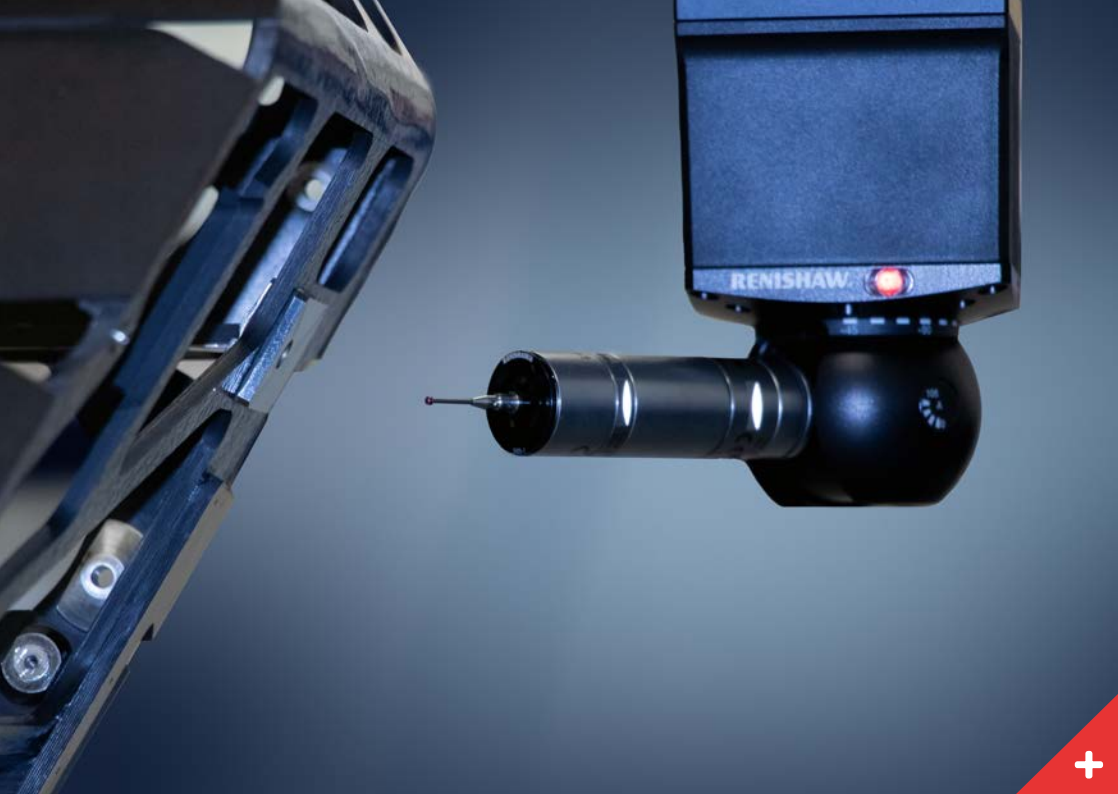


# QUALITY CHECKS / MEASURING TECHNOLOGY

The 3D measurement laboratory at Vogt AG in Lostorf specialises in high-precision measurements under laboratory conditions. Our customers save valuable time and get more useful measurement results through our use of the latest software, standard-compliant documentation and efficient service.



- **Proven quality with our in-house measurement laboratory**
- **Initial samples (VDA, PPAP)**
- **Complete metrological solutions**
- **Fulfilment of the highest quality standards**





# PACKAGING

In addition to the type of packaging, the labelling can also be selected to suit individual requirements. It is important to be able to automatically identify the product by means of a barcode, not just when it is received, but also when it is taken out of stock. The batch numbers are also linked with the latest DataMatrix codes printed on the labels to ensure traceability.

- **Blister, tape & reel**
- **Bag**
- **Labelling**
- **Product range boxes**
- **Euro bracket**





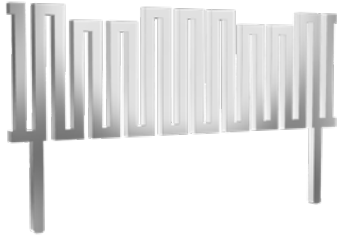
# CONTACT SLEEVES FOR TOTAL STATIONS



Vogt contact parts are used for high-precision applications. In the field of terrestrial surveying, total stations are used for the highly accurate determination of horizontal/vertical angles as well as object coordinates for testing prefabricated construction elements or the setting out of design data in construction projects.

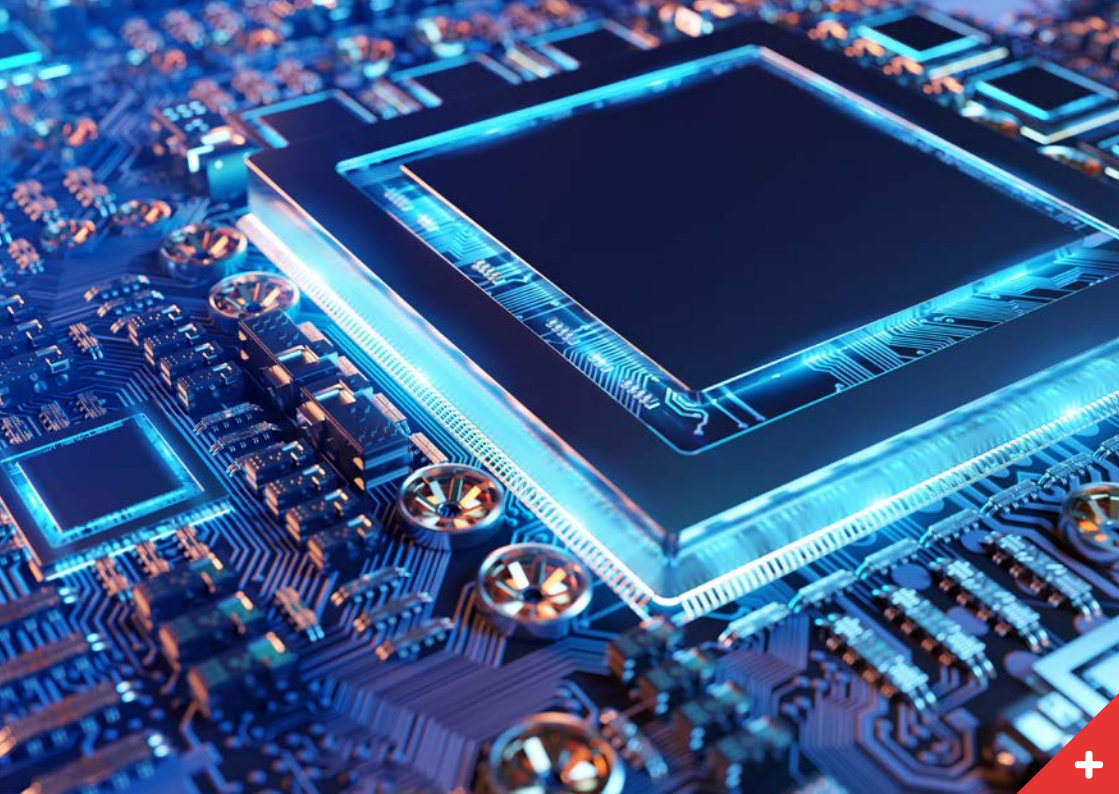


# STAMPED PARTS FOR CAPACITORS



Precision, contactability and cost-effectiveness are crucial when it comes to manufacturing components for SMT assembly. We satisfied these requirements when we manufactured two stamped parts for a leading manufacturer of electronic components. The order included a stamped-bent part and an intricate stamped part that satisfied very high requirements as a meander. It was first stamped, then silver-plated and then removed from the belt with minimal warpage and packaged according to the customer's requirements.







# MODULE FOR ACOUSTIC TRANSDUCER

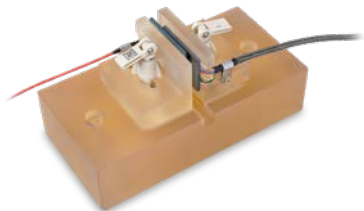


HB-THERM is the technology leader in the manufacture of tempering units. For the new Termo-6 series, we were able to work closely with the customer to create a complex assembly and connector housing.



## FIXING LEVER FOR SENSORS

Vogt manufactures a fastening lever made of PPS plastic for the world's largest telescope, which will be built in the desert in Chile by 2028. The production of the parts will be grease-, silicone- and burr-free, with dust-free processing. They satisfy the high precision requirements of Micro-Epsilon. The item number and series number are laser printed with a QR code.





VIDEO



CREDIT: ESO





# BATTERY CONTACT FOR WELDING HELMET



Inside each automatic welding helmet is the cartridge that combines both the technology and the know-how. Part of this cartridge is a printed circuit board upon which the controller is integrated that regulates the liquid crystal display depending on the brightness. Vogt AG has produced complex battery contacts for the company based in Eastern Switzerland.



# MATERIALS

**Aluminium**



**Brass**



**Beryllium copper**



**Nickel silver**



**Bronze**



**Stainless steel**



**Cupronickel**



**Steel and stainless steel**



**Copper**



**Nickel**



**Spring steel**









# SURFACES

**Blank**



**Silver-plated**



**Gold-plated**



**Bronzed**



**Pure tin-plated /  
solderable**



**Reflow**



**Nickel-plated**



**Galvanised**



**Anodised**

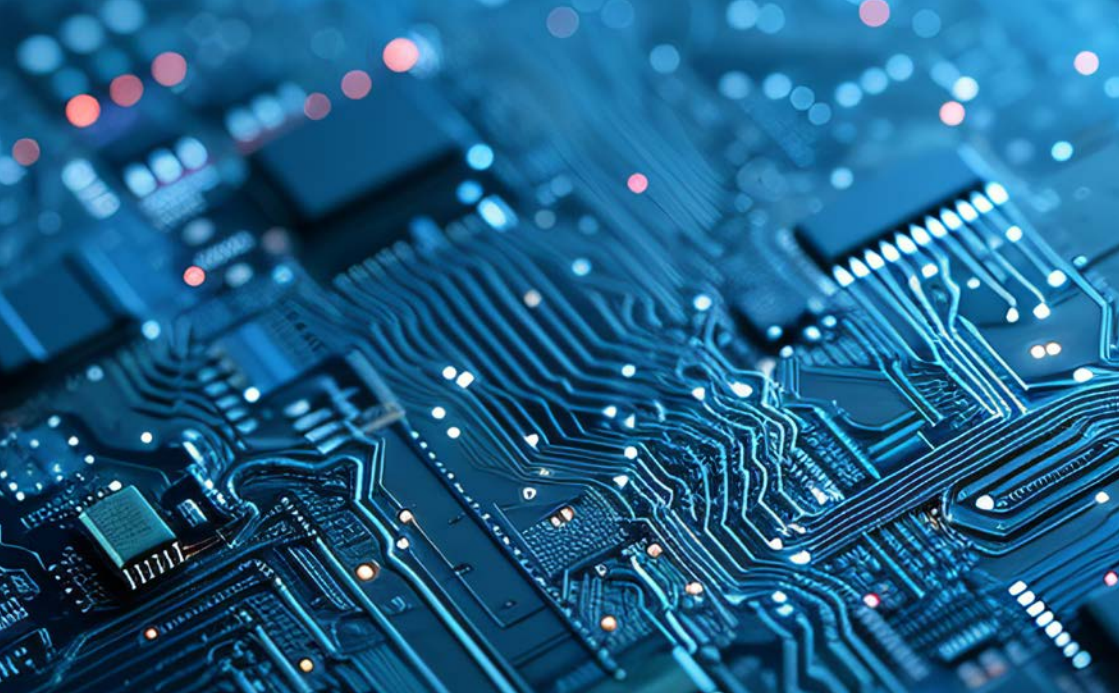


**Sucopro**



**Sucoplate**





Vogt AG Verbindungstechnik, CH-4654 Lostorf