

Company Profile

*If it's cables you need – then HOWAG!
We create connections.*


your cable solutions

A Swiss company with a long tradition



Always one step ahead: this was the motto for HOWAG as early as 1936, the year of its formation. Since then, the Swiss company has been a reliable and innovative partner for cable assembly for its customers.

The issue is quite clear to HOWAG. "If companies want the optimum solutions for cable assembly, we are your preferred partner. Our vision for the future: with our expertise, we want to be and always will be in a position to design and deliver the perfect products for our customers." These clear words are followed by the right actions.

Left: CEO Rolf Lüscher with the executive board members Roger Gojo and Pascal Jeker.



HOWAG has always put the focus on high technology in cable assembly. International certificates document their quality.



The management team and 100 employees at three locations have made HOWAG into an international company whose value proposition is the proverbial quality of Swiss products. Customers benefit from HOWAG Kabel AG's efficient processes and extensive production know-how and turn the quality of the cables into a unique selling point of their own.

Then as now, the same maxim applies: give customers the best possible quality

It all started back in 1936: following its formation in Wohlen (in Canton Aargau), the company developed into Europe's leading manufacturer of spiral cables. Its many years of expertise in the production of linear metre cables followed by cable assembly soon made HOWAG the first choice. The word spread: If it's cable you need, then HOWAG! Today, the company is certified to ISO 9001 and has all the essential certifications recognized in the industry - for example, the North American UL label and the VDE seal. In the past, the present and the future, customers could and can rely on cabling whose production reliability, ease of maintenance and trouble-free operation are second to none.

Cable assembly for all applications

Cable assembly is more than just fitting terminals to copper wires. In point of fact, it is a question of making powerful connections. We do our utmost to ensure that they work perfectly.

It is not the cheapest product that is the most efficient one, but the product that best suits your needs and provides trouble-free service over the entire intended period. Using us as your outsourcing partner for your connection requirements means that you get reliability in terms of planning, operation and application in your company. We are sure you will agree: having project partners who think for themselves is a major benefit. That is the sort of partner that we are. Talk to us first if you intend to plan new solutions or improve existing connections. Our specialists are familiar with every cable and any plug, can identify weaknesses and find optimal solutions. Incidentally, this also applies to the different country-specific safety regulations in leading industrial nations.

Eliminate any potential problems with your cables and plugs before starting production: 3-D prototyping makes it possible

HOWAG Kabel AG takes a holistic view of connectivity solutions: we provide you with the correct cable, suitable for the required mechanical strength and environmental conditions - wet, hot, cold, toxic. Of course, the right connection technology for each end of the cable is part of it. You wish to find out what a new connection on the module looks like and whether it fits before you start series production.



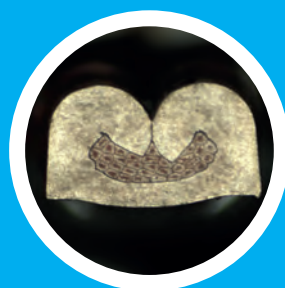


No problem, as early as the design process, we create a real 3-D model that you can hold in your own hands and try. In this way, you can determine the subsequent product design with a very high degree of precision - and are not simply dependent on sketches and CAD drawings.

Our connections keep our promise

Safety and quality are our guidelines. An entire inspection catalogue ensures that our customers always get the same high quality. We are happy to perform custom checks, complete with individual test reports. These include high-voltage tests, electrical measurements, electrical connection tests and customized tests. We – and, by the way, our subsidiaries - operate exclusively in accordance with the international requirements of IPC 620 and the acceptance criteria for cable and wire harness assemblies. This means that in the case of resale you can always rest assured that our cable assemblies are manufactured according to internationally recognized standards. An example of our product testing: we operate a modern micrograph laboratory to optimize the quality of our crimp connections. In the micrograph laboratory, a crimp is literally placed under the microscope to verify its quality. Our customers thus receive optimum quality and reliability.

Connections are checked in the micrograph laboratory (bottom left). 3-D models help with product selection.





Keep the processes lean: count on us!

Outsourcing can be so simple: you concentrate on your core competencies. We do, too - and support you.

People should do what they do best. This is the simple, but very efficient basic concept behind outsourcing. Irrespective of the area of technology in which your unique selling proposition is located, we are happy to deal with everything that has to do with your connections and cables. In this field, we have developed a specific expertise over almost 80 years and have the most modern equipment and tools for cable assembly.

Optimizing the supply chain with electronic data exchange

Lean processes are not only fast and efficient - they also offer less room for error. HOWAG Kabel AG relies on electronic data exchange. This means that corporate data such as orders, order confirmations and invoices can be exchanged between us and your company in a standardized format and with minimum friction losses. Manual creation, printing, enveloping, dispatch and receipt are no longer necessary because the data is translated from your computer system into a standard format so that it flows from the data interface directly into HOWAG's ordering system. Just press a button - and we will send off your order, packed and labelled for transport together with barcode and your logo anywhere in the world. This is lean manufacturing done the smart way.



Production, packaging and delivery logistics: thanks to electronic data interchange everything runs like clockwork.



International contacts: HOWAG Kabel AG's managing director Rolf Lüscher from Switzerland (centre) in a meeting with project leader Panayot Dzumaliev of Bulgaria (right) and project manager Kelly Lee from China (left).

Efficient production all over the world

We are proud of the products of our Swiss home location. What prevents us from producing this quality all over the world for you? Nothing at all.

HOWAG Kabel AG is a Swiss company with international experience. We think globally and act regionally - for you and right where you are! We have recognized the opportunities offered by globalization and built subsidiaries in China and Bulgaria alongside our main plant in Dintikon. If you want to have products manufactured abroad, but do not know who offers the best price-perfor-

mance ratio, just use our contacts and expertise. Your advantage: you negotiate with us because we speak your language. You do not have to worry about international practices, time shifts and the time-consuming generation of business leads.

High-quality production outside Switzerland - under the Swiss flag and Swiss management

Experience and contacts are indispensable for international projects. We are familiar with the stumbling blocks in international partnerships. Our own factories in China and Bulgaria have made us a competent partner who is willing to help at any time.



Switzerland, Bulgaria and China: HOWAG Kabel AG has presences with its subsidiaries in Europe and Asia.

This is where all the cables come together: we communicate with our international production locations - and you communicate exclusively with us in Switzerland.



Our locations: Switzerland, Bulgaria, China

We are the right partner for every production job outside Switzerland. Our subsidiaries provide top-quality products. You can depend on it.

People who have products manufactured outside Switzerland are keen to have a particularly good price-performance ratio. However, there must be no loss of quality, so we control our production sites in China and Bulgaria from Switzerland. From here, we can prepare and manage your production to keep overall costs as low as possible and quality high.



HOWAG OOD in Bulgaria

Specializing in the three areas of cable assembly, module assembly and injection moulding, our subsidiary in Bulgaria produces outstanding quality at competitive prices in the EU area. Deliveries from Targovishte, which is situated near Varna on the Black Sea, are made by land and allow high-volume production with great weight, without the correspondingly high logistics costs.

HOWAG SWISSPUR in China

Series production with cost benefits: this is what our factory in China provides. Cable and electronic connections and injection moulding of cables in different variations are the specialities of our location in China. In south China's Zhongshan, our trained staff produces high quality products in the fields of cable assemblies, spiral cables, connectors and sleeves.



Our production sites in Switzerland (top left), Bulgaria (top) and China (left) assemble cables and modules in the quality and quantity you require.

We are your professionals for cable assemblies

There is no cable for which we do not have the right connector. And if we do not have it, we can easily develop it. Your requirement is our guiding principle.

Only one aspect gets priority for us where cable assembly is concerned: that you get a product of outstanding performance. We therefore optimize our cable connections in respect of production reliability, trouble-free operation and ease of maintenance. We also include country-specific requirements and specific standards. A reduction in complexity is often the best solution: we make a single cable out of several cables or combine them to fit a single plug. You can be sure of one thing: we guarantee the right connection!

The right injection moulding technology for all applications

We manufacture connections, bushings and connectors in high pressure or low pressure processes, which offers an unlimited range of possibilities: from encapsulated data connectors and moulded plugs through to special solutions for medical technology and the mechanical engineering industry, we supply the Swiss quality you expect. Together, we discuss what materials and what injection moulding technology make the most sense for your specific application. We carefully examine the suitability of cables, connectors and the thermoplastic for injection moulding for you. In the high-pressure process involving PVC and PUR plastics, we can also create the most complex shapes and connections. For the usual D-Sub data cables, for example, we offer several different types of connectors that we manufacture using a high-pressure injection moulding process.





Low-pressure injection moulding is perfect for sensitive components

An injection pressure of up to 1000 bar is inappropriate for all components. Therefore, we use gentler, low-pressure injection moulding for sensitive, delicate electronics. By limiting the pressure to 2 to 40 bar and using special hot-melt adhesives, sensitive compounds can be protected perfectly from environmental influences.

We deliver reliable connections

Cables and connectors have to put up with a lot: they get kinked and bent and get plugged in and unplugged again repeatedly. They must also function properly in surroundings that are dangerous for them, for example when they come into contact with moisture, toxic gases or liquids or are exposed to extreme heat or cold. Our cables and connectors meet the highest quality requirements and work flawlessly in all the environments for which they are approved. This is made possible by our superb quality management and effective control mechanisms at the production stage.



Plugs, bushings and sheathing are available in both high- or low-pressure injection moulding processes.

Cable assembly and modules

Spiral, network and patch cables and modules are special solutions for special tasks. We also manufacture data cables fully in line with your requirements.

Off-the-shelf solutions not right for you? No problem: our experts develop connections especially for you: the right cable, individual terminals through to complete wire harnesses. We build a prototype, transfer it if required into small quantities and usually also prepare it for mass production. You see: There is no connection that we are unable to make for you.

The data cables you want - perfectly in line with your requirements

Patch cables are used wherever network devices need to be linked together. The possible combinations are almost limitless. We produce any lengths and adjust the assignments to your requirements. Choose from various materials: PVC, PUR, UL, halogen-free are possible. We manufacture terminals with standard bushings, slender bushings and on request with latch protection. Labelling is applied directly to the cable or a sleeve. The cable you need is available in a wide range of colours.

Spiral cable: as flexible as it gets

Experts develop the cables and connections especially for you. The trick is the spiral shape: This cable is very flexible and can be infinitely adjusted in terms of length: it's definitely the end of an era for cables that are too short.





Power cords: this is where the energy is

Our power cords pass all the international inspections required for Switzerland, Germany, England, USA and Japan. They are available in standard lengths or custom-made, with moulded plugs and as spiral cables in PUR version.

Modules: everything from one source

We go far beyond cable assembly when putting modules together: for complex solutions, such as drag chain assemblies, we put together the entire module with all its mechanical and electrical parts. Of course, we also obtain components on your behalf that we do not manufacture ourselves - such as casings or individual mechanical parts - and you get everything from one source. It couldn't be any simpler.



HOWAG Kabel AG produces cables for every application - individual special cables are also possible at any time.



*HOWAG – THE address for cables!
We have the right solution for every
connection problem. Find out more
about our expertise at a meeting
on your company premises - our
consultant team will be happy to
visit you!*



HOWAG
your cable solutions

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