

**100**

**YEARS**

1916 - 2016

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the secure connection

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**Leading system provider in the wire industry,  
track construction and the PMC-industry**



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**Dear Reader,**

100 years ago, the First World War was raging in Europe. In the midst of the chaos of war, the entrepreneur H. A. Schlatter recognized a pressing need: for the long marches, people needed more robust shoes. So he developed a method for the manufacture of hobnails. This method not only used electric heating to efficiently press and form the nail heads, but also to weld these heads with the pins afterwards.

Since then, the world has changed and developed dramatically. New technologies shape our daily life today. Schlatter, too, has developed, and is today a global company in the development and manufacture of resistance welding systems.

Schlatter's focus on the needs of the customers, however, has not changed. Although today here at Schlatter, we speak of system innovation. We understand the needs of our customers globally and design our modules and systems accordingly. This provides our customers with a network infrastructure in the manufacture of their products.

Over the past 100 years, Schlatter has played a leading role in shaping many developments in our field and consistently provided innovative solutions for the most recent market changes. Schlatter has experienced ups and downs and has emerged from crisis stronger than before.

Today, we are probably facing the most challenging time in our company's history to date. Through the globalization and digitization of our world our sales markets have become more fragile and prone to crises - news from all over the world spreads immediately, with a direct impact to other regions in terms of opportunities and risks. Schlatter has been successfully addressing these challenges by operating fast and flexibly. Even though Switzerland as a location might be at a disadvantage in the export industry since the latest currency crisis, we can still claim excellent political framework conditions and highly trained and highly efficient employees.

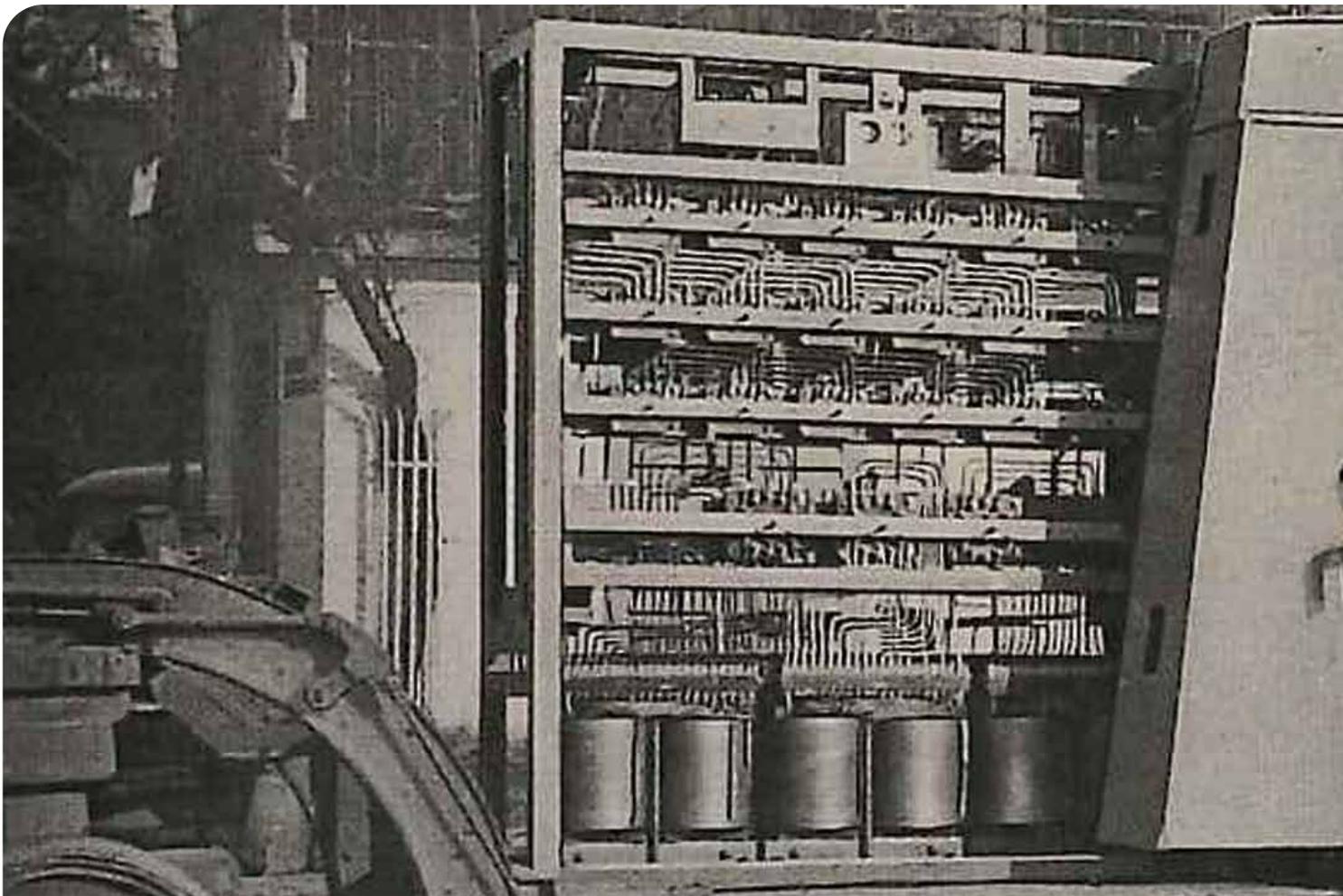
We make full use of this advantage and, with a focus on innovation and flexibility, will continue the success of our company and carry it into the future.

A handwritten signature in blue ink that reads "W. Schmidli".

Werner Schmidli  
CEO Schlatter Group

## A company with a history and future

Hans A. Schlatter, born in Zurich in 1886 as the son of a master metal-worker, first came to work on resistance welding in America, at a time where this technology was hardly known in Europe. After returning to Switzerland, he put this knowledge to good use. His groundbreaking work was well received in the industry and led to the founding of his company in 1916.



### The early beginnings

During the First World War, he developed a method for the manufacture of hob-nails. This method not only used electric heating to efficiently press and form the nail heads, but also to weld these heads with the pins afterwards.

He also used this process of heat creation successfully for spot welding.

In 1930, H. A. Schlatter took over as representative for the wire butt welding machines at the American company Microweld which gained him access to companies and the mesh welding industry worldwide.

For example, he provided radio and electric lighting manufacturers with precision spot welding machines, as well as steel manufacturing companies with high efficiency spot welding machines to weld up to 15 mm thick steel panels.

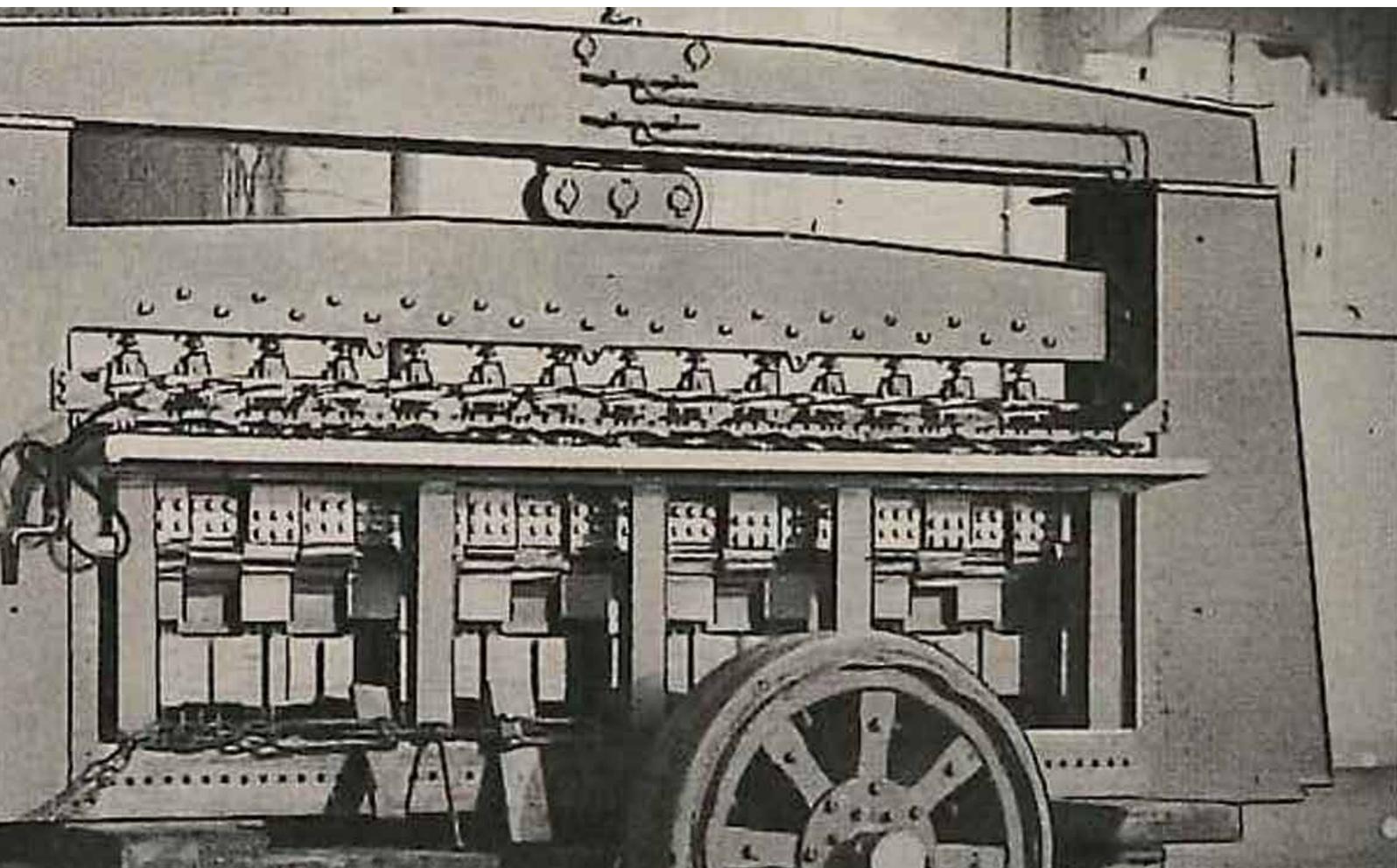
### The main pillars of Schlatter's success

After the Second World War there was significant activity in the European building sector. Numerous new constructions made of concrete needed steel reinforcement. It seemed the obvious choice to weld the reinforcement rods before laying them out as mesh and meant a significant improvement from binding together the individual rods manually.

Schlatter seized this opportunity and built his first mesh welding machine. In the beginning, the line wires were welded two by two and one after the other with a cross wire.

The real breakthrough, however, came with the pneumatically driven mesh welding machine. Installing several welding transformers allowed for the line wires to be welded with a cross wire along the whole width of the mesh at the same time.

1946 - The first mesh welding machine



### Becoming the global market leader

By the mid 1940s, central heating had become one of the standard amenities in new apartment buildings. Soon Schlatter was offering two solutions for the efficient production of heating-radiators.

A further milestone was set at the end of the 1940s. The welding of rail tracks posed a new challenge. The system designed for this process made Schlatter market leader. With the development and the use of flash butt welding, the company has managed to maintain its leading position to this day.

### The combination of machine and controlling system

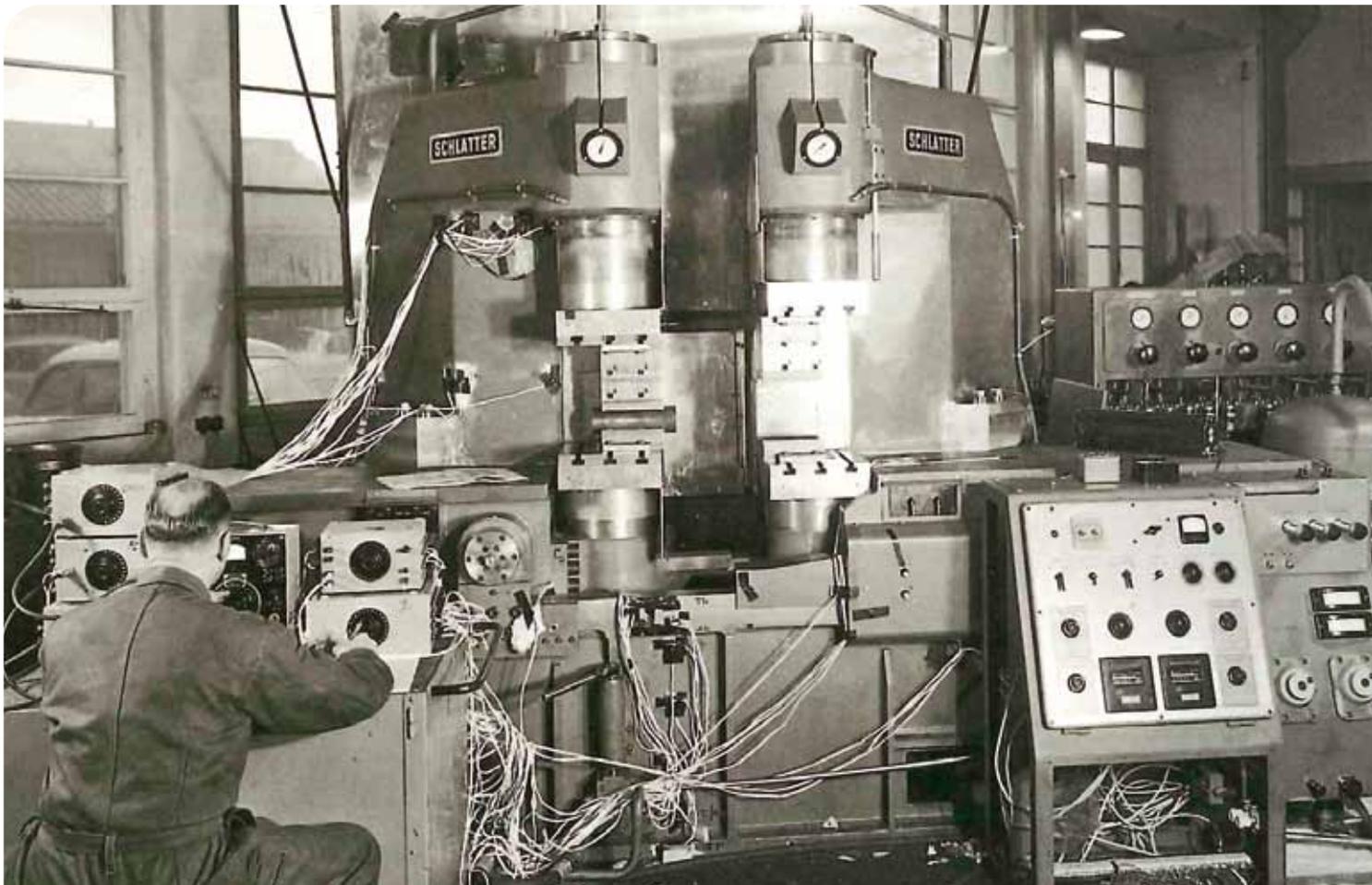
Early on, Schlatter realized that a good machine will only ever become a great one with the right control system. This is why, the company has always placed great emphasis on the in-house development of electrical control systems.

Schlatter develops a tube-controlling device that allows for the continuous regulation of the welding electricity. The additional electronic circuit makes it possible to distribute the single-phase loads inertia-free to all three phases. The Schlatter "Synotron"- load equalizer was born.

### Power electronic with new perspectives

Through intensive development in the 1940s and 1950s, Schlatter managed to introduce several new products to the market. In the following years, Schlatter focused particularly on providing the latest technology in order to expand the market position. The leaps in the development of control and power electronics opened up new perspectives in achieving this.

Schlatter was the first company to introduce rectifier welding machines to the markets.





Hobnails, formed and welded through the use of electric heat



Testing the "Variotron" control system

Once again, Schlatter proved their exceptional quality in the ability to provide comprehensive solutions by developing control systems in-house.

Using the latest micro processor technology in high-tech devices to control, regulate, measure and monitor welding processes guarantees the required quality of the bond.

Furthermore, the use of IT opens up new and nearly endless possibilities. Thanks to their usage in processing systems in managing and networking production plants, flexibility, productivity and reliability can be improved considerably.

#### **Becoming an engineering-company**

The continuous development towards becoming an engineering company for complex system solutions requires a clear focus. Right from the start, Schlatter's key to success was uniting mechanical engineers, welding experts, electricians and software specialists under one roof. From this emerged Schlatter's three core competences, welding technology, mechatronics and system technology.

#### **Quality without compromise**

The continuous commitment to quality, which holds a key position in the company's policy, is why Schlatter is ahead of its field.

#### **Expanding into new areas**

The incorporation of the Jäger company, which was founded in 1867, opened new doors for Schlatter into the field of weaving. Under the Jäger brand, Schlatter now also offers weaving and finishing machines for paper machine clothing as well as for wire and mesh.

#### **Focus on customer benefits**

Founded in 1916, Schlatter has developed from being a single plant manufacturer to becoming a solution provider for resistance welding and weaving systems. Decades of independent development activity and expertise in automating production systems provide the basis on which we are able to offer our customers the best in sophisticated technology and efficient solutions.

## A reliable partner in plant construction

The Schlatter Group is a world leader in plant manufacturing for resistance welding systems for specialized solution in the field as well as weaving and finishing machines for paper machine clothing, wire and mesh. With our long-standing expertise in industrial engineering, our spirit of innovation and our reliable customer service we offer our customers high-performance and high-quality manufacturing systems.





A hub for expert development and construction



Broad weaving machines in the production of paper machine clothing

### Experience in plant design

Combining the know-how of welding, weaving and industrial engineering, makes the Schlatter Group a strong force in engineering and among the Swiss listed enterprises.

In the welding segment, we develop and build resistance welding systems for the production of industrial and reinforcing mesh as well as rail welding.

In the weaving segment, we build weaving and finishing machines for paper machine clothing, as well as wire fabric and mesh under our Jäger brand.

### Automation expertise for high-performance machines

Our expertise in plant automation enables us to equip machine networks with intelligent control and automation technology.

### Boosting your market position

In our resistance welding machines and weaving systems, we combine our core competencies with our experience. With the goal of boosting your productivity and extending your systems' service life, we have developed innovative modular production plants that enable you to remodel and expand your manufacturing capabilities at will.

### Strong spirit of innovation

The Schlatter Group's goal is to help customers improve their market position. This is why we dedicate a significant part of our financial resources to researching and developing new products and complementary modules.

### A reliable partner

Our top priority is reliability when it come to quality, costs and scheduling. We do everything we can to honour the agreements we have with our business partners. To this end, we define our objectives together with our customers, we plan ahead and respond immediately to any changes that might occur.

To our customers, production reliability and economic efficiency of the manufacturing plants are the top priority. The Schlatter Group is able to meet these challenges due to its spirit of innovation, consulting services and by supporting customers and their systems over the entire product life cycle.

### Global presence

Our organization is designed to ensure that Schlatter is as close as possible to our customers and their markets. With production facilities in Switzerland, Germany and Brazil and subsidiaries in Europe, North America and Asia, we are always close to our customers all around the world. Our local presence ensures that we are always where you need us.

### International project experience

The members of staff in our subsidiaries as well as our representatives / agents, all have a wealth of international project experience. They know the specific requirements of local markets and are able to utilize an extensive network of internal and external specialists. They will assist you in planning your infrastructure and logistics, answer questions regarding conversion and expansion of your systems and work hard to provide quick and ready solutions to your problems.

## From the basic model to a complete high-performance factory

In the reinforcing mesh sector, the Schlatter Group specializes in the construction of plants for the efficient production of simple and complex reinforcement steel mesh of different shapes and sizes.





Longitudinal wire from the magazine



Plant construction in Schlieren

### **A broad range of system concepts**

The system concepts are ideally suited for the first step into the production of reinforcement steel mesh as well as the economical production of light and heavy standard-mesh for medium and large production series. Stock mesh and special mesh open up new possibilities to remain flexible in the market of reinforcement mesh.

With these systems, all materials used in the reinforcement mesh industry can be processed.

### **The all-in-one system provider**

Regardless of your investment budget and the required degree of automation, Schlatter is your one-stop solution provider, offering you anything and everything from individual machines to a complete and fully-automated plant. This is what makes Schlatter the number one system provider in the market for reinforcement mesh worldwide.

### **Reinforcing mesh**

Schlatter reinforcing mesh systems are designed for the flexible and economical production of reinforced concrete mesh. Boasting high availability and productivity, short changeover times and a consideration for specific local quality requirements, our systems fulfil all the central requirements of our customers in the market of reinforcing mesh.

### **Complementary modules**

The broad range of complementary modules and options allows for the expansion of your system up to a fully-automated plant with small personnel-requirement. The selection of different cross wire feeds enables the implementation of system concepts with very short changeover times and high working-speed.

## Economical production of industrial and fencing mesh for all lot sizes

In the industrial and fencing mesh segment, the Schlatter Group specializes in the construction of plants for the efficient production of industrial and fencing mesh in small and large lot sizes.





Testing and pre-assembly of individual components



Mesh with welded double cross wires

### Focusing on our customers' needs

High production output, flexibility, short changeover times and operation safety of our plants make Schlatter the number one system provider in the market for industrial mesh worldwide. Thanks to the modular design principle, our broad range of basic systems and complementary modules allow for customized economical solutions matching to our customers' specific needs.

### Competitive Pricing

Schlatter-systems enable the production of industrial mesh in all shapes and sizes and at competitive prices. Thanks to their expandability, they are perfect for both developing and established markets. Regardless of your investment budget and the required degree of automation, Schlatter is your one-stop solution provider, offering you anything and everything from individual machines to a complete and fully-automated plant.

### Industrial mesh

Schlatter industrial mesh systems are used in the production of dimensionally accurate meshwork in a variety of application areas. You will come across these welded meshes in you every-day life in the form of a appliance shelf, shopping trolley, point of purchase display stand, gabion, barbecue or animal cage. The modular systems can quickly and easily be adapted to different products.

### Fencing mesh

Schlatter fencing mesh systems are used in the production of dimensionally accurate meshwork for both small and large lot sizes.

### Complementary modules

A sophisticated range of complementary modules, e.g. cutters, integrated straightening and cutting machines as well as handling elements, allow us to offer customers complete solutions, even in this complex market.

## Efficiency and reliability with the help of flash butt welding

In the product area rails, the Schlatter Group manufactures stationary and mobile rail welding systems. The flash butt welding method used in this process has proven to be the most reliable joining technology with the lowest fault rates. This is why Schlatter is the worldwide market leader.





Tauting of welding rails



Technology & Innovation: Control-Software

### Reducing rail and rolling stock wear

Continuously welded rail lines increase safety and comfort for passengers and reduce wear on rolling stock and track material. Compared to other joining techniques, flash butt welding of profiles with large cross-sections, such as those used for railway tracks, offers tremendous economic benefits and quality advantages. The welding process is monitored by state-of-the-art control technology, which yields reproducible and well documented high-quality welds.

### Stationary rail welding systems

Stationary systems are mainly used in large welding plants in joining short and long rails. The Schlatter-welding machines are at the heart of this welding process and can be supplemented with additional machines to create a complete system.

Stationary flash butt welding machines made by Schlatter are also used for joining different materials, for example switch blades or crossing hearts.

### Mobile rail welding systems

With the help of the mobile welding systems, continuous track sections are produced directly on the track. With our high level of system expertise, we are able to assemble complete mobile rail welding systems from compact welding machines, carrier vehicles, power generators and further auxiliary equipment.

## Leading technology in the PMC-industry

In the weaving segment, the Schlatter Group offers machines for the production of paper machine clothing, under the Jäger brand. This includes weaving and finishing systems in the production of forming, press, dryer filter fabrics as well as warp preparation machines. In our weaving segment we also offer wire weaving machines, mesh weaving machines and crimping machines.





Wire weaving machines for a variety of materials



Schlatter Germany configures the ideal machine exactly suited to your needs

### **Weaving and finishing systems for the PMC-industries, wire and mesh weaving machines**

Just like the Schlatter Group resistance welding systems, the Jäger weaving machines have a long-standing tradition and are renowned for their quality, speed and process reliability. The weaving and finishing systems are used to produce plastic fabrics used as filter and transport mediums in paper machines. Our product range is complemented by warping machines, which prepare the warp materials for the weaving process, and finishing machines for thermal adjustment and finishing of the fabrics. This is how we are able to offer our customers a comprehensive service package for the various process steps.

#### **PMC Weaving Machines**

All types of high quality plastic materials which are used in the world's most modern fastest paper machines are manufactured on our the Jäger weaving machines. In manufacturing screens for forming and dryer filter fabrics, rapier weaving machine with the highest filling insertion rate are used. The weaving systems can handle widths of 15.5 m, weaving machines for continuous textiles for the production of press fabric machines even widths of more than 30 m.

Rapier weaving machine for forming fabrics.

Besides the PMC-weaving machines, Jäger also offers rapier weaving machines for the manufacture of heavy industrial filter fabrics.

#### **Warp preparation machines**

Warp preparation machines are used to pre-process warp threads, which can then be further processed by the weaving machines. The optimum winding quality is an indispensable prerequisite for producing high-quality fabrics. Besides the warping machines, Jäger also provides the necessary creels.

#### **Finishing and Thermal adjustment machines**

After the weaving process, the plastic fabrics go through a thermal finishing process. This is often done with a hot-air-system, in the case of press and dryer filter fabrics, often with oil-heated cylinders and heating jackets. The precise longitudinal and transverse force control and, depending on the fabric, the required grinding, coating, precompacting and other processes ensure perfectly finished fabrics. All systems and modules, required for this process, are provided by Jäger.

#### **Wire Weaving Machines**

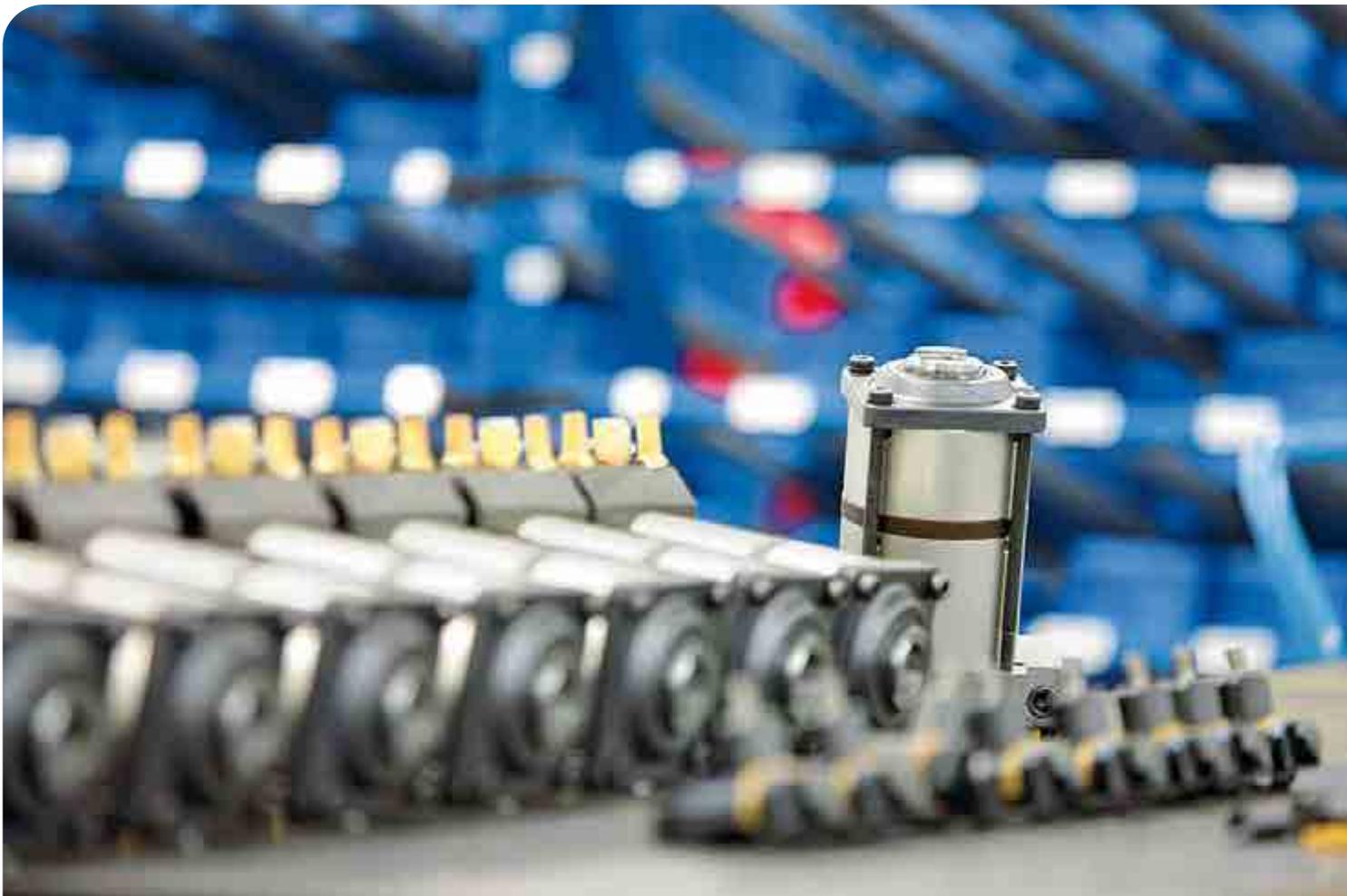
Jäger offers a broad range of wire weaving machines for all kinds of application areas. Besides the weaving machines for simple aluminium fly screens, we also produce machines for high-precision stainless steel wire filter fabrics or platinum alloy catalyst gauze. Furthermore, we also offer weaving machines for protective screens. In close collaboration with our customers, we develop other highly specialized wire weaving machines.

#### **Mesh Weaving / Crimping Machines**

For the production of heavy protection and fence fabric such as screen gauze, we provide automatic or semi-automatic mesh weaving machines which can process high-strength wires of 1 to 18 mm in diameter. The crimping machines, required for this process, for cross and longitudinal wires complete our series of finishing products.

## Investment certainty through long-term support

Our goal is to increase our customers' productivity and to extend their systems' service life. This is why our customer service will continue to provide support even after your Schlatter systems have taken up operation. We will be happy to arrange a personal consultation meeting and work out a custom-tailored service package for you.





On-site repair and maintenance



Helpdesk: At your service



### Service agreements

Schlatter systems are developed and manufactured according to the highest quality and availability standards. To ensure your investments retain their value in the long run, we set up individual service agreements with our customers, in which the desired customer services such as inspection, maintenance work, training, production support, remote diagnostics as well as repair and spare parts recommendations are defined.

### Helpdesk | RemoteSupport | 24Support

A multilingual helpdesk team is available at Schlatter to answer general technical questions and provide troubleshooting help for faults or malfunctions in your production system. The helpdesk team gives technical advice and clarifies whether a problem can be solved over the phone, via remote service, the Internet or on site.

### Field service

Our field service team consists of experienced service technicians and offers rapid on-site help throughout the world. They put your systems into operation, correct faults, carry out repair and maintenance work and support you during overhaul or relocation processes.

### Repair service

The Schlatter Group has its own workshops where we repair and overhaul control units and mechanical components. In case of production downtimes, we can also provide our customers with replacement equipment.

### Spare parts service

Schlatter spare parts are manufactured with the utmost care. They fit smoothly into the overall system when fitted as a replacement and ensure that the plant's operation and production continue at their usual quality level.

### Upgrades

Modernizing existing systems is often a cheaper way to increase productivity than buying new systems. Our proximity to the market and to our customers coupled with continuous innovation allows us to offer you attractive packages for converting and upgrading your production units.

### Training

Our training packages offer both standardized and individual courses and enable your employees to keep up with the latest technological developments needed to operate and maintain the Schlatter systems. Courses can be held in our training rooms, in our test laboratories or at your production site.

### You can contact our customer service

T +41 44 732 74 20  
service@schlattergroup.com

### Spare Parts and Repair Service MySchlatter.com

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Professional contacts for sales, technical support, customer service and administration are available worldwide in the group's companies and at select representatives / agents of the Schlatter Group. You can find the relevant contact data on our website [www.schlattergroup.com](http://www.schlattergroup.com).

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