

Welding systems for industrial and fencing mesh
Systems MG950, MG900, MG700, MG600, Syrocut and POSIWELD





Mesh with different line wire spacings

Economic production of industrial mesh for small, medium and large batch sizes

The MG950, MG900, MG700 and MG600 together with the Syrocut and POSIWELD systems have been developed for the efficient production of industrial and fencing mesh in small and large batch sizes. The systems are distinguished by high profitability, productivity and easy maintenance. A large selection of extra modules means they can be adapted to different requirements, while allowing a modular setup of the automation level.



Everything from a single source

The MG950, MG900, MG700 and MG600 together with the Syrocut and POSIWELD systems enable the production of industrial and fencing meshes with different geometries in small to large batch sizes at competitive prices.

The modular principle allows customers to start with a cost-effective, simple, yet extendible system. The wide range of extra modules and options guarantees extension up to a fully automatic production system with minimum need for personnel.

Thanks to the modular extension options, the systems can be used in both up-and-coming and established markets.

It is not unusual for a project involving an MG950, MG900, MG700 or MG600 to result in a complete factory, planned, installed and finally handed over to the customer by Schlatter as a turn-key system.

Depending on your investment options and the required degree of automation, Schlatter offers a complete solution from a single source – starting with a simple system through to a fully automated plant.

MG700 system with cross wire feeding device from above and below





Mesh stacker

Extendibility with modular principle

The right concept for individual requirements: The modular structure of the Schlatter welding systems lets you start with minimum investment costs and further extending your plant in line with requirements.

System MG950, MG900

Welding machines of the MG950 and MG900 system are suitable for the production of industrial mesh and work with precut line and cross wires, with the option of working with flat profiles as well as welding frames with center bars.

System MG700

Welding machines of the MG700 system are designed for the production of fencing mesh. Here the line and cross wires can be precut or fed directly from coils, spools or carriers.

System MG600

Welding machines of the MG600 are suitable for the production of industrial mesh. Here the line wires can be fed from coils, spools or carriers and the cross wires precut before feeding.

System Syrocut

Wire straightening and cutting machine for high-quality spinner straightening. Syrocut can be integrated directly in the wire feeder of the welding machine, or operated as a stand-alone unit.

System POSIWELD

Welding machines of the POSIWELD system are suitable for the production of special mesh and prototype mesh, as well as finishing and manufacturing industrial mesh for a variety of wire products.

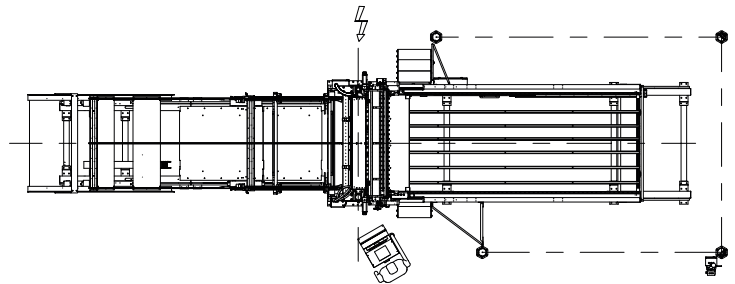
Control

The welding current control SWEP developed by Schlatter guarantees uniform and reliable welding quality. The processes for the entire system are controlled by the process control system PLS Win. This control system is operated via a Windows interface and provides interfaces for computer assisted work preparation.

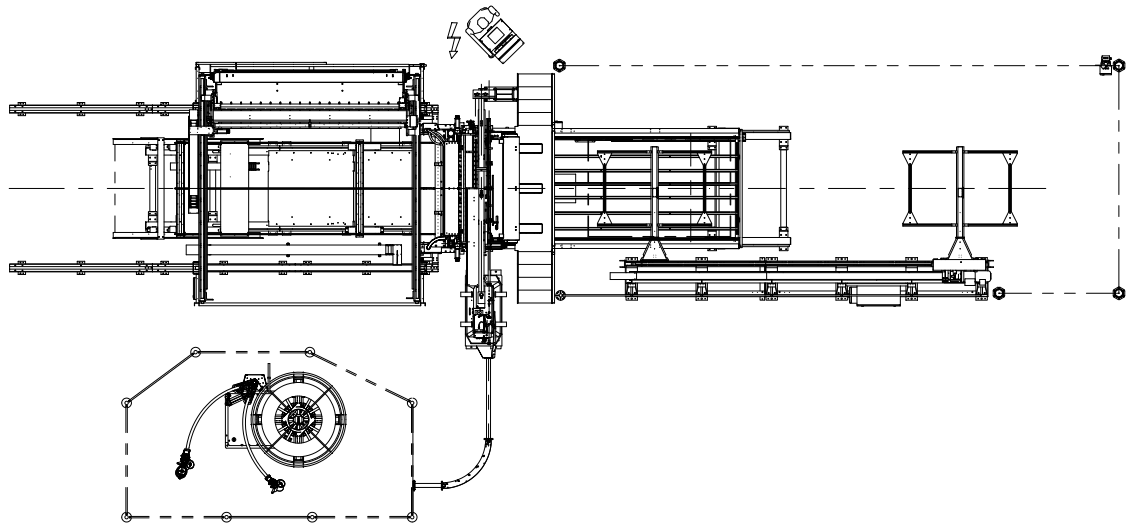


Video
Industrial Mesh

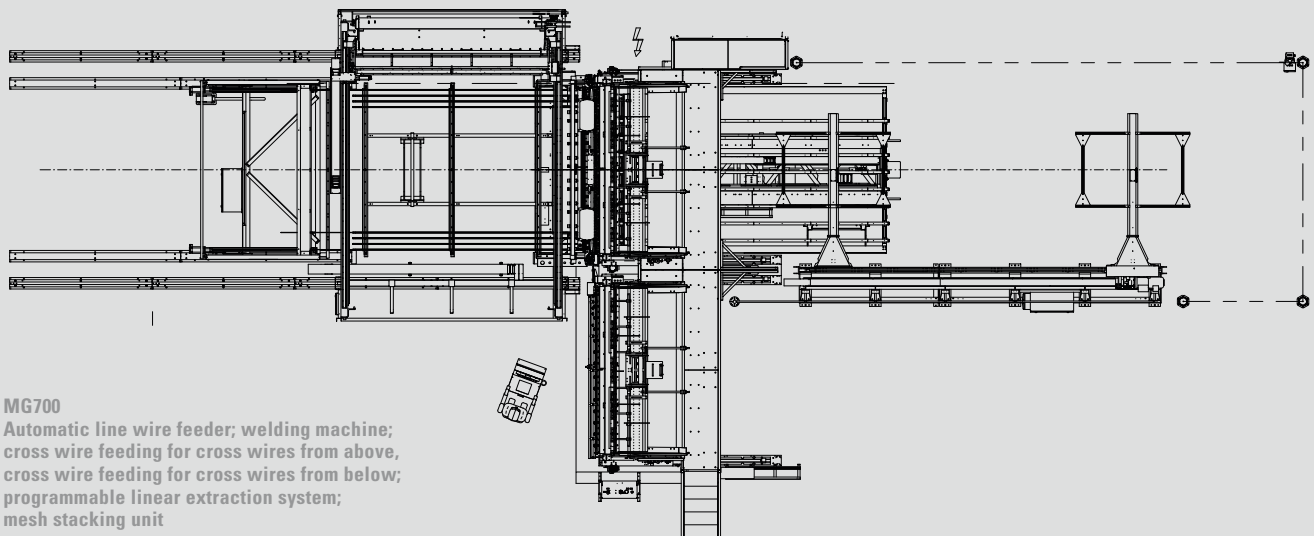
Choice of potential system configurations



MG950
Line wire feeder; welding machine; cross wire feeder;
programmable linear extraction system



MG950
Automatic line wire feeder; welding machine; cross wire feeding device with integrated Syrocut straightening-cutting machine;
programmable linear extraction system; mesh stacking unit



MG700
Automatic line wire feeder; welding machine;
cross wire feeding for cross wires from above,
cross wire feeding for cross wires from below;
programmable linear extraction system;
mesh stacking unit

Product features

MG950, MG900, MG700 and MG600 are flexible mesh welding systems for economical production of lightweight and heavy standard mesh as well as lightweight customized mesh in small and medium batch sizes.

Extendible level of automation

The line and cross wires are fed via manual or semiautomatic feeding systems, depending on the type of machine. An automatic line wire loading can be used for larger series.

A straightening and cutting unit is available with the Syrocut system.

This can be integrated into any system, thereby enabling production with wire from a coil, spool or reel.

It is possible to integrate a crimping machine for fence wire welding systems. Depending on the product, crimps can be pressed from above or below.

Wire material

- Cold-rolled or-drawn uncoated wire
- Cold-rolled flat stock for line rods
- Cold-drawn galvanized wire
- Cold-drawn stainless wire

	MG950	MG900	MG700	MG600
Mesh widths / Spacing of outermost line wires	1700 / 1600 mm <i>66.9 - 63.0 in</i> 2700 / 2600 mm <i>106.3 - 102.4 in</i>	1250 / 1200 mm <i>49.2 - 47.2 in</i> 1650 / 1600 mm <i>65.0 - 63.0 in</i> 2100 / 2000 mm <i>82.7 - 78.7 in</i> 2500 / 2400 mm <i>98.4 - 94.5 in</i>	2900 / 2800 mm <i>114.2 - 110.2 in</i> 3300 / 3200 mm <i>129.9 - 126.0 in</i>	1250 / 1200 mm <i>49.2 - 47.2 in</i> 1650 / 1600 mm <i>65.0 - 63.0 in</i> 2100 / 2000 mm <i>82.7 - 78.7 in</i> 2500 / 2400 mm <i>98.4 - 94.5 in</i>
Mesh lengths	300 – 4000 mm <i>11.8 - 157.5 in</i>	300 – 4000 mm <i>11.8 - 157.5 in</i>	500 – 4000 mm <i>19.7 - 157.5 in</i>	According to customer specifications
Line wire spacings, infinite beyond	min. 20 mm <i>0.8 in</i>	min. 20 mm <i>0.8 in</i>	min. 25 mm <i>1.0 in</i>	min. 18,5 mm <i>0.7 in</i>
Cross wire spacings, infinite beyond	min. 12.5 mm <i>0.5 in</i>	min. 12.5 mm <i>0.5 in</i>	min. 12.5 mm <i>0.5 in</i>	min. 12.5 mm <i>0.5 in</i>
Line wire diameter	2.0 – 8.0 mm <i>0.08 - 0.31 in</i>	2.0 – 10.0 mm <i>0.08 - 0.39 in</i>	2.0 – 10.0 mm <i>0.08 - 0.39 in</i>	1,8 – 6,0 mm <i>0.07 - 0.24 in</i>
For flat stock, width	2.0 – 5.0 mm <i>0.08 - 0.20 in</i>	2.0 – 5.0 mm <i>0.08 - 0.20 in</i>		
For flat stock, height	10.0 – 35.0 mm <i>0.39 - 1.38 in</i>	10.0 – 30.0 mm <i>0.39 - 1.18 in</i>		
Cross wire diameter	2.0 – 8.0 mm <i>0.08 - 0.31 in</i>	2.0 – 10.0 mm <i>0.08 - 0.39 in</i>	2.0 – 10.0 mm <i>0.08 - 0.39 in</i>	2,0 – 6,0 mm <i>0.08 - 0.24 in</i>
Cross wire cycle time / min.	up to 170	up to 130	up to 150	up to 150



Shopping trolley



Container

MG900 for universal use

With the MG900, Schlatter offers a flexible welding system for the economical production of various types of quality mesh, which may be used for both small series and larger batches. The system is distinguished by high productivity, easy operation and maintenance as well as short tooling times. Thanks to its tremendous flexibility, the MG900 can be set up optimally to the needs of the market.

Properties

- Welding performance that can be installed corresponding to requirements
- Individually controllable AC or MF transformers
- Large welding range because of water-cooled secondary circuit
- Can be extended in varied ways, also with devices for welding frames with center bars
- Also reliable for thin wire diameters
- Depending on the machine type it is possible to weld cross wires from above and below.

Welding portal with programmable linear pullout



MG950 where flexibility, quality and the highest speed is demanded

The MG950 is an industrial mesh welding system which is used everywhere where great flexibility, speed and the highest quality is required from the first mesh.

Flexibility

The highly flexible single welding groups with a width of less than 50 mm (2.0 in) and a straightforward possibility of connection to two independent circuits make extremely productive manufacture of very complex meshes possible in the smallest batch sizes.

Speed

Cycle speeds of up to 170 wires per minute and two efficient direct current medium frequency circuits if required allow a high level of productivity for complex and sophisticated meshes. This is without reverting to cascading which reduces efficiency.



Video MG950





Cable tray system



Deck mesh system

Highest quality

The positioning of the very stable line wire feeds is supported by a very precise measurement system. The operating software determines the correct welding parameters. In this way the necessary quality for sale of the mesh is attained as soon as the first mesh produced following conversion.

Product characteristics

- Mesh width 200 - 1700 mm
(7.9 - 66.9 in)
- Mesh length 300 - 4000 mm
(11.8 - 157.5 in)
- Wire diameter 2.0 - 8.0 mm
(0.08 - 0.31 in)
- Line wire spacing min. 20 mm
(0.8 in)

Wire material

- Cold-rolled or-drawn uncoated wire
- Cold-drawn galvanized wire
- Cold-drawn stainless wire
- Cold-drawn ribbed wire

Options

- Automatic line wire loading device
- Double cross wire feeding device
- Cross wire edge trimming device
- Mesh stacking system

System MG950 for flat steel mesh





Chicken cage

MG600 for large batch sizes

The MG600 system is suitable for areas of application where large series of the same mesh must be manufactured. The industrial mesh is produced with line wire feeding directly from the coil, spool or reel.

Products

- Animal cages
- Chicken cages
- Standard mesh
- Storage mesh
- Gabions

System MG600 for the production of cage mesh





3D wire mesh fence

MG700 for all types of standard mesh fences

The MG700 fence wire welding systems from Schlatter are suitable for the competitive production of dimensionally accurate meshes in small to large batch sizes. The wires can be straightened and cut in the system or fed directly from the coil.

Products

- Safety and security fences
- 3D wire mesh fences
- Dual-wire fences
- Privacy fences
- Mobile building site fences
- Industrial mesh

Fence production with precut wires





Direct integration into the cross wire magazine

Syrocut system for highly productive straightening and cutting of wires

The Syrocut system consists of a synchronously operating spinner straightening machine, a cutting unit and a powered coil-off. The length of each individual wire can be programmed individually. The system can be integrated into the Schlatter mesh welding machines for line and cross wire feeding. Alternatively it can be used as an independent unit.

Syrocut integration into mesh welding machine

- Different integration solutions for cross and line wires
- Feeding of long thin wires
- Wire length individually programmable for each wire in the mesh

Syrocut for coil of wire production

- High flexibility with high productivity
- High wire quality thanks to stopped straightening rotor when cutting
- Quick convertibility of the wire diameter with exchangeable rotors

Production features

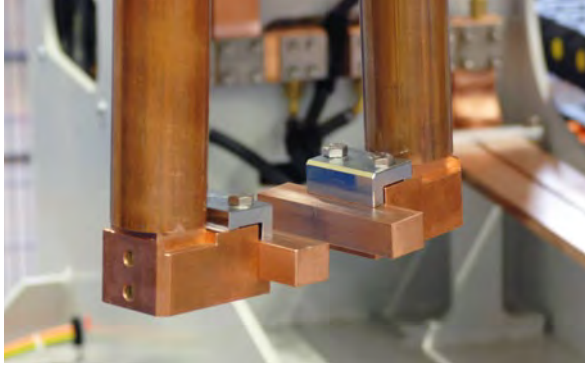
- Wire diameter 2.0 – 8.0 mm
(0.08 - 0.31 in)
- Capacity up to 240 m/min.
(945 FPM)

Wire material

- Cold-rolled or-drawn uncoated wire
- Cold-drawn galvanized wire
- Cold-drawn stainless wire
- Cold-drawn ribbed wire

Syrocut - straightening and cutting unit





Welding gun to weld 3 dimensional products

System POSIWELD CNC Jig welding system for welding 2 or 3 dimensional wire products in a single operation

With the system POSIWELD, Schlatter offers a flexible CNC welding cell for the economical production of wire products in small to medium batch sizes. The rotating turntable design allows a single operator to load/unload the work holding fixture while the machine is operating.

Product features

- Fast changeover from one product to another
- Rotating turntable with workpiece fixture inclination device
- Max. welding power up to 20 kA with MF power source
- Hand held operator pendant for programming part in work cell (teach-in)
- Rotational pole plates (C-axes) for welding nonrectangular mesh geometries

- Upper and lower electrodes driven by servo motor allowing shorter weld/ cycle times
- PC touch screen control system for CNC axes control and SPS functions. Off line programming by means of a PC is possible
- Optional welding gun to weld 3 dimensional products
- Capable of welding a wide variety of materials: Bright basic wire, galvanized wire, stainless steel material as well as reinforcement wire

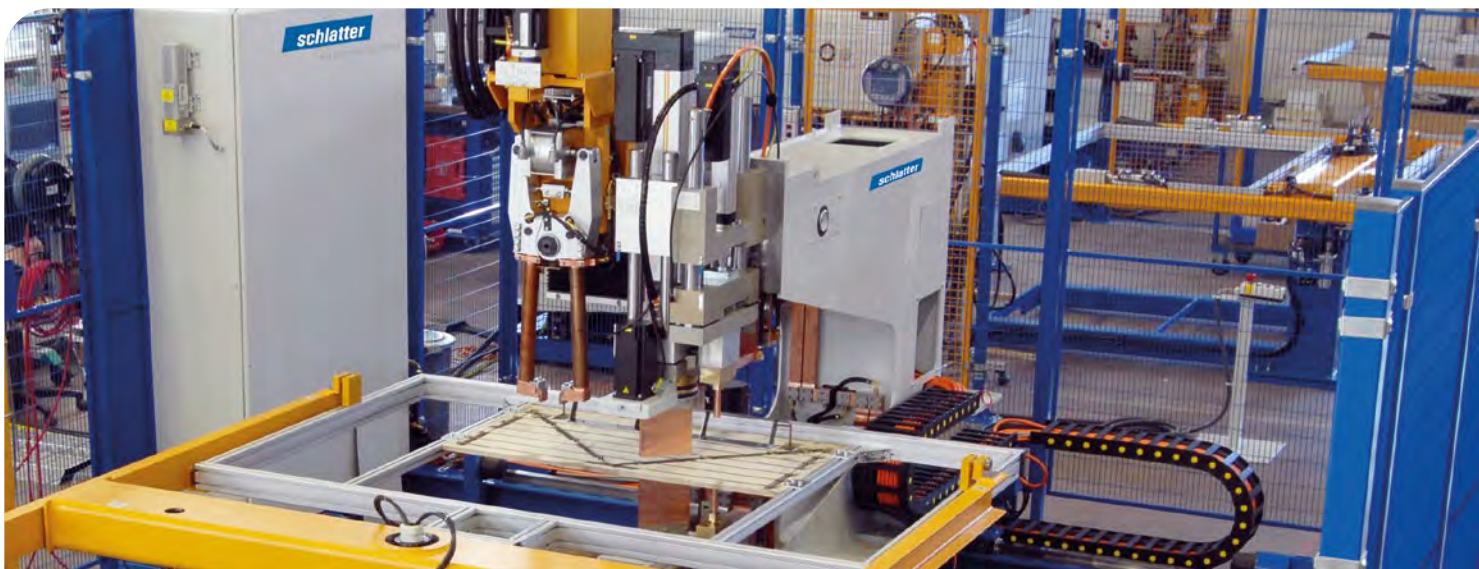
Technical data

Standard working range:

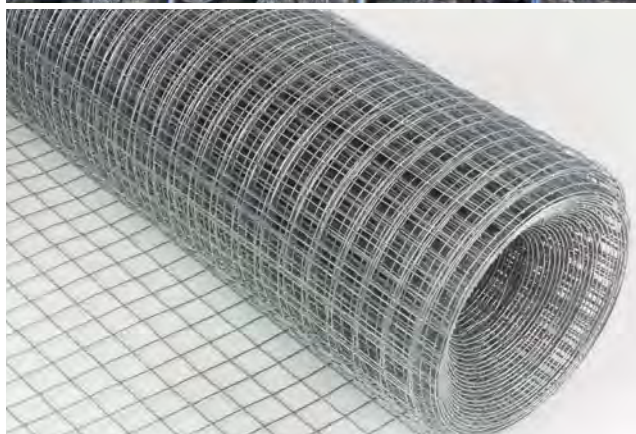
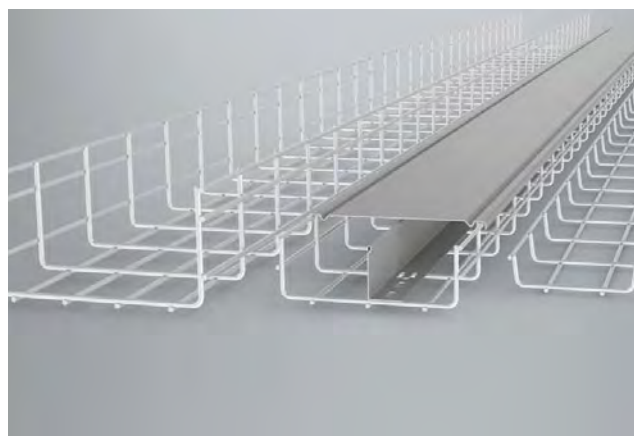
- X-axis: 2000 mm or 78.7" lengths
- X-axis: 3000 mm or 118.1" (optional)
- Y-axis: 1200 mm or 47.2"
- Z-axis: 190 mm or 7.5"
- W-axis (Gun): 260 mm or 10.2"



Video POSIWELD



Examples of welded wire 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.



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.

VisionSupport

With Schlatter VisionSupport, you and your staff will be able to show any components of your plant to the Schlatter helpdesk «live» via smartphone – it is really easy to use.

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

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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.



Experience in plant design

The combined competence in the fields of welding, weaving and industrial engineering makes the publicly listed Swiss Schlatter Group a secure title in plant engineering.

Segment resistance welding

We develop and build resistance welding systems for the production of industrial and reinforcing mesh as well as rail welding.

Weaving segment

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

Contact

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 internet site www.schlattergroup.com.

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