Welding Systems for Reinforcement Meshes
System MG208 and MG210
Economical production systems for reinforcement meshes

The Schlatter welding systems MG208 and MG210 are designed for high economic viability. The systems are distinguished by low investment costs, user friendliness and easy maintenance. A large selection of extra modules allow to be adapted to different requirements, while allowing a modular setup of the automation level.
Everything from a single source

The MG208 and MG210 systems enable the production of reinforcement meshes in different geometries at competitive prices.

Thanks to the modular extension options, the systems can be used in both, developing and established markets. The modular principle allows customers to start with a low cost, simple yet extendible system. The wide range of extra modules and options allows the upgrade to an automatic production system with minimum need for personnel.

The choice of various cross wire feeding systems, plant concepts with very short change over times and high production speed can be realized.

It is not unusual for a MG208/210 project to result in a complete factory, planned, installed and finally turned over to the customer by Schlatter as a turn-key system.

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

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

System MG208
The right concept for the successful start-up of reinforcing mesh production due to low investment cost, easy operation and maintenance. The plant allows a flexible operation and can be adapted in an optimal way to the requirements of the reinforcing mesh industry. A variety of additional modules allows the upgrade of the plant at a later date. The plant is suitable for the economical production of light and heavy standard mesh panels as well as engineered mesh panels in small and medium batch sizes. Line and cross wires are straightened and cut. Depending on the development of the market, this plant can also be modified for a production with line wires fed from spools or coils by adding the necessary supplementary equipment.

System MG210
The ideal plant for the economical production of light and heavy standard mesh panels and engineered mesh panels as well as special mesh panels. With the programmable mesh-pull out device, it is possible to produce mesh panels width any desired different cross wire spacing. This opens further possibilities in the flexible adaptation to the reinforcing mesh market, especially in the field of engineered mesh and special mesh. Line and cross wires straightened and cut. The modular unit construction system also allows in case of the System MG210 a start-up with a cost-effective upgradeable basic plant. The big variety of additional modules and options allows an upgrade to a fully automatic production plant with minimal personnel requirement. The selection of different cross wire feeding systems, plant concepts with very short change over times and high production speed can be realized.

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.
Choice of potential system configurations

**MG208**
Manual line wire preloading; welding machine with pneumatic line wire feed; mesh roller extraction

**MG208**
Semi-automatic line wire preloading; welding machine with servo line wire feed; mesh roller extraction

**MG208**
Semi-automatic line wire preloading; welding machine with servo line wire feed; mesh turning and stacking unit

**MG210**
Semi-automatic line wire pickup; welding machine, line wire guides; mesh linear pull-out with programmable servo drive; mesh turning and stacking unit

**MG210**
Fully-automatic line wire pickup from wire vibration table and automatic line wire loading; welding machine with servo line wire feed; mesh linear pull-out with programmable servo drive; mesh turning and stacking unit
Product features

MG208 and MG210 are flexible mesh welding systems for economical production of lightweight and heavy standard meshes as well as engineered meshes in small and medium batch sizes.

Extendible level of automation

The line and cross wires are straightened and cut to length. The line wires are fed in via manual or semi-automatic feeding systems. An automatic line wire loading with robotic grippers can be used for larger series. Depending on the equipment, the production of meshes with longitudinally offset line wires as well as double line wire meshes is also possible.

<table>
<thead>
<tr>
<th></th>
<th>MG208</th>
<th>MG210</th>
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<tbody>
<tr>
<td>Mesh widths / Spacing of outermost line wires</td>
<td>2500 / 2400 mm</td>
<td>2500 / 2400 mm</td>
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<tr>
<td></td>
<td>2900 / 2800 mm</td>
<td>2900 / 2800 mm</td>
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<td></td>
<td>3300 / 3200 mm</td>
<td>3300 / 3200 mm</td>
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<tr>
<td></td>
<td></td>
<td>3700 / 3600 mm</td>
</tr>
<tr>
<td>Mesh lengths</td>
<td>2,0 – 8,0 m</td>
<td>2,0 – 8,0 m</td>
</tr>
<tr>
<td>Line wire spacing, infinite beyond</td>
<td>min. 50 mm</td>
<td>min. 50 mm</td>
</tr>
<tr>
<td>Cross wire spacing, infinite beyond</td>
<td>min. 25 mm</td>
<td>min. 25 mm</td>
</tr>
<tr>
<td>Line wire diameter</td>
<td>3,4 – 12,7 mm</td>
<td>3,4 – 12,7 mm</td>
</tr>
<tr>
<td>Cross wire diameter</td>
<td>3,4 – 12,7 mm</td>
<td>3,4 – 12,7 mm</td>
</tr>
<tr>
<td>Working speed, wires / min. Cross wire feeder in opposite direction to production</td>
<td>up to 120</td>
<td>up to 120</td>
</tr>
<tr>
<td>Mesh transport</td>
<td>Clamping and pushing on line wire</td>
<td>Mesh linear pull-out</td>
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</tbody>
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Further dimensions on request
Wire material

- Cold-rolled wire, plain or ribbed
- Hot-rolled ribbed wire with inline heat treatment, Tempcore (cooling and tempering process, directly after rolling)
- Hot-rolled wire, micro-alloyed, ribbed
- Hot-rolled and subsequently stretched wire, ribbed
Designed with changing needs in mind

Schlatter offers a wide range of extra modules. Most of them can be integrated into existing plants. The following options represent a selection of our range for the MG208/210 system. We shall be pleased to advise you in person if you require customised extensions.
Line wire feeders

Manual line wire feeder
Wire preloading for the next mesh during production

Cross wire feeding system
With integrated straightening and cutting system Syrocut II

Line wire storage table
With chain cross-transfer and vibration function

Automatic line wire picking and feeding
With automatic robotic grippers for picking up line wires from the wire delivery table and feeding the wires to the welding line

Automatic line wire loading and feeding
Motor-driven carriage with clamping elements for line wire infeed into the first welding position and further feed steps; wire advance feed for next mesh during production

Line wire advance feeding systems

Programmable clamping-pushing drive VariStep
With clamping elements and servo drive

Mesh linear pull-out
After the welding machine, with mesh grippers
Options

Reduced set up time / Increased productivity

**Cross wire feeding system**
Chain insertion in opposite direction to production; optionally with motorised adjustment of the chain elements and side guidance for reducing the set up time

**Single welding groups**
For fixed line wire positions; individually selectable; stroke can be adjusted

Turning and stacking / Preparation and further transport of the meshes

**Automatic mesh turning and stacking unit**
With roller or linear insertion via grippers

**Automatic tying unit**
Consists of two units; tying is automatic

**Automatic mesh package stacker**
Stacks tied mesh packages
Customer service

Investment certainty through long-term support

The aim of our work is to increase the productivity of our customers and extend the service life of their systems. Our customer service will therefore continue to provide support after your system has been commissioned. We shall be pleased to arrange a personal discussion and work out a service package customised to your requirements.

Helpdesk

Our multilingual Helpdesk team is available – by phone or via the Internet – to answer general technical questions and provide troubleshooting help for faults or malfunctions in your production system.

Field Service

For rapid on-site help, our Field Service experts offer professional support worldwide.

Repair Service

Schlatter has its own workshop where they can carry out repairs and overhauls to your control units and mechanical components.

Spare Parts Service

Our warehouse with over 15,000 spare parts and efficient logistics ensures a high availability and a rapid replacement of system components.

Training

We offer standardised courses as well as individual training measures in our welding laboratory at our training facilities in Schlieren (CH) or at your production site.

Direct contact with our customer service

Helpdesk/Field 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 and weaving machines for special applications. With longstanding expertise in industrial engineering, innovative flair and a reliable customer service, the company group listed in Switzerland provides production systems offering high performance and quality.

Core competence

Schlatter has almost 100 years of expertise in plant construction, customer-oriented solutions, a worldwide presence and more than 500 dedicated employees. The combination of expertise in welding and systems technology makes Schlatter a reliable partner in plant construction.

Segment resistance welding

Schlatter has acquired unique experience in the development and production of reinforcing and industrial mesh welding systems, mobile and stationary rail welding machines as well as systems for manufacturing radiators.

Weaving segment

Under the brand Jäger, the Schlatter Group provides state-of-the-art weaving and finishing machines for the paper machine fabric industry.

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.