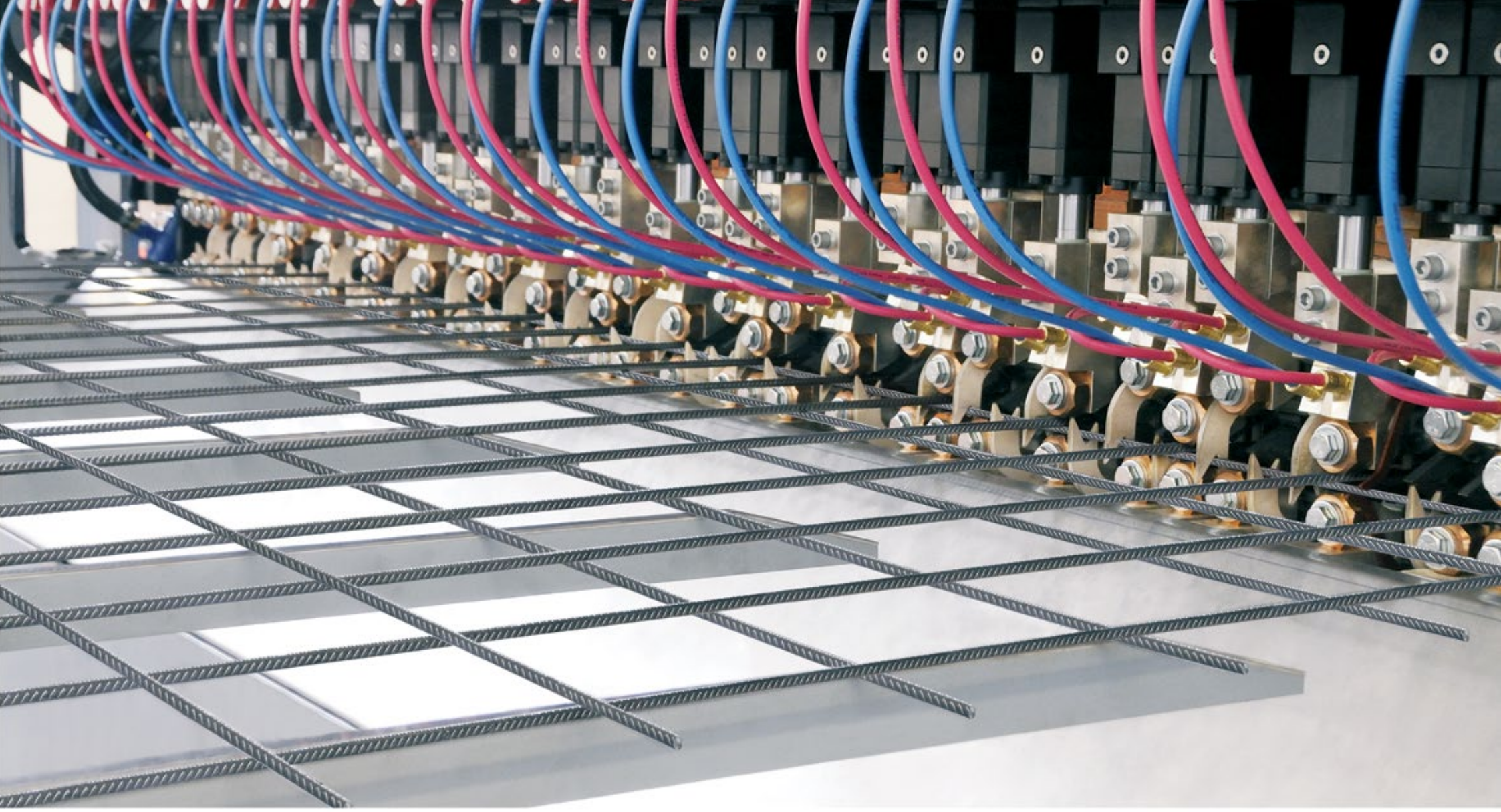


ATT

Reinforcing Mesh Welding Lines

EVG

Entwicklungs- und Verwertungs-Gesellschaft m.b.H., Raaba-Austria

Photo on page 3: EVG Factory and Head Offices, Austria

Wire Mesh Welding Lines ATT

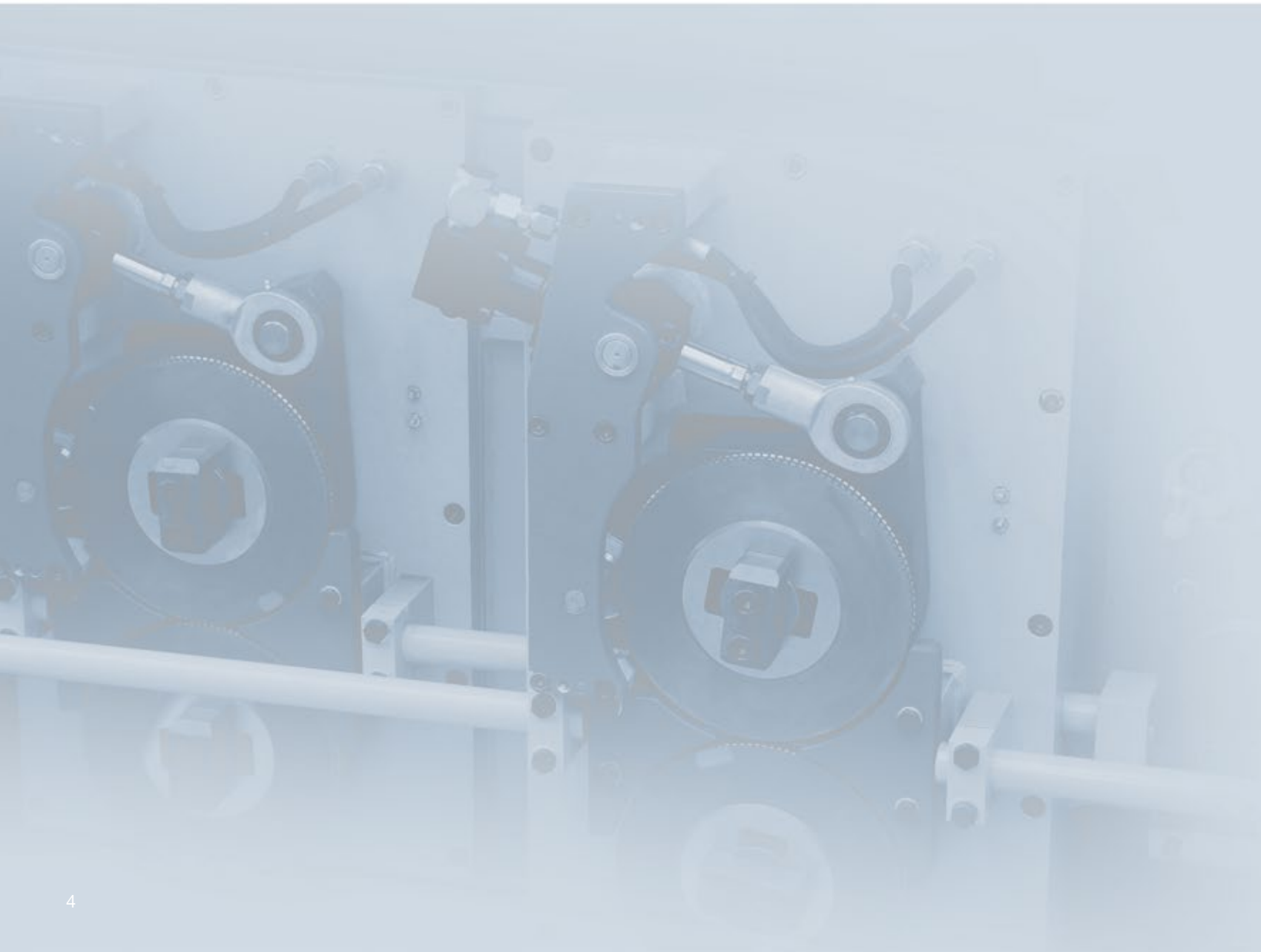


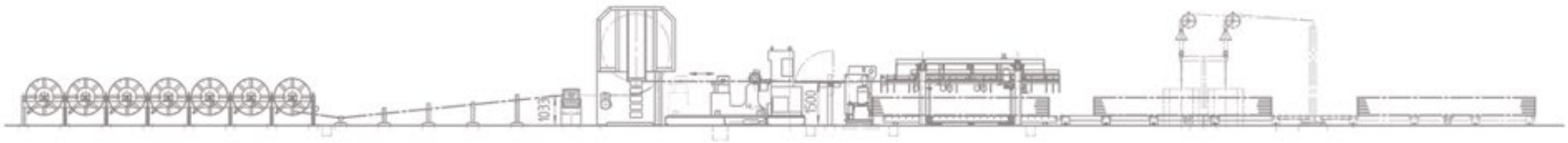
Table of Contents

Technical Data

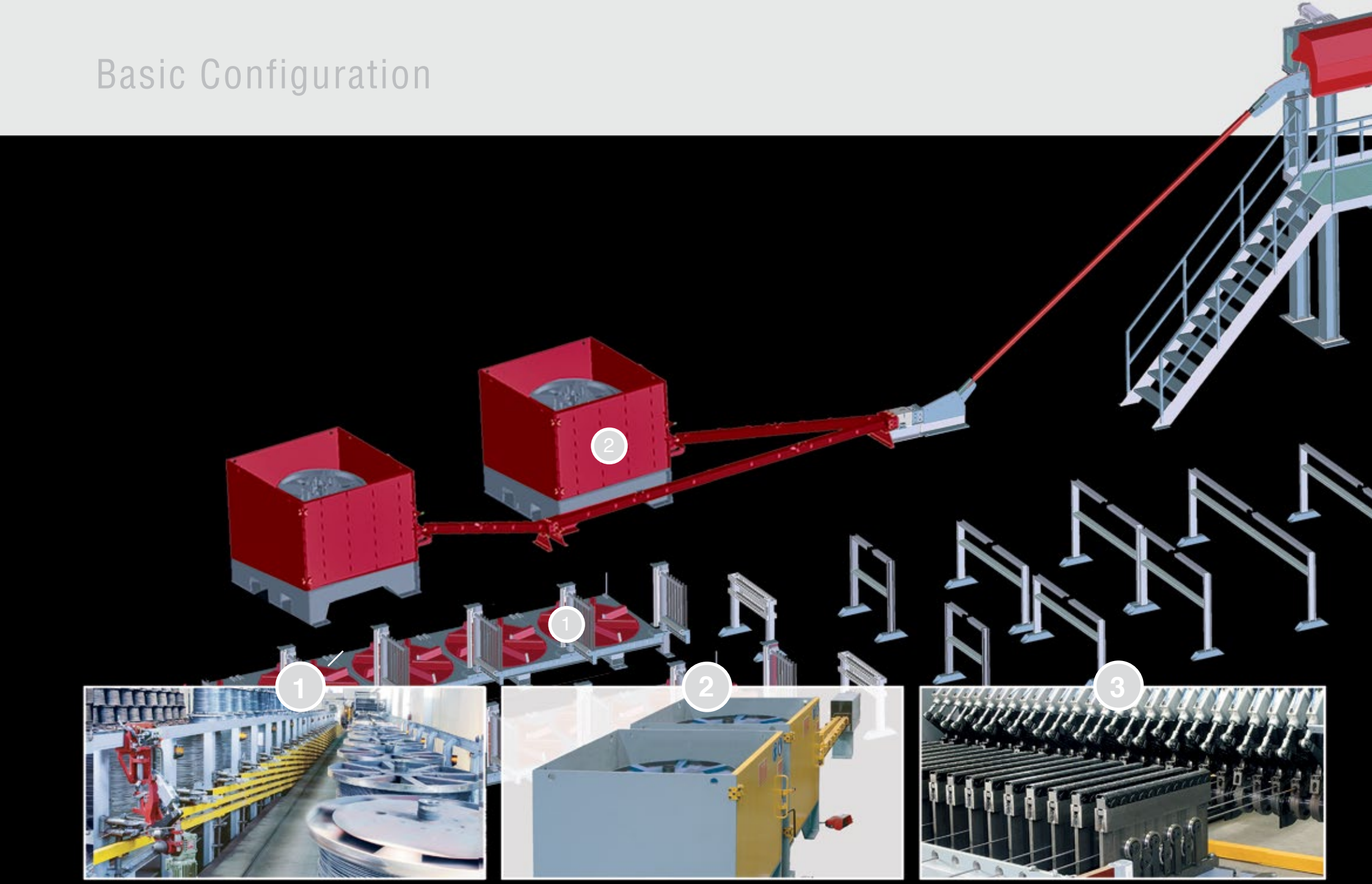
- Fully automatic welding lines for the production of standard reinforcing mesh in sheets and rolls. Programmable feeding and welding of cross wires above and below the line wires, thus, turning of sheets is not required.

  The technical data refer to standard welding lines which, however, can be adapted to our customers' specific requirements.

		ATT 8	ATT 10	ATT 12
Welding width	mm	2.400, 2.600, 3.200	2.400, 2.600, 3.200	2.400, 2.600, 3.200
Line wire:				
Diameter range	mm	3 - 8	4 - 10	5 - 12
Spacings	mm	(50), 100, 150, 200	(50), 100, 150, 200	(50), 100, 150, 200
Cross wire:				
Diameter range	mm	3 - 8	4 - 10	5 - 12
Spacings	mm	50 - 400	50 - 400	50 - 400
Max. total diameters	mm	16	20	24
Max. working speed	cw/min.	180	180	180

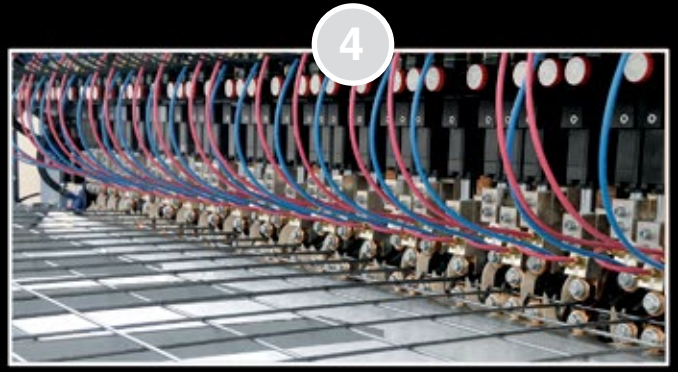


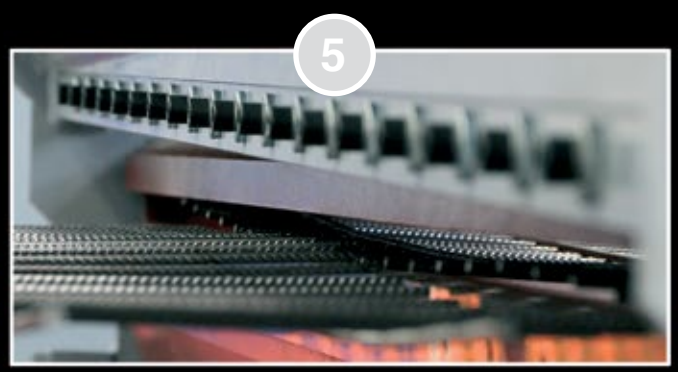
Basic Configuration

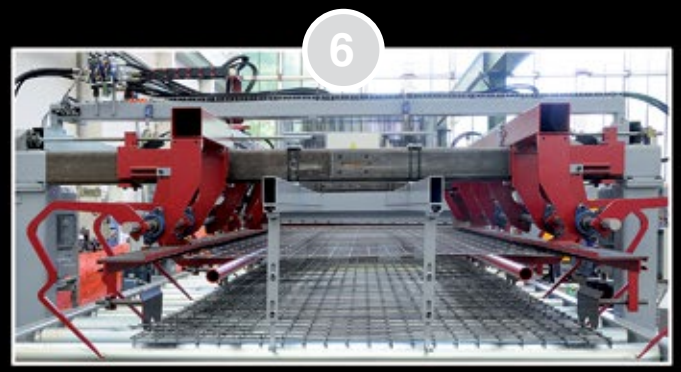


Components

1 *Line Wire Pay-off*
2 *Cross Wire Pay-off*
3 *Line Wire Straightening Units and Pull-off Device*
4 *Welding Machine*
5 *Sheet Shears*
6 *Sheet Stacker with Lifting Table*





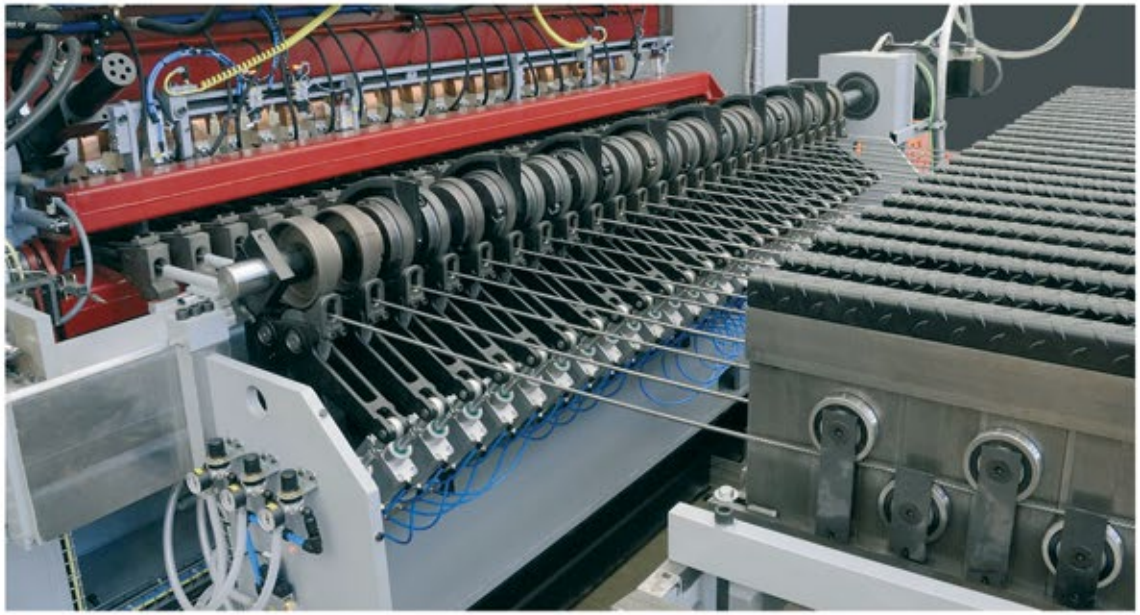


Line Wire Feeding

Line Wire Pull-off Device and Straightening Unit

The line wires are pulled off automatically from spools or coils. The use of a loop accumulator ensures continuous pull-off of wires despite the intermittent operation of the welder.

Centrally and individually adjustable straightening units ensure optimum sheet quality even when producing sheets with large line wire overhangs.



Roller Advance System

Maximum advance speeds are achieved by a servo-electrically driven roller advance system.

Line Wire Switch System

The optional execution of the line with a line wire switch system ensures continuous production during butt welding of line wires.

Cross Wire Pay-off

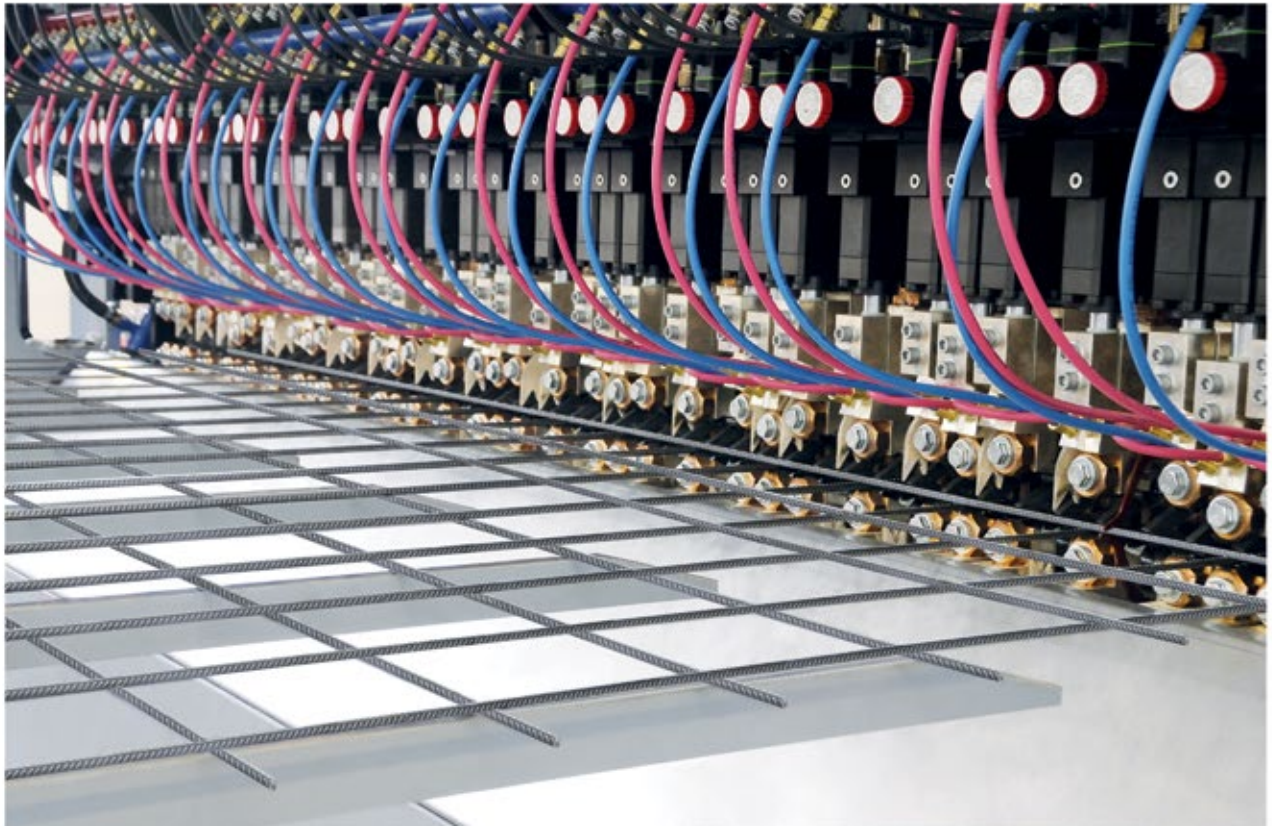
Available with horizontal or vertical spool axis

Cross Wire Feeding

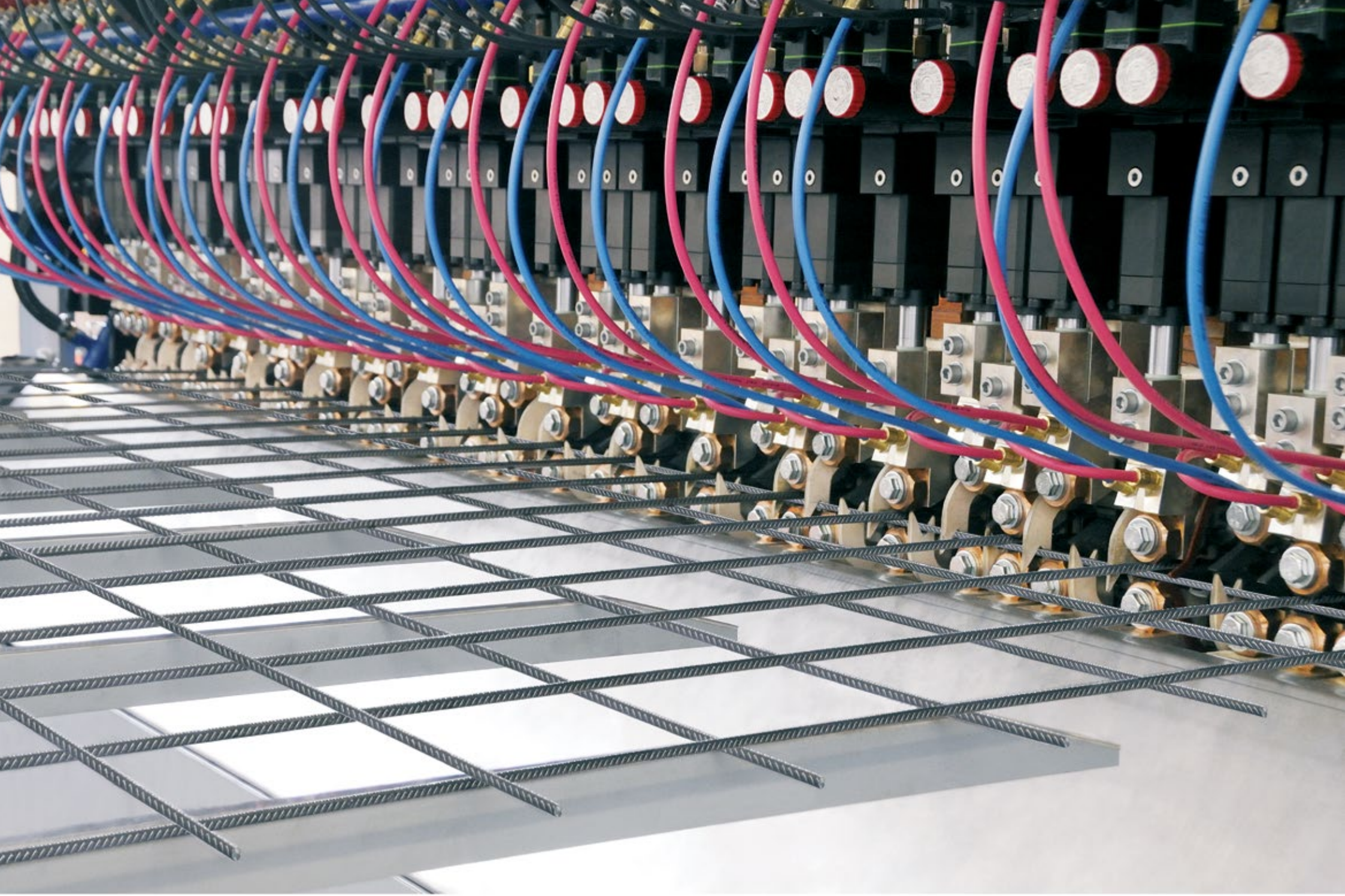
- The cross wires are shot-in above or below the line wires. The highly dynamic electric servo drive of the cross wire shoot-in system allows working speeds of up to 180 cross wires per minute.

  Thanks to this technology the turning of sheets is no longer necessary.

  On account of the compact arrangement of the cross wire shoot-in channels and of the welding dies, cross wire feeding needs a very short distance only, both to the top side and to the bottom side of the line wires.



- **Cross Wire Pull-off Device**
  With loop accumulator available in horizontal or vertical design



Welding Machine

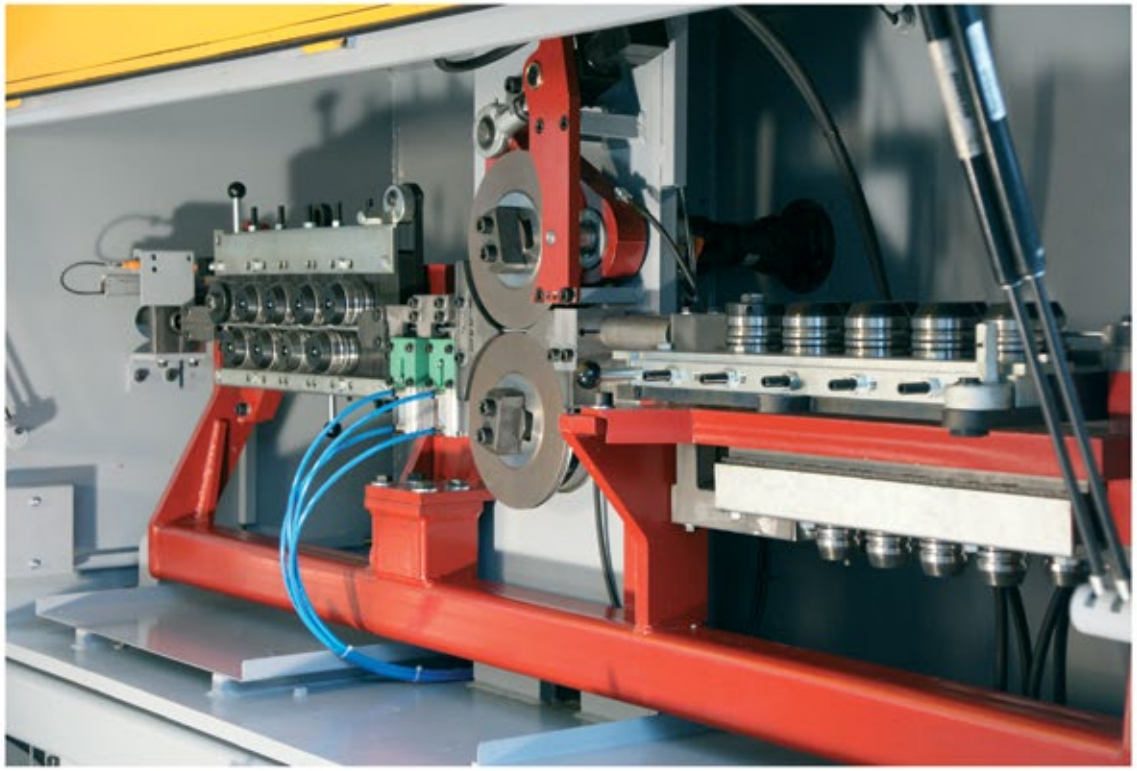
Welding Units

The electrode beam is equipped with hydraulically actuated welding units. This design ensures very tight control of the welding process and, as a consequence, minimum welding cycle times.

The single point welding units are connected firmly with the transformers via busbars. In case of a change of line wire spacing, the welder will hence be changed over fully-automatically. No modification of current bridges and no change of polarity is necessary.

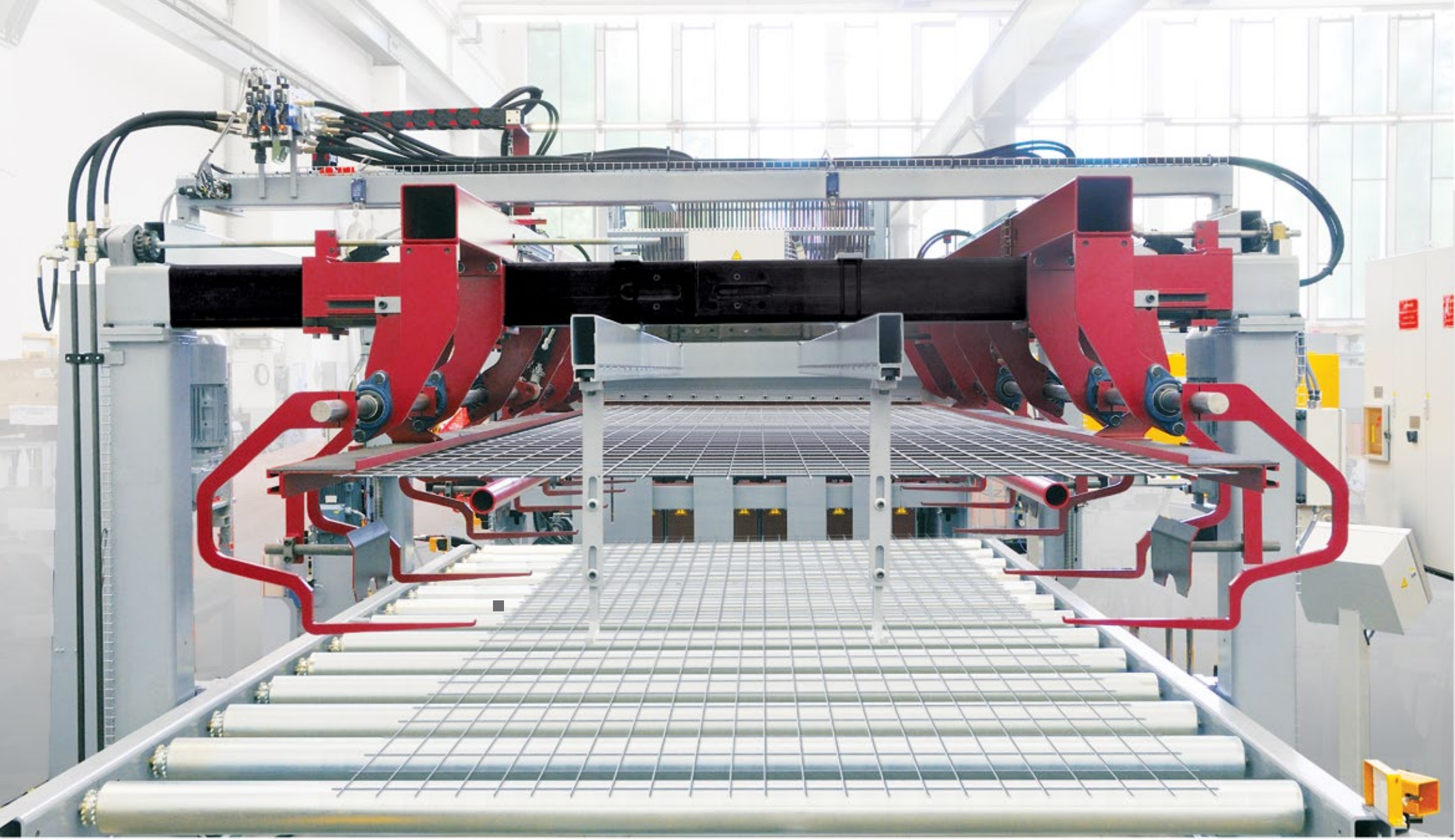
Cross wires are welded alternatively to the top side or to the bottom side of the line wires.

Maximum service life of electrodes is obtained by optimized welding pressure control (compression before and after welding).



Cross Wire Shoot-in Mechanism with Switch System

An optional cross wire switch sytem ensures continuous operation during butt welding of cross wires and helps to improve efficiency of the welding line significantly.



Sheet Stacker

After being cut by the shears, the mesh sheets are stacked automatically. Extremely short cycle times also for short mesh sheets and compact arrangement without the need of a sheet turner.

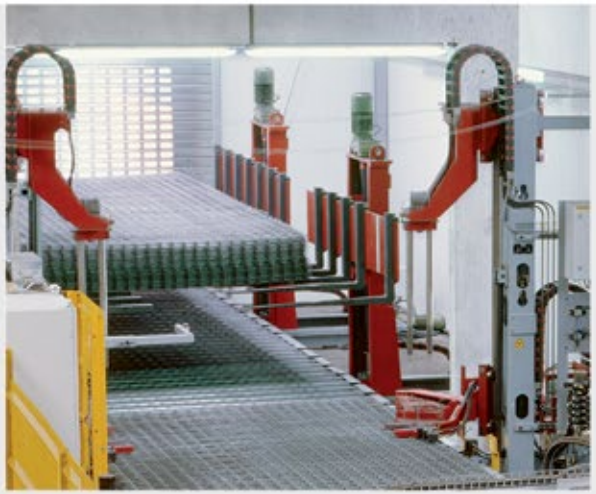
Intermediate Collector

Sheet stackers equipped with the optionally available intermediate collector allow for continuous production without any interruptions while the sheet stacks are being discharged.

Ancillaries

Automatic Tying Station

For the fully automatic tying of sheet batches after the programmed number of sheets has been produced.

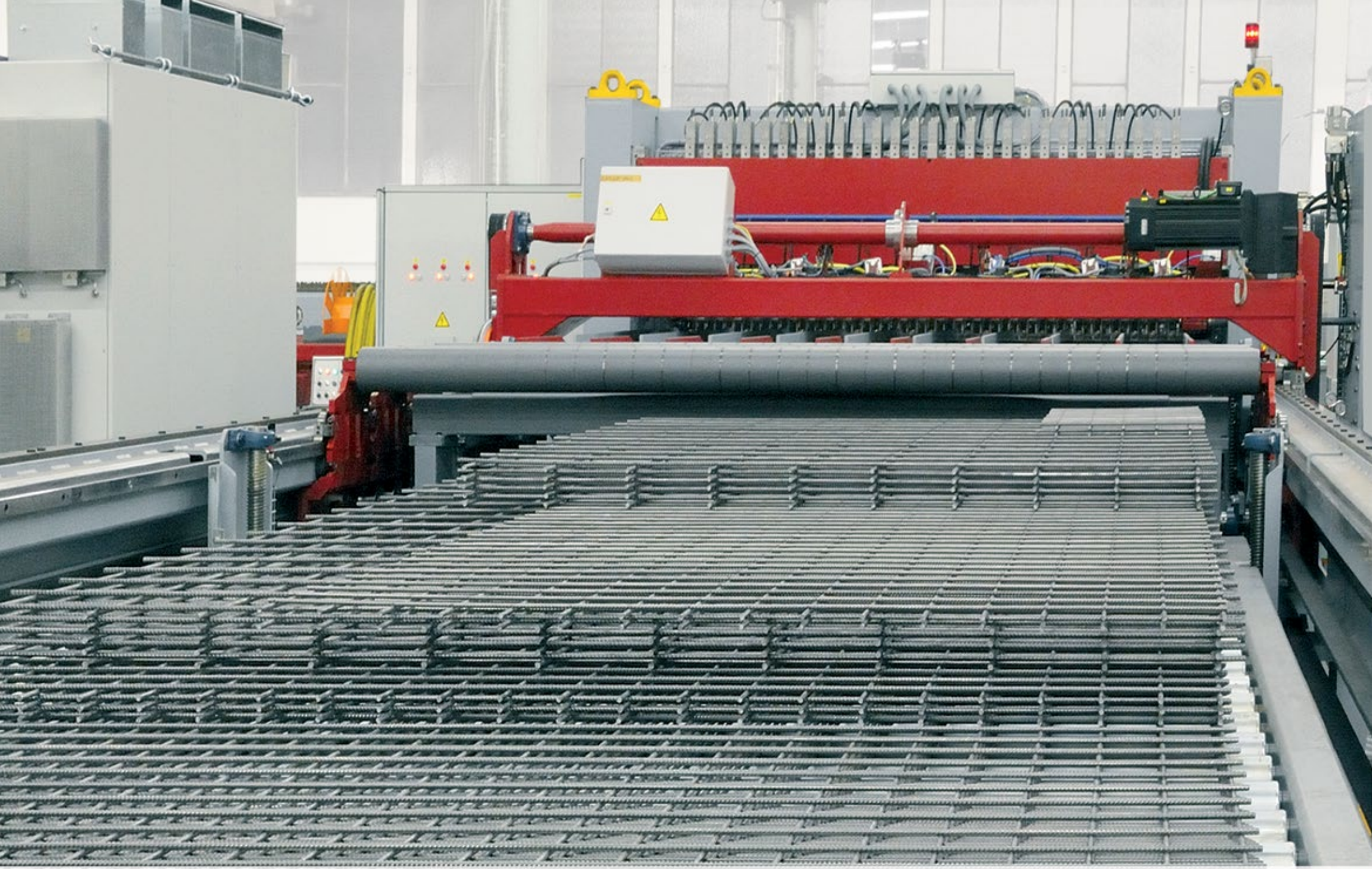


Mesh Pile Stacker

Precise and efficient stacking of sheet batches.

Roll Take-up Machine

Production of mesh rolls. Mesh coilers of different automation levels are available.



Special Design

Wire mesh welding line ATT with integrated line wire straightener POLYCUT – “Just-in-time” production of reinforcing mesh sheets of different configuration and geometry

Technical Data

- Highly flexible welding plant for the cost-effective production of standard and special sheets from small batches to large production volumes, working in fully automatic mode with line and cross wires fed from coils.

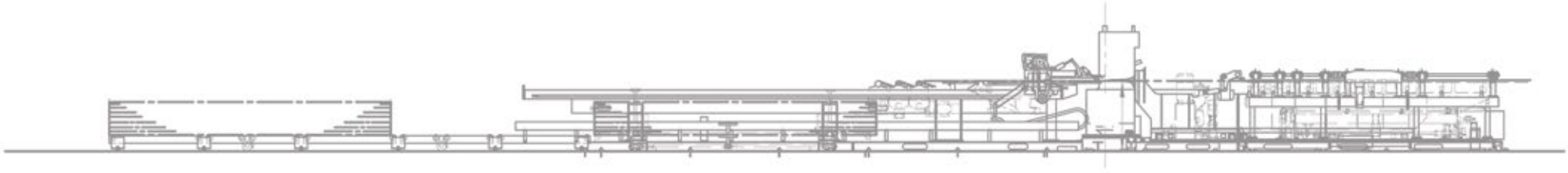
  This plant features high production speeds and the shortest changeover times to varying sheet styles and sheet geometries.

  The technical data refer to standard welding lines which, however, can be adapted to our customers' specific requirements.

		ATT 12 with PCX 12	ATT 12 (13) with PCX 16**
Welding width	mm	2.600, 3.200	2.600, 3.200
Line wire:			
Diameter range	mm	5 - 12	6 – 12 (13)
Spacings	mm	50*	50*
Cross wire			
Diameter range	mm	5 - 12	6 - 12 (13)
Spacings	mm	50 - 400	50 - 400
Max. total diameters	mm	24	24 (26)
Max. working speed	CW/min.	150	150

* Larger line wire spacings in steps of 50 mm

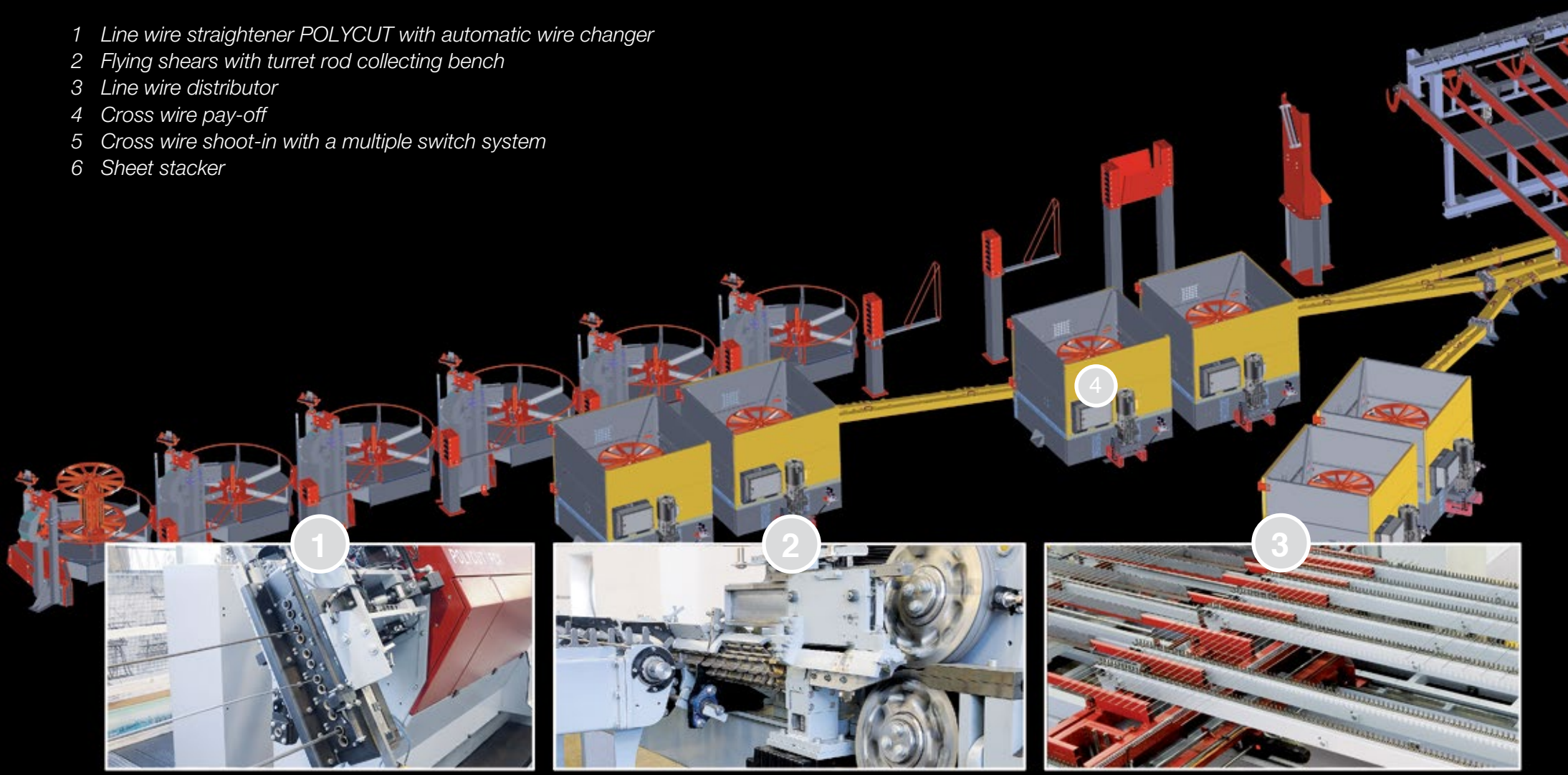
** The execution of the line with a line wire straightener POLYCUT PCX 16 enables higher straightening speeds at the preparation of line wires especially when processing larger wire diameters.

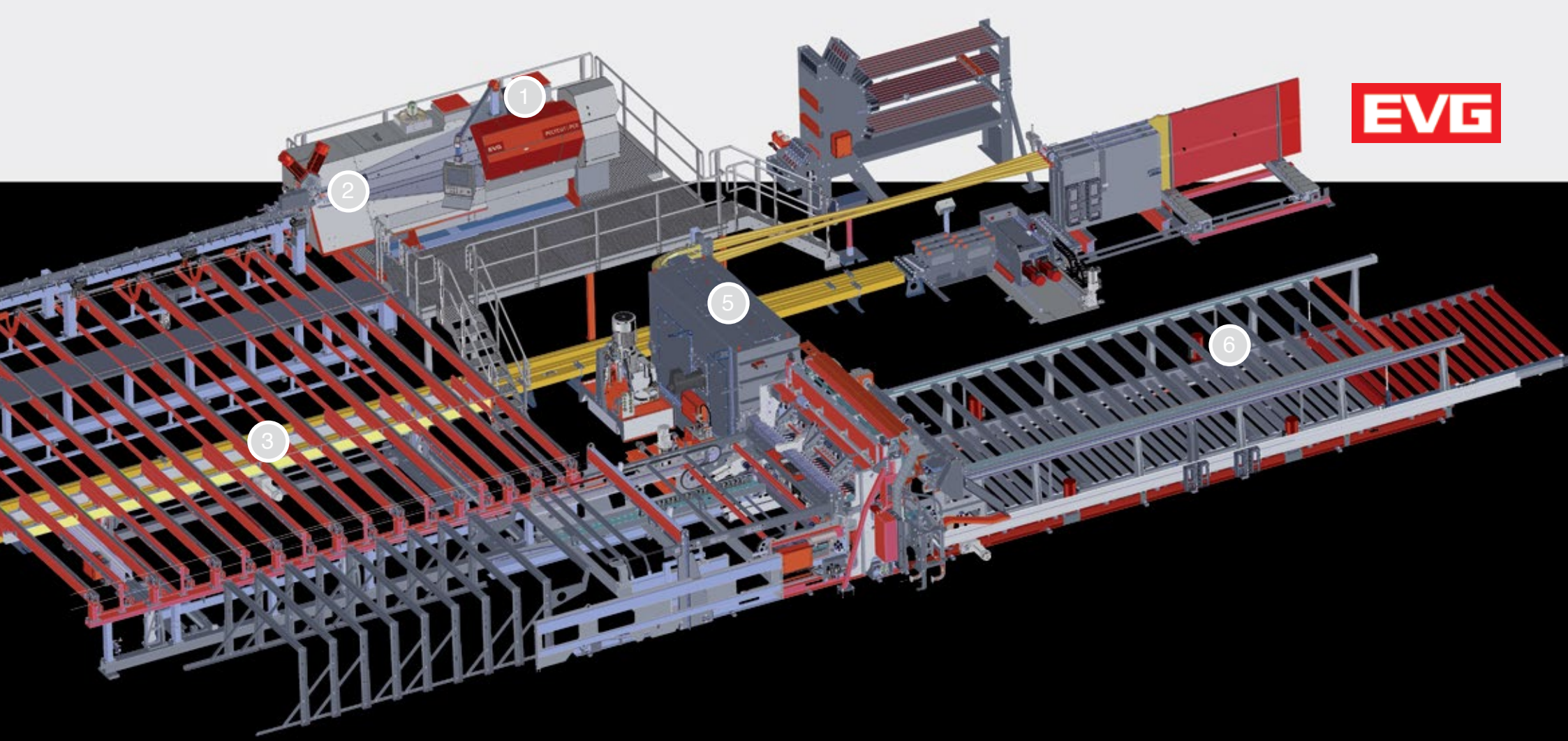


Special Design ATT with POLYCUT PCX

Components of the Line

1 Line wire straightener POLYCUT with automatic wire changer
2 Flying shears with turret rod collecting bench
3 Line wire distributor
4 Cross wire pay-off
5 Cross wire shoot-in with a multiple switch system
6 Sheet stacker

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2
3
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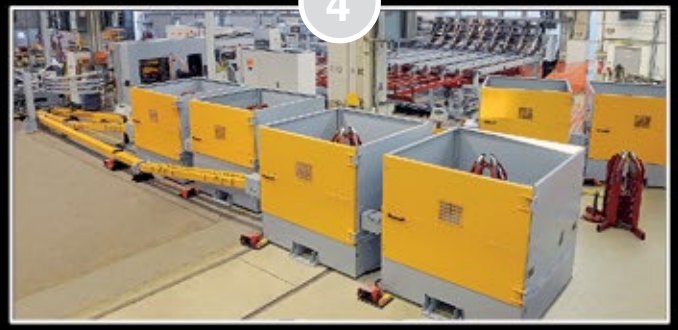
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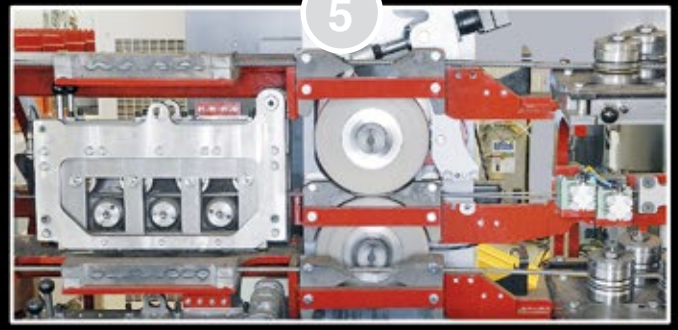
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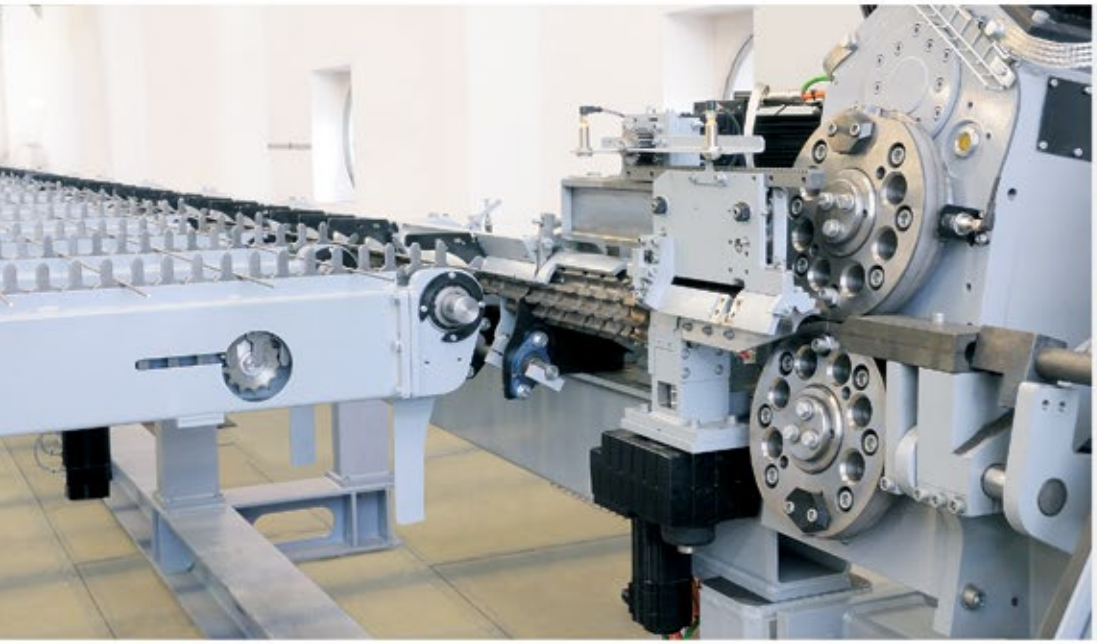
6

Functional Principle of ATT with POLYCUT

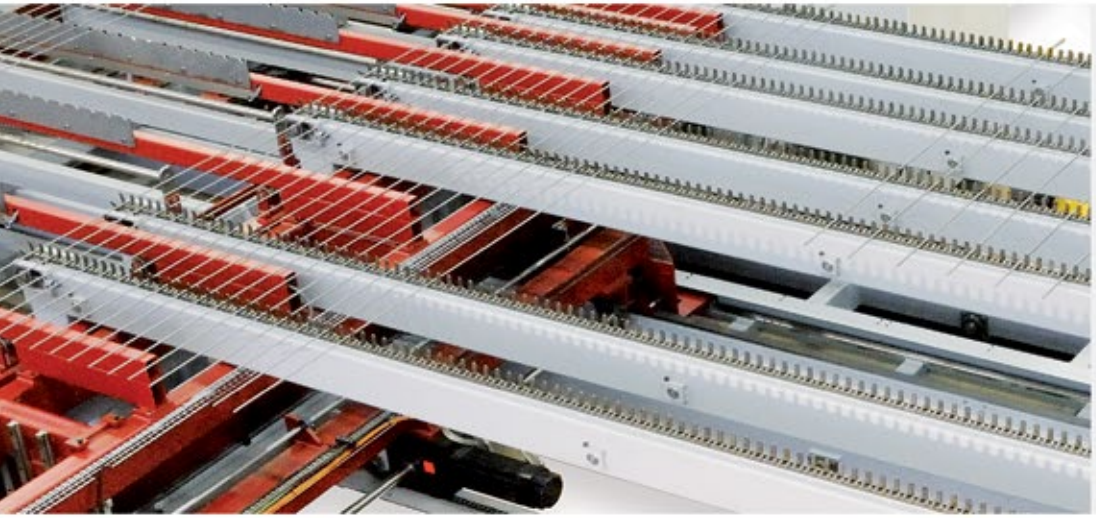


Straightening and Cutting of Line Wires

A wire straightening and cutting machine of POLYCUT-type is integrated and synchronized with an ATT-type welding line for preparation of line wires straightened and cut-to-length “just in time”. The wire advance system works with a servo-electrically driven roller-type straightening unit. The basic configuration includes stationary shears for wire cutting. After cutting, the wires are deposited individually by the rod collecting bench on a chain conveyor and are transferred into the line wire distributor combs that can be moved crosswise to production direction.

The wire change-over procedures are program-controlled and include the automatic adjustment of all straightening rolls to the new selected wire diameter.

An optional heavy-duty model provides flying shears with a turret-type rod-collecting bench to enable wire cutting without reducing advance speed.



Line Wire Feeding

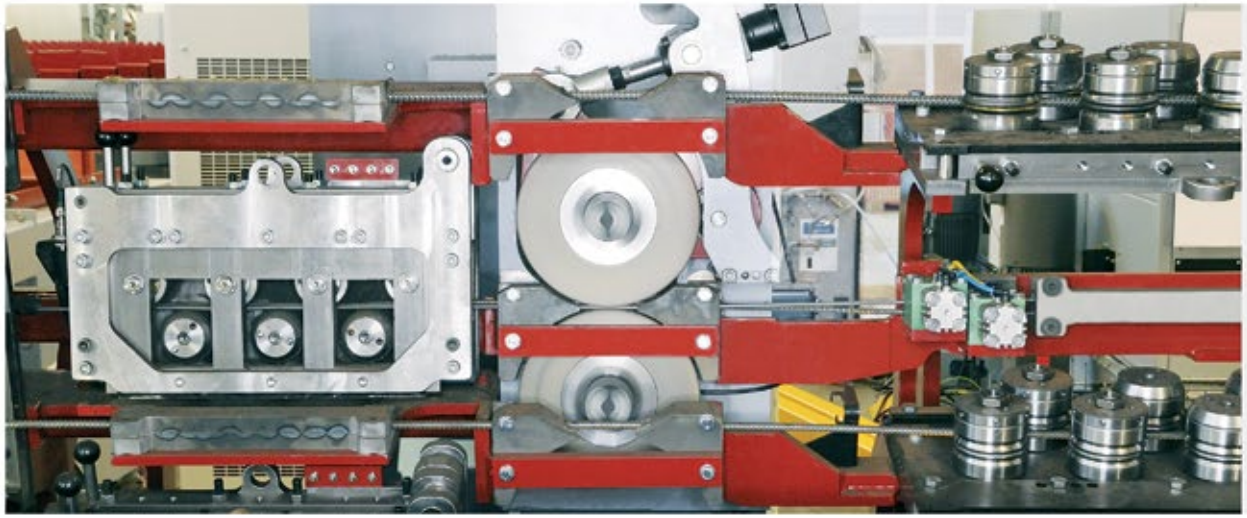
The automatic line wire distributor transfers the wires to the wire feeder according to the spacings of the sheet to be produced. Then, the wires will be aligned and fed into the welder according to the preprogrammed overhangs.

Due to the optional arrangement of two feeding chariots that can be moved alternately by program-control, the loading and feeding cycles can be reduced significantly as the repetition strokes of the respective chariot are always carried out in hidden time.
As a result, production downtime between two successive mesh sheets can be reduced to an absolute minimum.

Cross Wire Pull-off System

The cross wires are pulled off continuously from the cross wire pay-off stations and are fed into a loop rack.
The wire loop building up in this device serves as accumulator for the intermittent pull-off of the wire mesh welder's shoot-in system.

The fast change-over between different wire tracks is possible by shifting the loop rack automatically sideways. The number of the necessary wire tracks is fixed specifically for every line.



Cross Wire Shoot-in

Feeding of the cross wires is ensured via a multitrack cross wire feeding mechanism enabling the automatic change-over between different wire diameters.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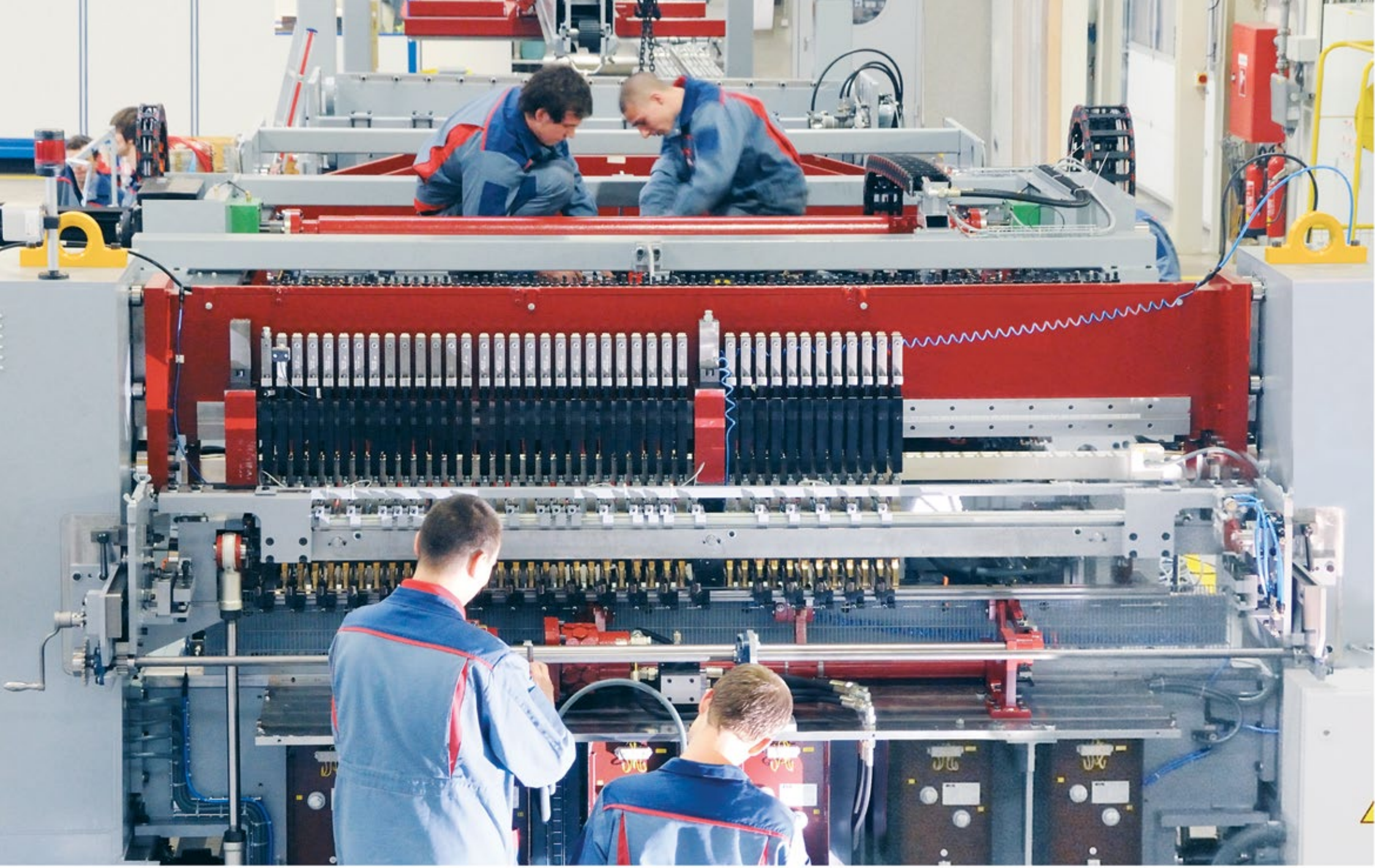
Produkt
Einstel
Schweiß
Menü
Setting
Welding
Menu

Welding Line Control System

Control

The control system ensures the fully automatic operation of the entire production line. Easy handling through central data input via an input computer of state-of-the-art industrial PC design. Monitoring of the line via a diagnosis program with plain text display. Tabular input of product data, production lists, welding parameters and line-dependent functions. Graphical representation of sheet types.
Owing to an integrated network communication feature it is possible to execute telemaintenance at the line.



Competence

Group of Companies

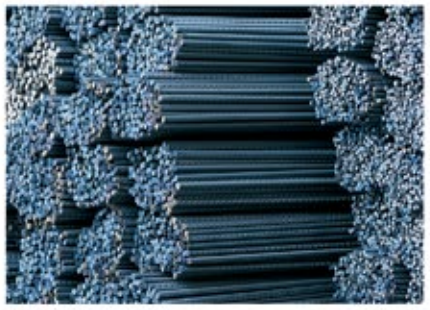
The group of companies EVG - AVI - MARIENHÜTTE with its complete program for the production of reinforcing steel and welded mesh is your reliable and experienced partner when it comes to reinforcement of concrete, wire products, production equipment and knowhow.

- EVG as suppliers of complete production lines
- AVI and BSTG as producers of reinforcing steel sheets, cold-rolled reinforcing steel, truss girders, spacer strips and reinforcing cages
- Steel and rolling mill MARIENHÜTTE as producer of reinforcing steel
- H&S Zauntechnik as supplier of industrial and fencing mesh as well as complete fencing systems

The cooperation within our network of companies allows EVG to become aware of all major challenges inherent in the production and application of mesh and reinforcing products also from a machine operator‘s point of view. Any knowledge gained this way is constantly introduced in our new projects.

The most important foundations of our success are close cooperation with our customers based on partnership, highly-qualified staff and ongoing innovations.

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