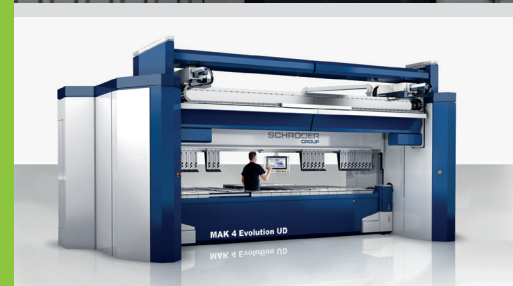
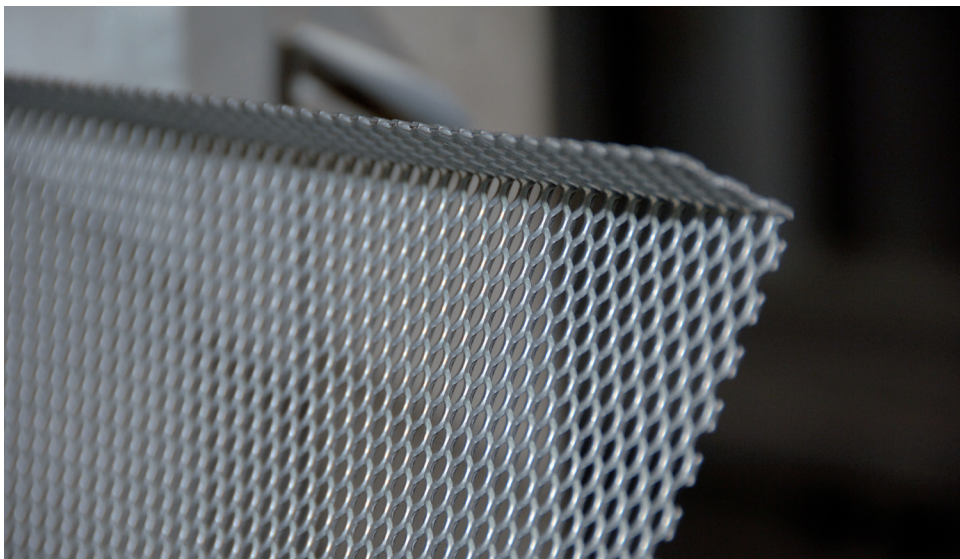


Increase of throughput, flexibility and quality

Wenker uses MAK 4 Evolution UD for mass production and single pieces



User

Wenker GmbH & Co. KG in Ahaus is a dynamically growing metal construction company with extensive added value. Own products are e.g. air conditioned liner spatial modules – a prefabricated building system for houses – or the ERGO LUX tunnel for surface inspections. Wenker delivers just in time/just in sequence assembly kits for cabins in “Sandwich” architecture for liners and cruisers made of sheet with wood décor. A major contract for the production of thermal power stations forced the Munsterlander company to find an alternative to the heretofore used press brakes. (www.wenker.de/en)

Success

Wenker looked for sheet metal working machines in order to replace their press brake that has been quite personnel-intensive and low in its repeat accuracy. The metal constructor arranged several meetings with manufacturers of folding machines and intensively tested the solution in line – with own metal sheets and clear tasks for technicians of the manufacturers. They decided to go for two Schröder folding machines type MAK 4 Evolution UD, which had passed the following performance test: In order to fold more than 30,000 sheets for the BHKW order, the sheet metal working machines have been running for one year in three-shift operation.

Machine in operation

MAK 4 Evolution UD

- Two folding machines in action (working length 3,200 mm and 4,000 mm)
- Batch sizes between 2 and 2,000 pieces
- Up to 6 mm sheet thickness
- Up-and-Down-folding beam
- 850 mm clamping beam stroke
- Operation from the front or rear side
- POS 3000 3D-graphic control
- Radius function
- High repeat accuracy in folding perforated metal sheets for insulating material edgings

For several years Wenker had exclusively focused on press brakes – just as other sheet metal processors did. But with the ever-increasing demand of customers, the proven technology kept on revealing weaknesses. For example, it was only possible to fold coated sheets with a protection film and special equipment needed for presses. Weight-saving perforated metal sheets used for edging bigger insulating parts could not be produced with high repeat accuracy. The greatest weakness of presses is the immense effort when handling big metal sheets.

A major order for the production of thermal power stations (BHKW) forced the company to take action: Only for the casings of the container-like BHKW-modules that had to be delivered, more than 30 000 man-sized sheets had to be bent – and that were not the only working steps. Carsten Bugsalewicz, foreman of the folding department, visited the EuroBlech show in order to look for machines for additional capacities.

„Only Schröder did convince us, especially in relation to accuracy and software. The machine construction is far superior. To us, further key arguments had been the work-saving and productivity-increasing Up-and-Down folding beam as well as the possibility to operate the machine alternatively from the front.“

Carsten Bugsalewicz
Foreman

Proven in continuous operation

After tough practical tests with machines of various manufacturers a decision for the MAK 4 Evolution UD was made. Machines from Hans Schröder Maschinenbau GmbH already convinced with their torsion-resistant construction and set themselves apart from the competition when machines had been tested. Wenker bought two types of industrial folding machines that had been in continuous operation for one year bending BHKW-casings. One enormous increase in efficiency while doing so was the Up-and-Down folding beam of Schröder machines. The advantage is that bending large sheets can be done easily by one single person as sheets do not need to be turned over for counter-foldings. Instead, the folding beam surrounds the workpiece and can fold up

and down as needed. A further argument in favor of Schröder was the possibility to alternatively operate the machine from the front. That was quite important for Wenker, since they fold lots of thin profiles as well. An additional safety installation and the control panel right on the swivelling arm are the most important unique features of Schröder.

A speciality of this contract: In order to produce edgings for the insulating material, perforated metal sheets are used. This had been a problematic material in the past since it had led to a lot of waste but with Schröder folding machines they could be processed precisely and with high repeat accuracy. Alongside this ability the advantages of surface-gentle folding can be seen through careful folding of coated sheets – e.g. with decor for ship's cabins. The dominance of the software control POS 3000 shows: „For pipe edgings we now use step by step radius bending with the clamping beam against the bottom- and the folding-beam. That is working extremely well and saves an additional working step. And we do not even use the full potential of the possible fineness of the steps, that the machine MAK 4 Evolution UD performs“, Bugsalewicz says.



Schröder Group

The Schröder Group consists of Hans Schröder Maschinenbau GmbH, located in Wessobrunn, Germany, and SCHRÖDER-FASTI Technologie GmbH, located in Wermelskirchen, Germany.

Founded in 1949, Hans Schröder Maschinenbau GmbH combines traditional and modern aspects in mechanical engineering. Successfully managed as a quality and customer-oriented family company, Hans Schröder Maschinenbau specialises in the development of modern machine concepts for folding and cutting sheet metal.

Thanks to the 2006 integration of the Fasti Company and its workshops and a global presence, the Schröder Group is now a leading provider of machines for folding, cutting, crimping, beading, and circular bending sheets of all kinds. The diversity of the range of precision machines ranges from proven solutions for trade to innovative, high-performance machines for automated industrial production. The Schröder Group now employs more than 240 workers at various domestic and international locations.

SCHRÖDER
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