Progress Maschinen & Automation AG, 39042 Brixen, Italy

Mesh welding plant with totally integrated bending system brings precast production facility up to state-of-the-art

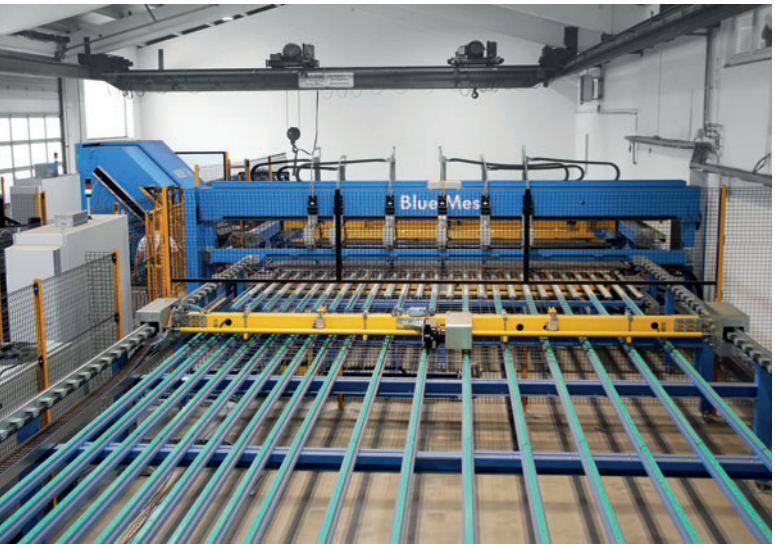
The Habau Group is active as a full-range supplier in the business fields of civil engineering, underground mining, precast element production, as well as the construction of pipelines, timber and steel structures plus other systems. At its headquarters in Perg, Upper Austria, Habau Hoch- und Tiefbaugesellschaft operates one of most productive precast element manufacturing facilities in Austria. To enhance automation at its factory, this family-run business is now banking on the new M-System BlueMesh® mesh welding plant made by Progress Maschinen & Automation, a Progress Group company.

The precast facility in Perg (Upper Austria) has been in existence since the beginning of the 1970s and currently employs between 150 and 200 persons. The company manufactures precast elements, such as supports, beams, floor and façade panels, balcony slabs, partition walls and bridges, in all variations exclusively to order for industrial, commercial, residential and infrastructure construction work. Continuous growth over the last decades brought about substantial new investment in 2014, when a cutting-edge carousel plant was commissioned.

"Purchasing the automatic mesh welding machine from Progress was a logical complement to be able to exploit the great capacities of the carousel plant," explains Hubert Wetschnig, CEO of the Habau Group.

Reinforcement for panel-shaped precast had formerly been carried out manually. At least two to three employees were needed to be able to bend the meshes upwards. The new mesh welding machine's specially integrated bending system with two beam benders and two single bending machines generates appreciable savings on time and staffing. The difficulty of finding suitable skilled workers has also underscored the need for certain work processes to be automated at Habau.

The efficient beam benders were specifically designed for manufacturing bent end products automatically. Their hardened bending tools have been equipped with a special double cam which allows two different diameters to be bent with one matrix.

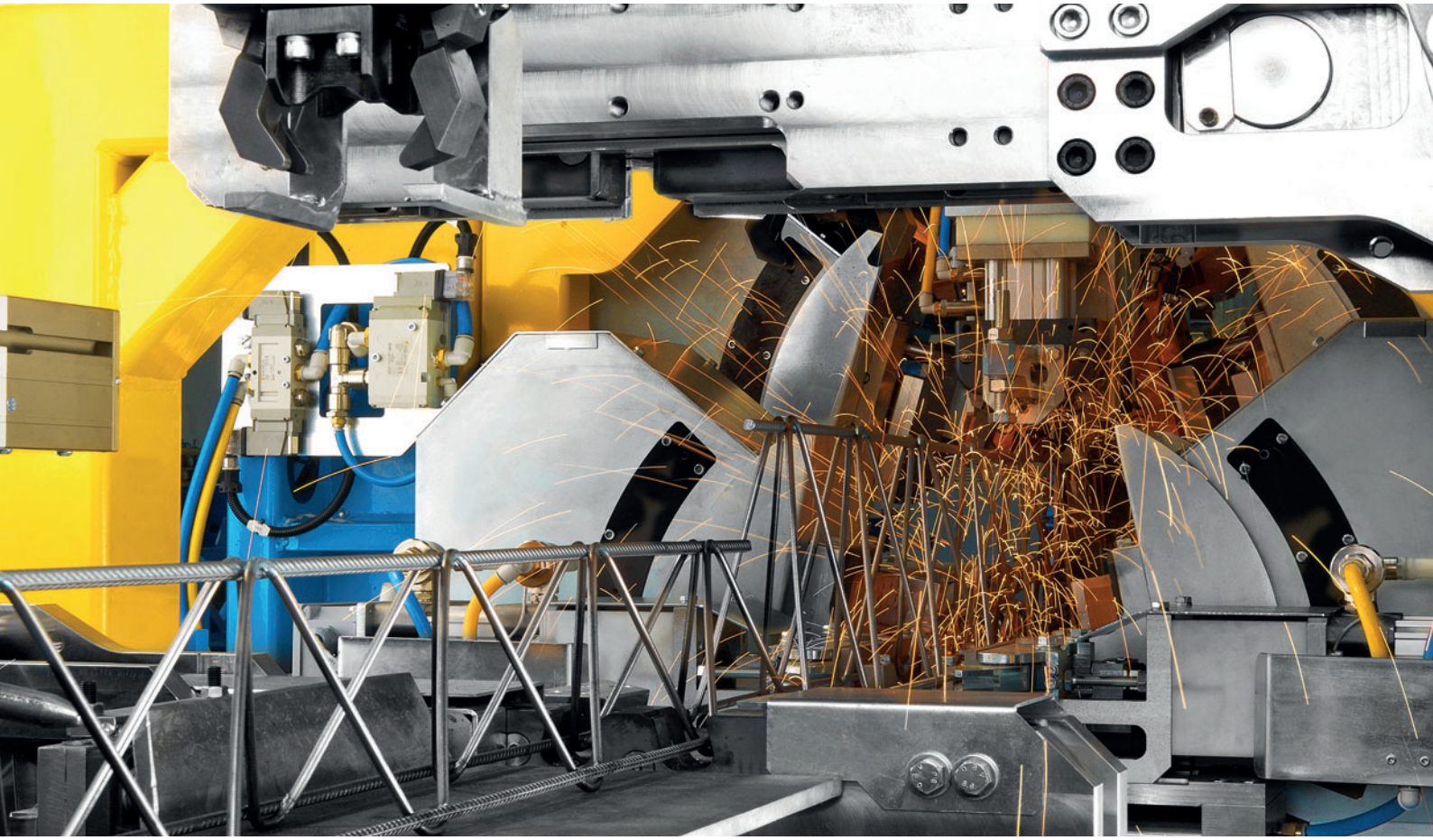


The new M-System BlueMesh® mesh welding system makes it possible to produce made-to-measure reinforcing meshes flexibly

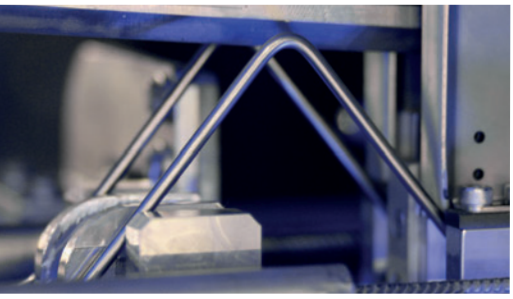
Individual steel wires can be welded at any distance desired using the Progress spot welding process

progress

Maschinen & Automation



Lattice Girder Welding Machines



- Flexible
- Fully automated
- Without waste

The VGA Versa allows fully automatic and just-in-time lattice girder production.

The plant is equipped with automatic lattice girder height adjustment and produces at the highest level of flexibility.

www.progress-m.com

Beam bender in operation manufacturing bent end products automatically

Travelling rotating single bending machines make for full flexibility

For full flexibility, the beam benders were supplemented with travelling rotating single bending machines. The two integrated bending units permit work to be carried on simultaneously and can thus bend spacing stirrups upwards even in the small interstices of a mesh. The automated bending rotor diameter changing system boasts a particular special feature: five matrices have been installed for greater flexibility instead of the customary three matrices.

Habau originally wanted to carry out bending the meshes solely with single bending machines. In the meantime, the company has been convinced that the additional beam benders generate considerable savings on time and that this extra investment has paid off. The overall concept with its highly flexible mesh welding system plus beam benders and single bending heads represents a very high degree of automation in manufacturing reinforcement in a carousel plant for solid walls.

Automated production started at the beginning of May. Walter Preisinger (Division Manager for precast element construction) expressed his satisfaction: "The straightening quality is outstanding and the rebar is extremely straight even over 8 or 9 m". The new mesh welding plant is set up for one shift production with a target of 100 % capacity utilisation. Total production capacity for slabs is approx. 200 m² per hour. Habau also manufactures some very special, exceptionally large components with recesses that demand specialist expertise from the planning side. Reinforcement meshes can be up to 5.10 m wide; a reinforcing cage of a maximum 3.90 m width can be manufactured with upward bends on both sides; 6 to 16 mm diameter reinforcing steel can be processed directly from the coil and thus without off-cuts. Welding without grids according to individual CAD specifications generates very great flexibility in manufacturing. Automatic labelling and the possibility of transferring straightened steel via a roller

Walter Preisinger, Division Manager for precast element construction, expressed his satisfaction with the new system

Aerial view of the Habau Group company premises in Perg/Upper Austria

Assembling special precast concrete elements at a construction site

conveyor are other special features of the system. Habau is looking optimistically to the future despite the current difficult situation on the market due to the Corona crisis. The company is very broad-based and can cope with the uncertain perspectives for the coming months thanks to its successful development.

Seamless communication between the companies has played a crucial role in their successful cooperation alongside the positive impression that Progress systems have left after diverse viewings. Progress scored points and was able to supply an impressive all-round package as it has gained much relevant expertise through operating its own precast element production facility. One distinctive characteristic in particular unites both partners – developing innovative, tailor-made solutions for each individual customer. ■

FURTHER INFORMATION

HABAU
part of the family HABAU GROUP

HABAU Hoch- und Tiefbaugesellschaft m. b. H.
Greiner Straße 63, 4320 Perg, Austria
T +43 7262 5550
office@habau.at, www.habau.at

progress
Maschinen & Automation
PROGRESS GROUP

Progress Maschinen & Automation AG
Julius-Durst-Straße 100, 39042 Brixen, Italy
T + 39 0472 979100
info@progress-m.com, www.progress-m.com

Product catalogue

For 25 years leading in magnetic formwork technology for precast concrete production.
In the development and production of intelligent magnetic formwork components and complex formwork solutions we set global standards.

With our know-how from intensive development work in close cooperation with our customers worldwide, RATEC has the right answer to every conceivable shuttering situation. Our solutions are not only technically well-engineered, but they also take into account economic feasibility, efficiency and process optimisation.

Benefit from our experience, flexibility and creativity – MEET THE BETTER IDEAS!

Phone: +49 6205 9407 29
info@ratec.org | **www.ratec.org**

RATEC
MEET THE BETTER IDEAS