

Tecnocom S.p.A., 33100 Udine, Italy

Special prefabricated elements specialist Klaus relies on fully individualised automation solutions



Klaus Hoch- und Tiefbau GmbH is upgrading its machine pool in the precast concrete plant with several automated systems from progress Maschinen & Automation and Tecnocom, both companies of the Progress Group. With the individualised reinforcement machines and formwork specially designed for the company in Kissing, the many custom-made stair elements can now be produced even more easily and automatically.

Special designs are the strength of Klaus Fertigteilwerk

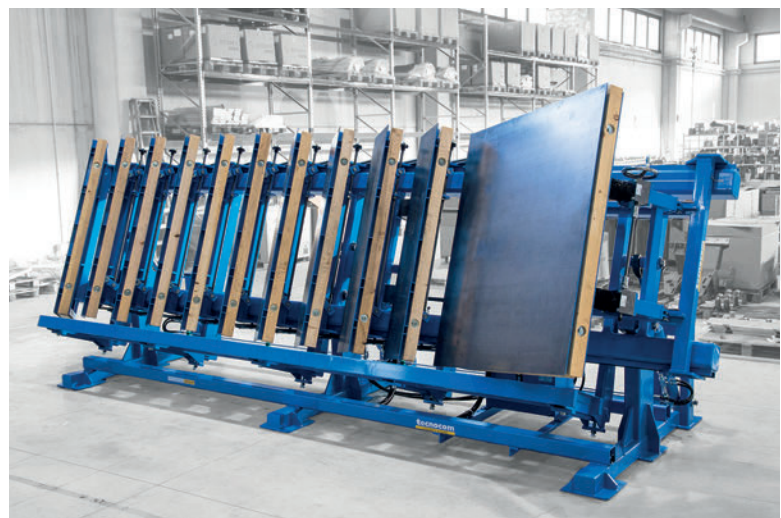
Klaus Fertigteilwerk stands out above all in the production of special designs and everything that falls outside the norm, such as winding stairs. The precast plant belongs to Klaus Hoch- und Tiefbau GmbH and thus to the Klaus Group. The precast plant in Kissing has existed since the late 1960s and has developed into a best practice company under the name Klaus, currently employing around 115 people. Located south of Augsburg, the precast concrete company supplies Bavaria and Baden-Württemberg with high-quality and individual precast concrete elements such as stairs, balconies, façade elements and special designs. The company works

almost exclusively for the residential construction sector or private builder-owners, and only to a very little extent for the industrial construction sector.

Customised machines for the special design expert

The newly installed Pluristar multifunctional plant from progress Maschinen & Automation combines the functions of an automatic stirrup bender, straightener and a double bending machine. The Pluristar can process wire diameters from 8 - 16 mm and has a combined straightening system consisting of a roller straightener and a rotar straightening unit. This special combination enables flexible production of stirrups, straight bars and bars with large bends and can thus cover the entire rebar processing from coil.

In reinforcement processing, the new M-System BlueMesh® mesh welding plant also stands out by its versatility. The specially adapted plant with a small footprint produces customised meshes according to individual specifications, causes no waste due to working directly from the coil and is easy to operate. This ensures a high quality of the product and Klaus' special designs can be implemented easily and automati-



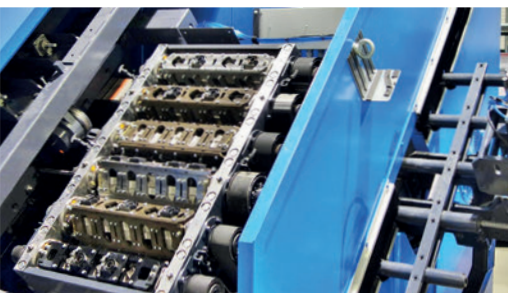
The custom-built staircase mould system model HT-Tec Plus is a tilting staircase mould with 10 steps, with which individual staircase models can be produced in easily.

progress

Maschinen & Automation



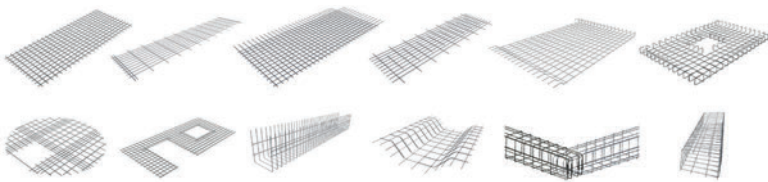
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The new mould for staircases of the Ramp-Tec Plus model



With the new machines from the Progress Group, the special prefabricated elements specialist is now well equipped for enquiries of all kinds.

cally. Some 50 reinforcement cages are produced per day on average. Depending on the order situation, a few more cages can be produced in the plant - 75 baskets in different sizes every day.

Thomas Heubeck, Technical Manager at Klaus Fertigteilwerk, comments regarding the investments made: "Thanks to the new machines, we have made a huge leap forward in reinforcement and can now produce precisely fitting cages for the stair formwork. The base basket then only needs to be attached to the corbel stirrups." He adds: "For straight stairs, with or without a stair landing, the reinforcement is made to fit exactly, so the iron bender only has to make control measurements."

The production of winding stairs is somewhat more complex. Here, the mat welding machine produces per metre for the top and bottom layers as well as for the edge baskets. These mats can be cut to size and added for the winding stairs.

In order to further increase the already existing high-quality production standards and the automation rate, Klaus additionally invested in customised stair mould systems from Tecnom, with this mould systems the formwork work can be realised quickly, flexibly and automatically with very high precision.

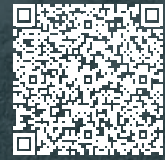
"When purchasing the new mould systems, the decision was made in favour of Tecnom because the products were individually adapted and manufactured to our needs. No other manufacturer could offer that in this way," says Heubeck.

A mould system for staircases, model HT-Tec Plus - a special tilt stair formwork with 10 steps - a stair formwork Ramp-Tec Plus as well as a stationary table were delivered.

The automatically adjustable mould ramp for stairs with stair landing - model Ramp-Tec Plus offers an automatic variation of the slope of the ramp and the stair landing. With built-in



The Pluristar multifunction plant has an automatic changeover from double to single wire processing and an automatic straightening adjustment.



Product catalog

ORIGINALS ARE IDEAS THAT SET INDUSTRY STANDARDS.

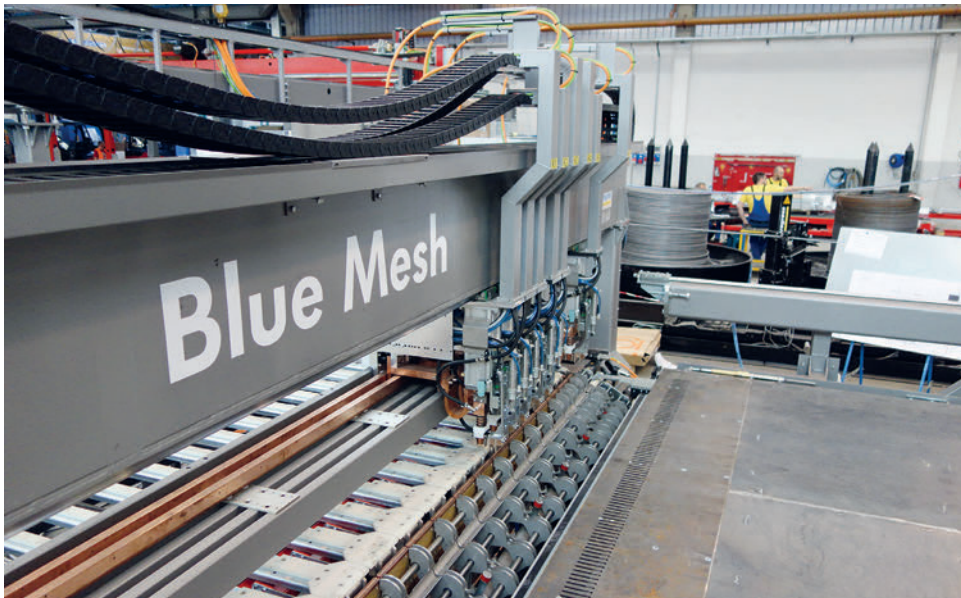
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The flexible mesh welding plant M-System Blue Mesh® processes reinforcing steel directly from the coil and thus produces with millimetre precision and without waste!

slope sensors for the variation of the stair rise and by automatically adjusting the slope of the stair landing with electric control, it is possible to adjust the moulds to the respective requirement. In addition, the length of the stairs or the platform size can be set and the faultless surface quality can be produced. The mould surface of the stationary table is sanded to produce precast elements with a high surface quality. The use of side formers enables the production of elements in different sizes and thicknesses. The freshly poured concrete is compacted by high-frequency or pneumatic vibrators. The table is equipped with various heating systems to speed up the curing process.

Progress Group as a reliable partner

According to the company, German-speaking, reliable support was very important. The Progress Group meets these requirements. Without language barrier, small questions can be solved quickly and easily.

Heubeck says: "Just today I spoke to the support team on the phone for a while. Good communication is essential for ambiguities that need to be resolved quickly."

The positive experience of other companies with Progress also influenced the investment decision. Bending, welding, and shuttering can be done by any machine on the market, but the Progress Group was able to convince Klaus Fertigteilwerk with an attractive overall package. ■



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Video about the new Klaus precast plant