Setting the standard: How GBS Prefab became one of Bulgaria's most advanced precast plants

With investments in new machinery GBS Prefab has become one of Bulgaria's most technologically advanced precast concrete plants. As part of Glavbolgarstroy Holding, a leading Bulgarian construction company, it focuses on innovative structural solutions, high-quality elements, and efficient project execution. To be outstanding in those, GBS Prefab ordered automated moulds and machinery from Tecnocom, a Progress Group company, and one of the market leaders in this field.

Innovation and quality

"Our goal is to leverage high-tech solutions to exceed our clients' expectations and solidify our position in the industry," explains Georgi Dikov, MSc. Eng, Executive Director – Engineering, Marketing, and Sales. Glavbolgarstroy Holding is renowned for its comprehensive services in energy, transport, water infrastructure, and residential, commercial, and industrial projects. With over 55 years of experience, the company is dedicated to continuous improvement and process optimization. "Our motto 'we connect, we inspire, we create' reflects our commitment to fostering strong relationships, driving innovation, and delivering high-quality construction solutions," says Dikov.

Investing in cutting-edge technology

GBS Prefab, established in February 2022, strives to uphold the high standards set by the parent company through implementing highly automated machinery from Progress Group.



Glavbolgarstroy Prefab is part of Glavbolgarstroy Holding, a leading Bulgarian construction company and represents one of the most advanced precast plants in the country.

A significant milestone for GBS Prefab was the decision to equip the new plant in Pazardzhik with this machinery. These state-of-the-art solutions are based on fully automated hydraulic drives, enabling an ultra-fast and safe production process. "The high-precision steel moulds provide a high-quality surface finish for the elements," Dikov elaborates. The plant is designed to produce precast structures for large-scale commercial warehouses, manufacturing plants, and industrial facilities, offering large spans and maximum flexibility.

Automation as the success factor

The decision to automate has proven to be essential for GBS Prefab. Automated processes enable rapid, simple, and safe workflows for the production of the precast elements. "Maxi-



The various moulds installed are between 32 and 62 meters long.

PRECAST CONCRETE ELEMENTS



With the battery mould for columns, very high productivity per unit of plant area can be achieved.

mum productivity per unit of plant area can only be achieved with compact, modular, and easy-to-operate equipment." explains Dikov. The aim is to produce high quality elements for the industrial construction.

The innovative plant includes various moulds for various elements and specifications from the Progress Group:

- Battery mould for columns 40 m long
- Mould for columns with corbels 20 m long
- Mould for I beams 32 m long
- Mould for ⊥, L beams 32 m long
- Tilting table 24 x 3,5 m
- Mould for double slope beams 35 m long
- Self-stressing mould for double T elements, 62 m long, max stressing force 450 tons

Focus on sustainability

Sustainability is a central focus at GBS. A key topic which they have in common with Progress Group. GBS is dedicated to



The moulds provide a high surface quality and a quick production of column precast elements.





Stability.

Stressing of towers and poles

PAUL supplies

- Prestressing installations incl. planning work
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(prestressing cables and stay cables)

The experts in Prestressed Concrete Technology. stressing.paul.eu

Paul at YouTube



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The extremely adjustable mould for I beams is 32 meters long and can produce high quality beams for medium and large industrial buildings.

environmentally friendly construction practices and places a special emphasis on recycling construction and demolition waste and using green and sustainable construction materials. GBS Prefab is one of the first precast plants in Bulgaria to collect and assess environmental data through a certified life cycle analysis process, providing Environmental Product Declarations for the entire production range. These measures underscore the company's commitment to responsible and forward-looking construction and are made possible with the newly installed machinery.

Successful projects and renowned clients

Since the installation of the plant, GBS Prefab has established a leading position in the market sector, executing precast structures with a total built-up area of over 100,000 sqm per year. Renowned clients include leading Bulgarian and international companies such as Profilink, Orno, IAG, Schneider Electric, Bultex-99, SPG, and Billa.

Progress with Progress Group

The collaboration with Progress Group has been a crucial factor in the success of GBS Prefab. "It was clear that to achieve our goals in the shortest possible time, we needed to partner with an established market leader. Progress Group fully



Even columns with multiple corbels on each side represent no problem for the flexible machinery at GBS Precast.



The mould for beams with abutments makes it easier to produce exactly according to the needs of the customer.



Within a short amount of time big halls and other industrial buildings can be set up.



PRECAST CONCRETE ELEMENTS



The columns and beams are mainly used for industrial buildings/halls.

justified our trust and provided the crucial technical insight, professionalism, and partnership needed to specify, deliver, and commission the equipment on time and according to agreed terms," emphasizes Dikov. GBS Prefab demonstrates impressively how cutting-edge technology and sustainable practices can deliver outstanding construction results. Looking ahead, the company remains committed to further optimizing its processes and delivering innovative solutions for the construction industry.



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