Echo Precast Engineering NV, 3530 Houthalen, Belgium

G&J Industries boosts the production capacity for 60 cm wide hollow core slabs



The future-oriented producer of pre-stressed concrete elements G&J Industries, a family company from Belgium, decided to boost the production with an Extruder X-Liner® from Echo Precast Engineering. G&J was founded in 1999 by its owner Gerard Oben, who is now working with his two sons Jan and Johnny. The company is specialized in hollow core slabs, solid floor, T-beams, stakes, and full and core lintels. With hollow core slabs being 50% of their production outcome, the family-owned company provides products throughout Belgium.

To stay ahead of the competition and increase the production capacity in 2020, the company has chosen a new Extruder X-Liner from Echo Precast Engineering, a Progress Group company based in Belgium. With this new machine on their 1.2m wide production beds, it is now possible to produce two slabs at the same time for increased production of the highly demanded 60 cm wide slabs.

Producing hollow core slabs automated and efficient

The innovative company was the first in Belgium to have their prefabricated elements certified with the CE mark and the BENOR mark, showing that their constant drive for quality and processes is successful. 90 % of the products are produced on-demand, and only 10 % are in stock. The process of producing hollow core slabs, in a nutshell, is simple: The concrete is pressed by screws on the production bed, compacted, and can then cure on the production line. When automation is needed, proven technology is crucial.

G&J normally produces with Slipformers but has now chosen to expand their range of machines with the Extruder X-Liner from Echo Precast Engineering and, by this way, increase the production of the 60 cm wide slabs. This high-performance machine has been specifically designed to meet the needs



The highly automated production machine Extruder X-Liner FC with "shark screws" guarantee very high compaction.



Production bed of 1,2 m, where two hollow core slabs of 60 cm width are being produced at the same time by an Extruder X-Liner

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60 cm wide hollow core slabs, which are used a lot in the construction industry in Belgium.

of producers in the residential and commercial sector, who require widths of 0,6 m in addition to the standard 1.2 m, 1.5 m or 2.4 m.

The Extruder X-Liner

The Extruder X-Liner FC (Flow Compaction) is designed to produce hollow core slabs automated and is easy to manage for the operator. The Extruder X-Liner installed at G&J Industries works on 1,2 m wide beds and produces two 60 cm wide hollow core slabs with heights of 160 mm and 180 mm in thickness. The versatile machine is also capable of producing hollow core slabs with a width of up to 1.2 m simply by replacing a few components.

The X-Liner modules can produce 160- and 180-mm height to make 2 slabs of 60 cm (with 4 cores) simultaneously. Their unique combination screws and a center mold piece to split the slabs guarantees excellent compaction and quality on 60 cm wide slabs. The 60 cm wide hollow core slabs are very popular for residential construction in Belgium, but they can also be perfectly used in industrial constructions, schools, etc. G&J ordered a X-Liner with a versatile nozzle unit to produce as well 9 core slabs of 160 x 1200 mm and 180 x 1200 mm.

Gerard Oben, the company owner comments his new acquisition as follows: "The quality of the hollow core slabs is really good - it is the same quality as provided by a Slipformer with an additional nice finish on top", and adds: "The machine is very good and quick. We like that it does not make noise, and nobody is needed to drive the machine. The machine can self-drive, so we need only one person to bring the concrete to the casting machine."

Shark screws for a high performance

The maintenance-friendly X-Liner with a high degree of flexibility can be individually adjusted and with that switch to producing different slab heights in a short amount of time. Also, the ratio between load and span can be adjusted by changing the concrete strength parameters and the reinforcement plan to suit specific applications. As a result, the production



The Extruder X-Liner only needs one machine operator to handle the concrete supply.

time, wear, and tear are reduced, and the whole process is easier to plan and handle, in addition to the time saved. With its "shark screws", specifically designed for this machine, it is possible to minimize the back rotation of the material inside of the machine, meaning less power needed for making compaction. The rates of production increased significantly – all that with better compaction and long-life wear.

The X-Liner is equipped with the integrated software system stabos from Progress Software Development, another company of Progress Group, which stores the production data locally and can then be integrated into the web client. Additionally, the machine also includes a wireless connection for remote control from anywhere.



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FURTHER INFORMATION



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