

Festner invests in the future

After the question of succession had been settled in the family-owned company Festner Baustoffe & Betonwerke, it was certain that the company would have to invest in a new manhole ring machine. They chose a fully automatic manhole ring system of the type Karibic 2011 from BFS.

Festner Baustoffe & Betonwerke e. K. can look back on a long company history. Registered in the business register of the municipality of Sillerthausen in 1899 as "Zementwarengeschäft ohne Gehilfen" ("Concrete products business without assistants"), the family-owned company has gone through some troubled times: world wars, post-war periods, strokes of fate – but the company was continuously led with entrepreneurial skill and a lot of hard work and courage. In 1969, at the age of 20, Johann Festner took over his parent's company in Attenkirchen near Munich, which he still heads today together with his daughter Monika Festner and his son-in-law Matthias Schumacher. The small medium-sized company with around 10 employees is specialised in the production of concrete products for underground construction as well as dealing in natural stone. Matthias Schumacher joined the company in 2010. It was clear to both that investment in the machine pool was necessary.

Whilst searching for a suitable machine to replace the old one, they came across BFS in Blaubeuren. "The advantages for us were obvious: BFS is a technology leader and not all

that far from our location", explains Johann Festner. Nevertheless, the two managing directors remained sceptical. After inspecting the BFS concrete manhole systems of the type Karibic and Atlantic in Switzerland as well as a visit to BFS in Blaubeuren it was clear that Festner would choose a BFS machine. In addition to that, the company was convinced that the price/performance ratio was very good. "The overall package and the chemistry between us was quite simply right", says Schumacher, putting it in a nutshell.

Karibic 2011 fully automatic manhole ring system

In mid-2016, after it had transpired that the Karibic was better suited to the company than the Atlantic on account of the product range, Festner ordered the fully automatic manhole ring system type Karibic 2011 for the manufacture of manhole rings, manhole necks and cones. BFS assembled the machine in Attenkirchen in February 2017. "The special feature of this machine is that it can be used to manufacture manhole products in diameters of up to 2,000 mm", stresses Rainer Straub, sales manager at BFS and contact for Festner.

BFS's tasks also included integrating the manhole ring machine in the already existing foundations of an old system. The effort was worthwhile: the Karibic is positioned centrally in the production hall and the production takes place completely below floor level, allowing very low noise emission values to



The finished products are pushed out of the machine automatically.



Mould core with hydraulic plate for the production of manhole rings with manhole steps



Stationary concrete silo with additional conveyor belt

be attained. "There's absolutely no comparison with the old machine", says a delighted Festner about the low-noise system. "And our neighbours also benefit", says the senior boss with the wink of an eye.

Special equipment of the machine

A further special feature of the new production plant is the stationary concrete silo with a capacity of around 3,600 litres. BFS catered here to the company's wish to be able to fill the machine with concrete from the mixing plant at any time via a conveyor belt. The Karibic communicates with the mixing plant via the level sensor integrated in the concrete silo and signals when concrete is required. This increases the effectiveness of the machine still further, since no interruptions in the production process are necessary for concrete silo filling procedures.

BFS has equipped the Karibic system with a hydraulic mould jacket clamping system in order to achieve fast change-over times. Festner also saves time with the electromotive press positioning, because in the production of cones the press is no longer positioned mechanically from the centre as would usually be the case, but instead the movements take place electrically and very precisely. "Apart from the saving of time, it's very convenient for the operator, too", Straub adds. Relief is also provided by the BFS central lubrication, which automatically lubricates the central vibrator at defined intervals. The maintenance intervals are thus adhered to irrespective of



Manhole ring with manhole steps



A good team: Matthias Schumacher, Johann Festner and Rainer Straub (left to right).



The Karibic 2011 system has been equipped with a pallet magazine with a fully automated pallet placement fixture.

the machine operator, which has a positive effect on the longevity of the central vibrator.

BFS has positioned the large hydraulic system outside the pit at Festner's request. Possible overheating of the hydraulic oil on hot summer days is thus avoided. In addition, the hydraulic system is equipped with an oil temperature controller, which regulates the oil temperature if necessary and banishes the threat of machine downtimes.

Convenient handling

Apart from that, Festner has invested in the overall height monitoring system of the type Heimo 500. This system enables the precise forming of the top pallet profile as well as precise checking of the height of the product. The height is adjusted via a position measuring system with regulation. The corresponding values are adjusted during the commissioning of the respective mould fixture and stored in the controller. They can be retrieved at any time in relation to the specific product.

The complete Karibic 2011 system has been equipped with a base pallet magazine with a fully automated pallet placement fixture. The pallet transport trolley pushes the cleaned base pallets into the base pallet oiling station, in which they are automatically sprayed with form oil. They are pushed from there into the machine. The finished products are pushed out of the machine on the other side in the same cycle and transported from there to the curing station by the electro-hydraulic run-off truck. The width adjustment for the nominal widths of 1,000 to 2,000 mm takes place hydraulically. A further special feature is the solution specially developed by BFS for the placement of the support rings (DN 1500 to DN 2000) in order to avoid deformation of the fresh concrete products during transport. This guarantees the high quality of the spigot end.



On-site discussion in Attenkirchen.

Connection via Internet

Fast help is available from BFS where necessary via the remote maintenance unit, because if any problems do occur the service technician can access the machine directly, diagnose errors and if possible rectify them immediately. "That minimises downtimes significantly, because we can help the customer promptly and uncomplicatedly", says Straub, speaking from experience.

Mould equipments

Together with the machine, Festner has also invested in a series of new mould equipments. The moulds were manufactured with a new core-jacket centring mechanism in order to ensure the optimum transmission of the vibrational force from the mould core to the mould jacket. To ensure long service lives of the moulds, they have been equipped with Hardox wearing rings in the wearing areas of the top and base pallets. If wear occurs, Festner need only to replace the wearing rings. They do not need to invest in a new mould equipment. The moulds for the nominal width 1,000 mm are manufactured with a hydraulic plate in the core area so that Festner can deliver products with or without manhole steps. Festner is thus able to react very flexibly to the large variety on the market.

Festner currently manufactures the following products on the new Karibic 2011:

- Manhole rings DN 1000 according to DIN 4034.1 and 4034.2 in the overall heights 250, 500, 750 and 1,000 mm, optionally with or without manhole steps
- Manhole cones DN 1000 according to DIN 4034.1 and 4034.2 in the overall heights 600, 850 and 1,100 mm as well as mini-cones DN 1000 according to DIN 4034.1 and 4034.2 in the overall height 300 mm, optionally with or without manhole steps



Festner has a large storage yard for finished products.

- Manhole rings DN 1500 according to 4034.2 in the overall heights 250, 500, 750 and 1,000 mm as well as manhole cones DN 1500 according to DIN 4034.2 in the overall height 600 mm
- Manhole rings DN 2000 according to 4034.2 in the overall heights 250, 500, 750 and 1,000 mm as well as manhole cones DN 2000 according to DIN 4034.2 in the overall height 600 mm

FURTHER INFORMATION



BFS Betonfertigteilesysteme GmbH
Dr.-Georg-Spohn-Straße 31
89143 Blaubeuren, Germany
T +49 7344 96030
F +49 7344 4710
info@casagrandegroup.com
www.bfs-casagrande.de



Festner Baustoffe & Betonwerk e.K.
Hauptstraße 26
85395 Attenkirchen, Germany
T +49 8168 782
F +49 8168 731
info@beton-festner.de
www.beton-festner.de