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F. C. Nüdling optimises its production with a new hermetic press

The commissioning of the new UNI 1200 hermetic press from SR Schindler has so far gone without any significant problems despite the current adverse conditions. Production will be able to start as planned. With the replacement of the only 3-year-old plant, the Nüdling company will considerably increase the production and the product quality in the future.

From the purchase of the plant to the adaptation of the already existing infrastructure and the commissioning on site, such a project is always a challenge. For Dr. Stefan Mothes, authorised signatory of F.C. Nüdling Betonelemente GmbH & Co KG, the decision was right: "We saw the new hermetic press from SR Schindler at the BAUMA trade show 2019 in Munich and we quickly came to the conclusion that we would replace our existing system by the new UNI 1200 hermetic press from SR Schindler." The reject rate of the old slab press was much too high and the production volume much too low and it became increasingly apparent that the goals originally set could not be achieved with the given technology.

Refined premium concrete slabs

The family-owned company Franz Carl Nüdling Basaltwerke GmbH + Co KG can look back on 127 years of experience in the production of building materials. Together with its subsidiaries, it operates in the three business segments - natural stone with high-quality aggregates and asphalt, precast technology with noise barrier systems and elements for residential, public and industrial construction, and concrete elements with concrete products for sophisticated patio, garden and landscape design and for ecological road and path construction.

One of the specialities of F.C. Nüdling Betonelemente GmbH + Co KG are refined premium concrete slabs with very high-quality standards (Fig. 1).



Fig. 1: Refined premium concrete slabs



Fig. 2: General view of the press

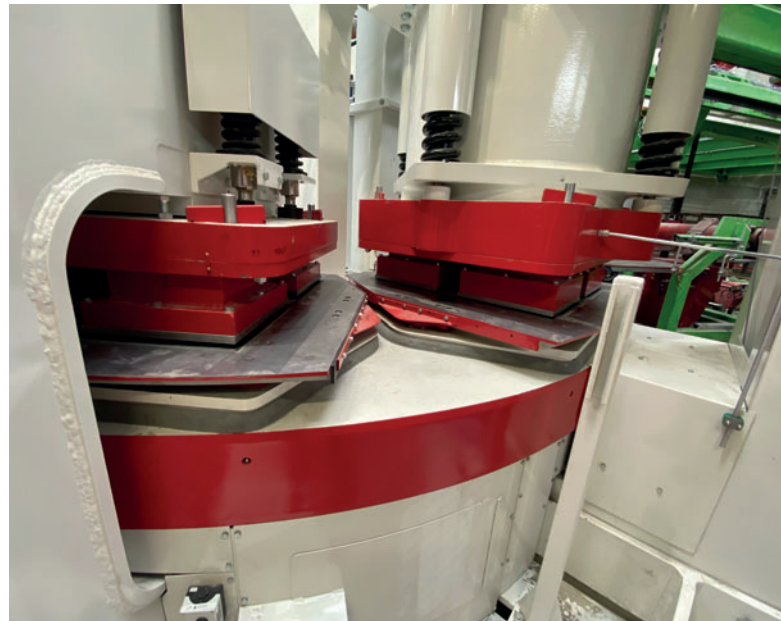


Fig. 3: Pre- and main pressing station

The new UNI 1200 hermetic press, which operates with a maximum main pressing force of 12,000 kN (1,200 tonnes), will ensure F.C. Nüdling a reliable, consistent quality in production as well as an increase in product variety in the future (Figs. 2 and 3).

Robust and easy to maintain

F. C. Nüdling's old plant was only three years old when the company decided to part with it. The decision for the UNI 1200 was made mainly because of the proven design principle namely, to separate all workstations from each other and thus avoid negative interactions. The use of only well-known German component suppliers and the associated fast availability, as well as the energy savings of approx. 20% due to the new innovative hydraulic power unit were further good reasons.

Punctual commissioning of the hermetic press

The on-schedule installation of the new plant is particularly important to the Nüdling company. In the currently challenging time due to the corona pandemic, the authorized signatory Dr. Steffen Mothes is all the happier that the commissioning of the hermetic press is going according to plan. The schedule agreed between the contracting parties in December 2019 has been adhered to so far. The cooperation between the experts from SR Schindler and F.C. Nüdling works smoothly and efficiently. Dr. Mothes is convinced: "This project continues a longstanding, trusting relationship with SR Schindler." Availability, short response times and a competent after-sales service team are therefore essential, because "after the sale is before the sale".

The hermetic press is the heart of the production, and its replacement is intended to bring it to a new, higher level. Among other things, the existing foundation was adapted to the new press and the new machine was brought into place using double portal lifting technology. To improve ergonomics, the original direction of rotation of the press was changed and the existing infrastructure was adapted.

Product quality should exceed expectations

The new UNI 1200 hermetic press from SR Schindler was presented for the first time at the BAUMA in spring 2019. The commissioning at F.C. Nüdling is a premiere and is therefore being followed with great interest. Due to the new technical features of the UNI 1200 and the experience with the old press, the expectations and requirements are particularly high.

The renewed investment after only 3 years needs to be justified. Dr. Steffen Mothes is convinced at the current stage of commissioning: "We will generate high dimensional accuracy and surface quality. The many technical innovations on the UNI 1200 will improve the product quality. „For example, the ejector and the facemix distributor can be adjusted during operation (Fig. 4).

Tedious manual adjustment work, which results in hardening of the concrete and laborious, time-consuming cleaning work, will be history. The facemix volume can be easily and quickly adjusted during the ongoing production process. The powerful servo motor of the turntable drive also allows shorter cycle times. The servo-hydraulics also ensure a very good energy balance of the entire system (Fig. 5).

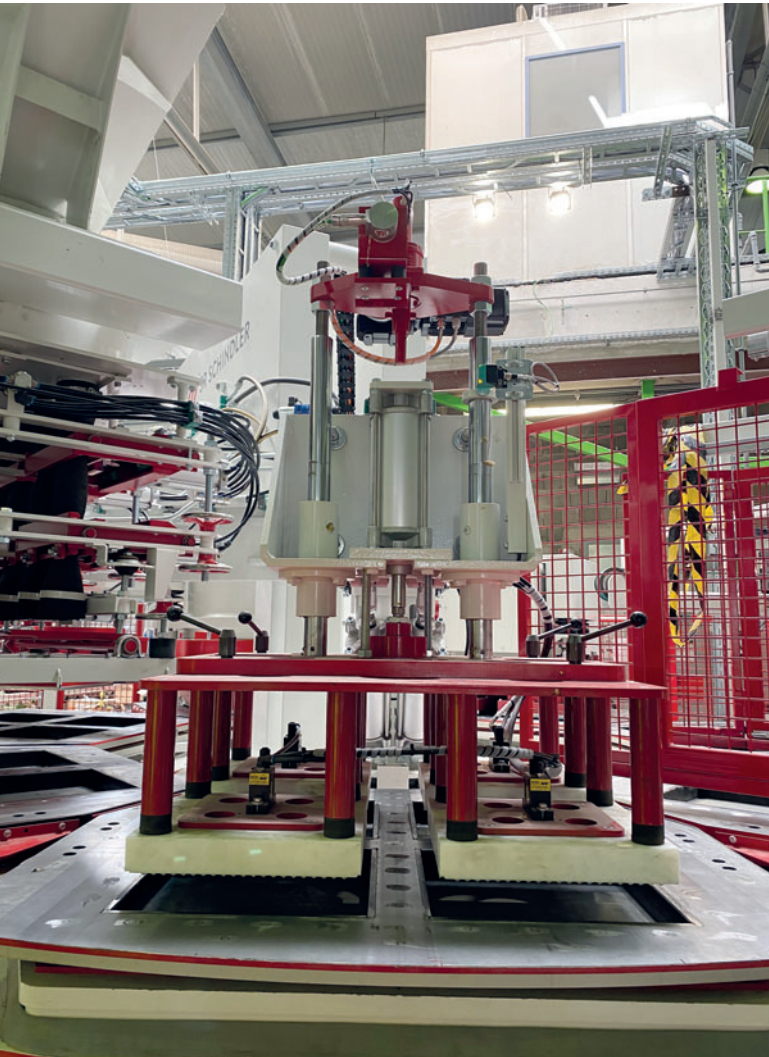


Fig. 4: Tube doser on the left in the picture and facemix distributor in the foreground



Fig. 5: Press hydraulics

Stable and controllable processes

The processes of the plant can be controlled effortlessly. An optimised press control system and a self-explanatory visualisation make the machine extremely convenient to operate. This, too, has so far made commissioning much easier and faster. The commissioning of the new UNI 1200 has so far been uncomplicated and efficient despite the current challenges due to the corona pandemic. F.C. Nüdling is therefore optimistic that routine production will start on time. Dr. Mothes is extremely confident that the goals set will be achieved as planned and even exceeded. ■



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FURTHER INFORMATION



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