Part 2 - Shaping the future together

Utilize existing potential instead of constructing a new production hall

Every day counts in the construction industry. For SCHRAG's customers, the emphasis is not only on quality and costs, but also on delivery times in particular. To assert his claim of market leadership in the edging profile business sector, Thomas Goswin, CEO of the SCHRAG Group, aimed to gain a two days head start with automated processes. Up to now, SCHRAG has produced edging profiles at four sites in Germany. The aim was to take the pressure off these sites in order to create room for growth. A new production site for the automated manufacture of purlins and rafters was to be developed for this purpose. Thomas Goswin got the support of the Smart Factory Consultants from TRUMPF for the factory planning. Along with the SCHRAG project team, they found a clever alternative to building a new production hall while working on a collaborative project.

SCHRAG Kantprofile GmbH

www.schrag-kantprofile.de

The SCHRAG Group with headquarters in Hilchenbach in North Rhine-Westphalia is a network of linked specialists, offering comprehensive solutions for roofs and facades in lightweight metal construction. In the largest business unit, the Group manufactures and sells edging profiles at four sites in Germany as well as in the Czech Republic and Poland.

INDUSTRY	NUMBER OF EMPLOYEES	SITE
Lightweight metal construction	500	Hilchenbach (Germany)

Challenges

Time is a deciding factor in the construction industry. Reason enough for SCHRAG CEO Thomas Goswin to start a strategic process for positioning the entire SCHRAG Group across all business units in 2017. The main focus was on edging profiles for the construction sector. Goswin knew that shorter delivery times were only achievable with automated processes and planned to construct a new production site where in future purlins and rafters for the substructure in hall construction will be centrally and efficiently manufactured. However, Thomas Goswin did not want to just rely on his own expertise in the practical implementation of this large-scale project. The Smart Factory Consultants from TRUMPF were called in to plan the cutting-edge production for lightweight metal components.

"The TRUMPF Consultants found the best solution for us with their expertise and new perspectives."

THOMAS GOSWIN
CEO OF SCHRAG KANTPROFILE GMBH

Solutions

The Smart Factory Consultants carried out extensive actual state analyses at all sites in close collaboration with Thomas Goswin, the site managers, the technical and IT managers as well as colleagues from the Production, Sales and IT departments. In-depth discussions with all participants, analysis of material and information flows as well as consideration of an extensive database provided by SCHRAG brought clarity concerning all production sequences and revealed optimization potential. But not only that: in view of the calculated production numbers, the project team members and the TRUMPF Consultants considered alternatives to the construction of a new production site. It became clear that developing and networking the existing sites would bring more added value for the SCHRAG Group than the construction of a new production hall. This resulted in the decision to develop the site in Seevetal in Hamburg, making it ready for the automated production of purlins and rafters.

Implementation

For Thomas Goswin, the condition for a collaboration with the Smart Factory Consultants from TRUMPF was that the consultation would be unbiased, in other words, independent of manufacturer and machines. This was exactly the type of consultation the Consultants provided. They recommended the purchase of a fully automated roll-profiling system from an Italian manufacturer for the production of standard profiles. A press working line was also installed in Seevetal, as special profiles are often included in the scope of delivery for large orders and it would not be productive to split the orders. This includes a 12.5 metre press brake from EHT for special profiles. A new coil store is used for both production strands. A new lorry bypass is included in the plan for efficient delivery and return of material and parts. A new office building completes the site development. The production start is scheduled for March 2022.

Forecast

Numerous sub-projects resulted from the site analyses of the TRUMPF Consultants which Thomas Goswin is aiming to tackle soon: "There are a few areas where we can create more transparency and establish more efficient processes. Taking the pressure off the sites also gives us space for automation and digitization solutions." "My big goal is to network all the sites," explains Goswin and he knows even now that the concentrated collaboration of the TRUMPF Consultants with the SCHRAG project team will continue in the coming months.

Our expectations have been met

SCHRAG's new production hall now has an automated roll forming system recommended by TRUMPF Consultants for the production of standard profiles. "Compared to conventional production, this multi-roll former is around four times faster. This way, we can also deliver real large-scale projects," explains Ingo Kleinau, manager of the Hamburg site. And the number of personnel required is also significantly lower, according to Kleinau: "In conventional production I have four to five people on duty, while this roll forming system can be operated by one person."

The 12.5 meter press brake from EHT recommended by the Smart Factory Consultants is an important addition to SCHRAG's machinery, explains Kleinau: "Orders often contain standard and special profiles. We need to be able to provide both. This is possible with the roll forming system and press brake from EHT."

Until now, SCHRAG processed 2,500 to 3,000 tons per year in Hamburg. "With the new machines we can now process almost 20,000 tons per year," says Kleinau, adding: "That is what our customers need today: delivery of large quantities - quickly. Our expectations have been met entirely."