

Increased material flow through accurately separated sheets

Highly precise De-Coil- and cutting center for Seibel + Reitz



User

Seibel + Reitz GmbH + Co. KG is better known under its brand name SUR Abgastechnik – and even better through the optics of their products: shiny chimneys of stainless steel. The flawless chimneys are produced in the factory of Biedenkopf-Breidenstein. So far, blank cuttings for production of the pipes had been delivered by external service contractors – partly with long delivery periods and minimum order quantities. In order to be able to produce with lower stocks and even more flexible, this working step was brought inhouse. (www.seibel-reitz.com)

Success

The slip bending- and welding center for stainless steel pipes needs blank cuttings with a high degree of accuracy and with an exact palletizing for its feeding. In order to benefit from the advantages in cost and flexibility during the internal cutting of coils it was necessary to have an exactly working De-Coil-and Cutting center. Winner of the evaluation: SCHRÖDER-FASTI. The specialist for sheet metal working solutions integrated existing standard machines as well as newly developed components to a customer-specific center that delivered the blank cuttings fully-automatic and with highest precision for a demand-driven pipe production.

Special construction

De-Coil- and Cutting center

- Unwinding equipment for coils 0.6 up to 0.8 mm stainless steel
- Conveyer track aligning the sheet
- Shear with portal in front for collecting the sheet and guide with a hold-down device
- Pneumatic stacking device
- Automatic retractor for protective paper
- Easy handling

The well-known stainless steel chimneys from SUR are in large parts serial products, but with a wide number of variety because of different measurements and diameters. Specialist dealers order via a configurator and the sections and connections with individual dimensions have to be produced demand-driven. As long as Seibel + Reitz had their sheets delivered completely pre-cut it meant a big effort in coordination with the supplier, longer delivery periods and capital commitment because of high stocks. Additionally, upon delivery of the stocks there has always been the danger of transport damage – scratched sheets cannot be used, since the untreated surface at the same time was the surface of the final product.

For Wolfgang Pitzer, responsible for purchase at Seibel + Reitz, the situation has been a thorn in the side and he started looking for the possibility of insourcing. He got various offers and evaluated them. A decision was made for a manufacturer who has already been present in the factory with multiple slip bending rolls and

flaring machines: SCHRÖDER-FASTI Technologie GmbH. The manufacturer of sheet metal working machines thereupon built a special construction that consists of an unwinding equipment for coils and a conveyor track aligning the sheet.

The shear making the cuttings is equipped with a portal in front for collecting the sheet and a guide with a hold-down device. Both ensure that the sheet has no backlash at all and that the cutting is made accurate to size and at an exact 90° angle to the sheet conveyer. The pre-cut metal sheets are collected pneumatically and stacked precisely on a pallet within guide rails. Afterwards, the pallet is taken to the slip bending- and welding center.

Improved delivery capability

The new shear from SCHRÖDER-FASTI is working to capacity, processing about 180 tons of steel sheet per year. To Seibel + Reitz insourcing has paid off. Buying coils with 0.6 up to 0.8 mm steel sheet and cutting them by themselves, has enormously reduced costs and improved delivery capability. The batch sizes when cutting stainless steel sheets are between 100 and 1,500 pieces. In order to be able to leave the system running unattendedly even during bulk orders, an extension was constructed: A collector for the paper which is running along in the coils for the safety of its surface. As the paper has a different thickness and tensile strength depending on the manufacturer and coils, the system needs to be adaptable – and this proved to be successful as machine operator Günter Achenbach confirms.

„The cooperation with Schröder is very good. Just before the installation we had to relocate the position of the center at our own premises. I liked the calm reaction to this serious change of plans – the system was adjusted quickly without any difficulties“, says Wolfgang Pitzer.

„The center works extremely reliable and is easy to handle. We can also use SCHRÖDER-FASTI-cutting center for special dimensions and larger sheets, just as we need them for boiler plates. That SCHRÖDER-FASTI also develops controls and software was a big advantage during the integration of the paper retractor.“

Günter Achenbach
Machine operator



Schröder Group

The Schröder Group consists of Hans Schröder Maschinenbau GmbH, located in Wessobrunn, Germany, and SCHRÖDER-FASTI Technologie GmbH, located in Wermelskirchen, Germany.

Founded in 1949, Hans Schröder Maschinenbau GmbH combines traditional and modern aspects in mechanical engineering. Successfully managed as a quality and customer-oriented family company, Hans Schröder Maschinenbau specialises in the development of modern machine concepts for folding and cutting sheet metal.

Thanks to the 2006 integration of the Fasti Company and its workshops and a global presence, the Schröder Group is now a leading provider of machines for folding, cutting, crimping, beading, and circular bending sheets of all kinds. The diversity of the range of precision machines ranges from proven solutions for trade to innovative, high-performance machines for automated industrial production. The Schröder Group now employs more than 240 workers at various domestic and international locations.

SCHRÖDER
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