

With roots dating back well over 230 years, the BUTTING group has come to represent excellence in quality and flexibility in metal processing. The core business of the group involves processing stainless steels and clad materials, and the core competences in material grade, welding and forming technology, and in quality assurance, are continuously being expanded. Hermann Butting, President and owner of BUTTING is the seventh generation family member to lead the Group and has been in charge since 2000. He spoke to Stainless Steel World about how the group is providing tailor-made, ready-for-installation products for a range of demanding industries around the globe.

#### By Joanne McIntyre

KCI: In preparation for our interview, you asked to speak about plant construction. HB: Does that surprise you? KCI: To be honest, yes. BUTTING is well-known as a pipe manufacturer.

HB: We do that too. But BUTTING is more than just a pipe manufacturer. For example, in my most recent visit to the USA, I visited a global player in the measuring technology area. The company buys pipes for its measuring devices and has them cut into fixed lengths by a different company. Then it asks yet another company to mechanically process these





For many years, BUTTING has been producing for drilling and well technology. Thus, for example, the family company has supplied perforated plates, filter screens, riser pipes, well-heads and elbows for a fire extinguisher and service water system. One reason why our customer opted for BUTTING was the demanding tolerances of the components with respect to shape and position. The flange connections were turned at precisely 1/100 mm. The high degree of prefabrication also paid off.



fixed lengths. BUTTING would supply it with components ready for installation. So the responsibility for the entire value chain would lie with a single company. Tailor-made!

# KCI: How long have you been offering this service?

HB: Around ten years ago we took the strategic decision to develop in that direction. Since then we have invested millions in laser cutting equipment, presses, grinding machines and processing centres.

You can see that sometimes you need a lot of patience till plans can bear fruit. Today we are very well placed in this area and offer real added value. We think in terms of generations. I should like to hand over a healthy company to the eighth generation. That's why we listen to our customers and do everything to make them successful.

# KCI: Does this make BUTTING competitive worldwide?

HB: Oh yes! Because this further processing of our pipes into components ready for installation is not only a question of personnel costs, but also of know-how and technology.

#### KCI: And yet you have two plants in China.

HB: We would like to be at home in the Chinese market and serve the local market, and also exploit the advantages of the location to deliver products from China worldwide. To give an example: Our sales team in Calgary/Canada sells a ready-for-installation module for sea water desalination to the customer's design. The pipes are made from super



Hermann Butting, President & owner of BUTTING.

duplex in Germany and delivered to China, where we weld and assemble the module. BUTTING China even produces and paints the carbon steel frame and installs all the fittings – ready for installation.

KCI: I understand. You take advantage of the cost benefits in China and offer "everything from a single source" responsibility?

HB: Exactly. That's what we understand by machinery and plant engineering. This can just as easily involve spools as machine components such as cleaner





In cooperation with a long-established customer, BUTTING developed the prototype for a double pipe design and brought it to market. The double tubes are built into a heat exchange reformer. More than 600 double wall pipes have been successfully produced up to now for a South African and an Indian plant. The inner and outer pipes NB 150 and NB 200 consists of high performance materials containing nickel. The challenge: For process-related reasons, the pipes are welded together from two materials (alloy 693/alloy 602 CA or alloy 693/alloy 601). Thus even during the manufacturing of the pipe, very high precision was required.

#### **COVER STORY**



Worldwide installation of pipelines and vessels for selected industries including the paper and pulp industry and bio-energy technology.

banks and disc filters for the paper industry, or vessels. We're very flexible.

KCI: How do you ensure quality in China? HB: Leadership and training, training, training. KCI: You just mentioned vessels. What product range do you offer in this area? HB: Our German plant in Schwedt on the Oder specialises in vessel construction. The spectrum runs from simple storage tanks through agitator unit vessels to

BUTTING is one of the world's leading processors of stainless steels. Its range of services includes:

- · corrosion resistant pipes.
- · clad pipes.
- · special pipes and components ready for installation.
- · spools and welded components.
- · vessels, tanks and columns.
- · assemblies.

The core skills lie in forming, welding and materials technology as well as mechanical processing. BUTTING products satisfy the highest quality standards. Customers all over the world rely on products from the family company.

complicated columns and pressure vessels. Thus BUTTING Anlagenbau has already produced a pressure vessel weighing more than 50 t.

#### KCI: What are your standard vessels?

HB: There's no such thing. We manufacture individual, customized products. Here are three examples from last year:

- The TESA project in Hamburg included the production of three process vessels for the reactor of an adhesives production plant with a diameter of 2,500 mm, 3,500 mm high and 5,600 kg in weight, made from material 1.4404; the surfaces are electropolished on the inside with  $R_a=0.4~\mu m$ , and an additional 25 process vessels were produced, with the total weight of the order being 48 t.
- The sugar factory project in Algeria, with production including three syrup vessels, each with a diameter of 4,090 mm, 9,500 mm high and each more than 8 t in weight, made from material 1.4301/1.4307, with an additional delivery of 30 vessels, some made from black steel.
- A bio-diesel plant in France, with prefabrication and installation of the pipes for process piping made from a variety of materials, including 1.4539 and carbon steel, in the size range from NB 15 to NB 200.

So you can see that we produce for different sectors and application fields.





BUTTING produces complete customised solutions through direct further processing of the pipes. The stainless steel processing company regularly supplies a number of customers with components ready for installation in pump casings, rollers, and cylinder pipes. Specific procedural applications are used along the value creation chain, such as laser, welding, metal cutting and forming technologies. Thus first-class processing, rapid availability on the basis of Kanban logistics and ensuring process and machine capability are guaranteed.



The know-how: Processing of corrosion resistant steels and clad steels into components ready for installation using appropriate material-specific welding techniques.

We've also constructed a separation vessel made from duplex steel for an oil platform.

# KCI: Mr. Butting, you were talking about your Schwedt site and your plants in China. How well positioned is BUTTING in the global context?

HB: Our largest sites, Knesebeck and Schwedt, remain the ones in Germany. They are followed by the two production sites in China, Shanghai and Tieling. We have a sales office in Canada with a store for duplex and superduplex pipes. In addition, there is a BUTTING team based in Rio de Janeiro, Brazil. We are currently constructing another plant construction company in the state of Santa Catarina. There we aim for the further processing of BUTTING pipes for the Brazilian market – with local content tailor-made by BUTTING.

KCI: I remember. You kindly gave us an interview on that subject at the Stainless Steel conference. Is Brazil such an interesting market for you?

HB: Yes. Today, BUTTING is one of the leading manufacturers of clad pipes and the only manufacturer which can produce and supply both metallurgically and mechanically clad pipes. We also offer to produce clad spools for the use of

our customers. There is a demand for precisely these pipes for the difficult explorations off the Brazilian coast and also for the construction of FPSOs. BUTTING is a very competitive supplier in this area.

# KCI: I have heard that BUTTING is also active in Uruguay. What are you doing there?

HB: In Uruguay we are just finishing the largest installation exercise in our corporate history, the Montes Del Plata pulp plant. The scope of the delivery includes pipes, spools, vessels and on-site installation. At peak times, there were 360 fitters working there under the responsibility of BUTTING. The total value of the order was around EUR 50 million. That too is what we understand by machinery and plant engineering.

### KCI: Do you also perform installations in the oil and gas industry?

HB: No, we concentrate our installation work in the pulp and paper and bio-fuels industries. For the oil and gas industry, our work is confined to pipes, spools, the odd vessel and components ready for installation.

Benefits of components ready for installation:

- Use of semi-finished, high-value products made by BUTTING.
- Cost-effectiveness through direct further processing of the pipe on the premises.
- Butting supplies customised complete solutions through the use and combination
  of specific procedural applications along the process chain, such as laser,
  welding, metal cutting and forming technologies.
- · High degree of automation und high reproducibility.
- First-class processing quality, including through consistent quality assurance.
- Corrosion resistance through full body pickling.





BUTTING produces a wide range of vessels, tanks and columns.