



Custom-made Machine Tool secures Contract

Customer satisfaction is the highest precept and means that a company will always be faced with new challenges. The company Halbach & Braun Maschinenfabrik GmbH & Co. is facing the challenge and invests constantly in mechanical production. But Halbach & Braun still faced a special challenge last year despite this.

Halbach & Braun Maschinenfabrik, headquartered in Hattingen, focuses primarily on the production of mining technology. Established in 1920, this owner-managed company now employs 45 members of staff. The company has also been active abroad since 1978 and it is now represented on the international market with 4 branches and/or partner representatives.

Its core competence has always been in chain scraper conveyor and crushing technology for the underground long wall mining of coal. Parts are produced on two different machining centres by the manufacturer AXA for chain scraper conveyors, plough systems, primary crusher plants for surface and deep mining and gearboxes with a drive rating of up to 1.5 MW. The Halbach & Braun systems are used, for example, in underground long wall mining, in surface raw material extraction / in-pit crushing (note: stone crushers with a long feed conveyor and a large roller), in loading situations and in the processing of the raw materials.

Last year Halbach & Braun rose to a particular, new challenge. This was to manufacture chain drive sprockets and shark sprockets (note: drive shafts for chain conveyors), which create mutual processing requirements because of very large dimensions in addition to very narrow tolerances. During the process two components interlock and need to withstand very great forces at the same time. The prerequisites for the production of these workpieces were not in place at that time and the management decided to invest in a new machine tool to process these specific parts.

As Halbach & Braun had already purchased a VHC 50 machining centre from AXA Entwicklungs- und Maschinenbau GmbH in 2017, they once again turned to AXA and cooperated to create a personalised concept that satisfied the necessary requirements. The result: the AXA travelling column machining centre VCC 50 - a 5-axis machine tool with SK 50 spindle (540 Nm torque, at 40% ED), continuously positionable swivel head and integrated NC rotary table.

High machining performance as crucial selling point

Once decisive factor for the VCC 50 was its high machining performance. The materials that need to be processed have a structural strength of up to 1250 N/mm²: shark sprockets, chain sprockets, toothed strips, base plates, gear components and casings with a high material density such as 42CrMo4 V2, 30CrNiMo8 V2, HB400, S355.

In the end a machining centre from AXA was chosen because it had both the required quality and precision and the price/performance ratio was right. Also the AXA headquarters are really close by and they had provided good service through their contact staff in the past.

Looking back, there is great satisfaction with the result. Both the travelling column machining centre VHC 50 XTS that was purchased back in 2017 and used primarily for processing large parts, at times also in pendulum mode, and the new VCC 50 process the workpieces smoothly and with very high precision and have good reserve capacity.

Good advice

Halbach & Braun sees a reliable partner in AXA. They worked closely together during the planning of the projects, so that this resulted in finding and developing optimum solutions for the customer requirements. The ongoing customer care from the AXA staff and the reliable service underscore the impression that the customer is taken seriously. AXA not only sells machines but also solutions for a wide variety of requirements. AXA's own development, construction and production services mean that they can realise just about any customer requests. Each machine is as unique as the customer.

About AXA

Successful with individually customised solutions

Just like Halbach & Braun GmbH & Co., AXA Entwicklungs- und Maschinenbau GmbH is also a family firm. Established in 1965 with its headquarters in Schöppingen, the company employs approximately 370 staff for metal-cutting machining centres in travelling column and portal designs. Stability in both quality and performance and clear orientation to customer service have been anchored firmly in the AXA company values for more than 50 years. Its unique depth of production together with the ability to integrate other technologies into existing concepts provide each customer with a customised solution.

Halbach & Braun Maschinenfabrik GmbH
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Image 1: Processing a toothed strip on the AXA VCC 50



Image 4: Thomas Jorna (AXA), Rüdiger Thomas and Friedrich Braun (Halbach & Braun)



Image 2: Primary crusher plant



Image 3: Shark sprocket