



Connected Manufacturing for Added Value

FFG at AMB 2018, Hall6-B11/C11, September 18-22

PRESS
INFORMATION

Eislingen, August 15, 2018 – At the AMB in Stuttgart from September 18 to 22, FFG will display all its brands in the same booth for the first time. The comprehensive range of metal cutting machines has been enhanced with entirely new products, proprietary automation, digital factory and connected production solutions.

In the field of advanced machine tools and systems, the FFG brands stand out with their range of technologies and application knowhow on offer. Manufacturers like VDF Boehringer, Tacchella, Pfiffner, HESSAPP, Modul or MAG are pioneers in milling, turning, grinding and various gear making technologies. They developed into specialists for turnkey manufacturing systems, flexible cells or rotary transfer machines and complete processing of large, complex parts, always meeting the demanding specifications of leading global manufacturers. “We are excited to meet our customer base in our home region Stuttgart and reveal many new benefits across our portfolio. At all our plants, our experts targeted their innovation work towards AMB, and they came up with inspiring results. The product premiers from Modul, HESSAPP and Tacchella, the demo cell from our MAG Factory Automation team or the various technology and software premieres are just some examples”, says Dr. Gerald Weber, CEO at FFG Europe & Americas.



Closing the loop for productivity

Given the universal portfolio of FFG, the AMB booth is set to give visitors a global understanding of the latest developments in modern metal working. A spherical construction, called the “iGlobe”, will be at the center of activity, symbolizing FFG’s holistic approach to production.

VDF BOEHRINGER

HESSAPP



meccanodora



MORARA

Pfiffner



TACHELLA

WITZIG & FRANK

Here, FFG's portfolio of machinery, engineering and digital services is displayed concisely to allow for an intuitive understanding of how connected manufacturing can create added value. On the outside of the "iGlobe", the FFG brands present their highlight applications from Automotive engine, powertrain, transmission, e-mobility, Aerospace engine and structural parts, Railway, Retrofit and high volume applications for various other industries.

Linking Technology, Machinery, and Automation

As factory automation takes over the future of production, MAG is using its system business expertise to develop a progressive concept of flexible automation. At AMB, the MAG Factory Automation team will present a machining cell which is taking flexibility to a maximum. A MAG SPECHT 600 machining center with pallet changer is the



core of the setup. A gantry-mounted robot is used for loading parts and tools into the machine or pallet changer. These are supplied by an automated guided vehicle (AGV), which can generally be equipped with any kind of workpiece carrier and robot coupling. The part

handling is controlled by a vision system and the entire cell is controlled by a central CNC, which is again connected to an industrial cloud application.

Machining any kind and number of Turbo Charger components

A further automated cell at the booth is targeting the needs of turbo charger manufacturers. The widespread portfolio of FFG provides opportunities to smartly combine technologies for high productivity, precision and flexibility at better cost per unit. As a live example at AMB, FFG shows a robot-automated cell with a MAG SPECHT 450 DUO dual spindle milling center and a Leadwell TW-8 dual spindle turning machine. The duo is able to produce about 200.000 to 500.000 turbo charger bearing housings per year at moderate investment cost. At the show, bearing housings made of grey cast iron GGG250 will be machined at a cycle time of 90 sec/part. Beside this demo, FFG will also present its solutions for compressor and turbine housings, bearings and turbine shafts on rotary transfer and grinding machines.

VDF BOEHRINGER

HESSAPP



meccanodora



MORARA

Pfiffner

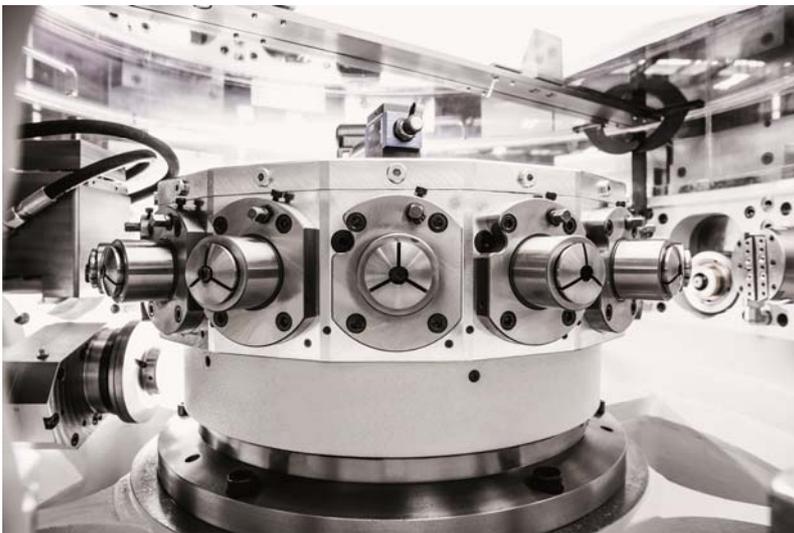


TACHELLA

WITZIG & FRANK

Pfiffner – twelve finished parts per minute

The Pfiffner experts, together with their rotary transfer colleagues from IMAS and Witzig & Frank, specialize in complete machining of high volume parts, utilizing various technologies in a sequential process. At AMB, Pfiffner will display a real customer process on its hydraulic rotary transfer machine HC 32-16 Hydromat, equipped with modular-designed CNC machining units. Latest control technology and full CNC control of up to 5 axes per station provide for shortest cycle times and highest output rates at a consistently high quality. The machine will perform complete machining of an Airbag Holder from bar in 5.1 seconds.



Total gear solutions of Modul and HESSAPP machines

Modul, MAG, HESSAPP and VDF Boehringer have cooperated for years in the field of integrated turning and hobbing equipment. The technology portfolio of Modul has recently grown through the acquisition of MHD, a neighbouring company in Chemnitz with close ties to Modul, extending the range of soft machining gear processes with bevel gear generating and gear shaping. In addition, the brand developed its own solution for skiving, including a full scale software package. These additions complete the FFG offer for soft machining of gears, together with the existing solutions for cutting of external and internal gears, cold forming, as well as chamfering and deburring.



VDF BOEHRINGER

HESSAPP



meccanodora



MORARA

Pfiffner



TACHELLA

WITZIG & FRANK

At AMB, Modul will turn up with the bevel gear generator B 320 for applications up to 350 mm. An innovative machine and drive concept allows for high performance machining of straight bevel gears. CNC supported cutter head change, direct driven rotary main axes with torque motors, absolute measuring systems in all axes and a central, generously designed chip disposal concept allow for productive applications, for example in the agricultural, conveyors or general machinery industries. Right next to this premiere, HESSAPP will show the new skiving process, already implemented in a customer machine. The DVH 500 L WS will machine a real workpiece, applying inside skiving, outside turning, and milling of a decentral nut from the inside on a spur gear. The proven machine concepts thus comes with an extended range of technologies, enabling it for various applications in the fields of trucks, e-mobility, agricultural machines and more. Dedicated software packages for the skiving and bevel gear generating processes are rounding out this twofold gear-making display. They can be tried and tested live at the machines.

All-Purpose Solution for Flexible Large Part Machining

Next year, VDF Boehringer will celebrate its 175th anniversary expertise in machine tool manufacturing. From its long standing success in turning and crankshaft machining, FFG will show the VDF 1300 DUS, a cycle-controlled lathe with extremely high cutting performance at AMB. Due to the cycle control and the possibility of manual operations, machines of the VDF DUS series are mainly used for single workpiece or small batch size production. An automatically indexing turret in combination with a second chip protection door allows full CNC machining and therefore the enhancement of efficient use in medium batch sizes as an alternative to a CNC lathe.



Leadwell BC 600 – universal 5-axis performance

As part of FFG, Leadwell provides creative solutions for machining complex components with all-inclusive equipment. The BC-series is equipped with torque-driven C-axis built-in rotary table and tilting head for complete flexibility to

VDF BOEHRINGER

HESSAPP



meccanodora



MORARA

Pfiffner



TACHELLA

WITZIG & FRANK

machine any workpieces. Furthermore, the equipped Heidenhain or Siemens control allows simultaneous 5-axis contouring and 5-face machining thus reduces processing time and improve performance.

PRESS INFORMATION



Tacchella Crossflex – the grinding experts from Cassine/Italy will present an external cylindrical grinding machine with in process gauge and flexible automation possibilities



The UNIMOG – a real Boehringer! The Unimog 7200 was the first series modell of the world-renowned allrounder, at the time called “Ochsenkopf” (Ox head). From June 1948 to 1951, exactly 600 pieces were built by Boehringer, of which about 100 to 120 are still around, one of them will be shown at the FFG booth at the AMB, announcing the 175th Boehringer anniversary next year.

VDF BOEHRINGER

HESSAPP



meccanodora



MORARA

Pfiffner



TACHELLA

WITZIG & FRANK



PRESS INFORMATION

About FFG Europe & Americas

The FFG entities in Europe and the Americas unite major players from the German, Italian, Swiss and American machine tool industry with a broad range of milling, turning, grinding, and gear manufacturing technology, and the knowhow of the renowned machine tool brands VDF Boehringer, Hessapp, IMAS, Jobs, MAG, Meccanodora, Modul, Morara, Pfiffner, Rambaudi, Sachman, Sigma, SMS, Tacchella and Witzig & Frank.

Since 1798, these brands have substantially contributed to the progress in industrial manufacturing and are well known as reliable and innovative equipment and systems solutions suppliers for the automotive and truck, aerospace, machine building, general machining, railway industry, energy and heavy engineering industries.

While being an independent group, these entities benefit from the strengths and opportunities of the global Fair Friend Group. They stand for premium technology within FFG.

Press Contact:

FFG Europe & Americas

Joachim Jäckl

Salacher Straße 93

73054 Eislingen

Tel.: + 49 7161 805 2513

joachim.jaeckl@ffg-werke.com

VDF BOEHRINGER

HESSAPP



meccanodora



MORARA

Pfiffner



TACHELLA

WITZIG & FRANK