

## PRESS RELEASE

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### **Driving Force for Industry 4.0 in Toolmaking: ZF Friedrichshafen is “Toolmaker of the Year 2021”**

**The corona pandemic has left deep scars in the international moldmaking industry. But in the meantime, production lines are starting up again in many places. Companies that not only considered financial success in earlier years, but also expanded their organizational and technological excellence, are now ahead of the game: The tool shop of ZF Friedrichshafen AG in Schweinfurt is one of these companies that has been relying on scientifically based key figures for many years, thus setting itself apart from competitors. ZF Friedrichshafen now received a special award on November 3, 2021 in the form of the overall victory in the industry competition "Excellence in Production" by winning the title "Toolmaking of the Year 2021".**

For 18 years now, the Laboratory for Machine Tools and Production Engineering WZL at RWTH Aachen University and the Fraunhofer Institute for Production Technology IPT have been presenting the best tool and mold making companies in the German-speaking region with the "Excellence in Production" industry competition. Once again this year, 265 companies took part in the competition despite the continuing difficult situation in the industry. Among the eleven finalists, ZF Friedrichshafen AG finally prevailed, having already been on the winners' podium once in 2012 as overall winner and in 2019 as category winner, as well as in the finals in 2015 and 2016.

After a year's break, finalists, jury, laudators and other selected guests were finally able to meet again in person in the Coronation Hall of Aachen City Hall. Last year, the corona pandemic had forced the organizers to hold the award ceremony in virtual space via a live stream. In keeping with tradition, this year's laudation for the overall winner was given by last year's winner Dr. Volker Franke from HARTING Applied Technologies GmbH in Espelkamp, Westphalia.

#### **ZF Friedrichshafen AG: Pioneer in automation and plant interlinking**

The toolmaking of ZF Friedrichshafen AG at the Schweinfurt site impressed the jury with its consistent implementation and further development of Industry 4.0 solutions, such as the automated creation of work plans based on an algorithm-based analysis of CAD data or the approach to the holistic implementation of clocked single-part production. In addition, the very high degree of automation and the cross-technology linking of the production machines convinced the jury of the efficiency of the tool shop. The high innovative strength of the employees is reflected in the numerous in-

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house developments. In this way, the company has already concretely implemented a large number of Industry 4.0 solutions to further improve internal value creation. According to the jury's verdict, the tool shop has thus succeeded in an outstanding way in positioning itself as a Group-wide technology center for the development and application of Industrie 4.0 solutions.

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ZF Friedrichshafen AG is a leading global technology group in driveline and chassis technology as well as active and passive safety technology and is one of the largest automotive suppliers worldwide. The TechCenter Tools, Measuring Equipment and Automation at the Schweinfurt location is a strategic competence center for cutting and forming tools as well as measuring systems. The tool portfolio includes complex progressive, progressive and individual tools, both for cold forming and for forming thick and thin sheet, as well as tools for fiber-reinforced plastics and increasingly applications for components for electromobility. In addition, there is a wide range of high-precision testing and measuring machines and small-scale automation systems.

#### **Also best internal toolmaking company with more than 50 employees**

In addition to the overall victory, ZF Friedrichshafen also won the award in the category "Internal toolmaking company with 50 or more employees". The jury also awarded a certificate to Robert Bosch, spol. s r.o. in the Czech Republic and Otto Dunkel GmbH from Mühldorf am Inn as further finalists in this category.

#### **Winner in the category "Internal toolmaking company under 50 employees" is Schürholz GmbH & Co. KG Stanztechnik**

This year's winner in the category "Internal toolmaking company under 50 employees" goes to Schürholz GmbH & Co. KG Stanztechnik from Plettenberg in the Sauerland region.

Among the particular strengths of the internal toolmaking of Schürholz GmbH & Co. KG Stanztechnik, the jury counted the development of new tool technologies with partners from the mechanical and plant engineering sector. The transparent rough and detailed planning as well as the continuous order tracking based on target and actual costs should also be emphasized.

For many years Schürholz has developed from a producer of stamped washers to a supplier of sophisticated precision parts, assemblies and components. The company's international clientele includes manufacturers from the automotive, supplier and electrical industries as well as other branches of industry. Stamping and stamping-bending technology, laser and CNC folding technology as well as welding and joining technology round off the technological range of metal forming. Overall, the Schürholz Group generated annual sales of over 97 million euros with more than 158 million

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parts produced in 2020 and employs 406 people at four locations. The company's central new toolmaking at the main site in Plettenberg in the Sauerland region supplies the international sites with progressive and Bihler tools.

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Other participants in this year's final were Schunk Sintermetalltechnik GmbH from Heuchelheim and Boida Kunststofftechnik GmbH from Langgöns.

**The winner of the category "External toolmaking company under 50 employees" is W. Fasnacht Werkzeug- und Formenbau**

Best "External toolmaking company under 50 employees" was W. Fasnacht Werkzeug- und Formenbau from Bobingen near Augsburg.

At W. Fasnacht Werkzeug- und Formenbau, the jury particularly praised the family-like working atmosphere combined with high efficiency. Even in times of crisis, the company has demonstrated very good profitability, the jury noted in its assessment.

W. Fasnacht Werkzeug-Formenbau started in 1990 as a "garage business" with three employees. Since then, the owner-managed company has experienced steady and healthy growth and today employs 25 people. Fasnacht sees itself as a small but high-performance mold manufacturer in the field of sophisticated injection molds and supplies cross-industry customers from all over the world with reliable solutions for complex requirements.

Other finalists in this category were BBG GmbH & Co. KG from Mindelheim in Unterallgäu and Primaform AG from Thun in Switzerland.

**Best "External toolmaking company with 50 or more employees" is Color Metal GmbH**

The winner in the category "External toolmaking company with 50 or more employees" is Color Metal GmbH from Heitersheim in Breisgau.

The jury was particularly impressed by Color Metal's very high process competence in milling and the consistent measurement of all components on the machine tool. A high degree of automation in the technologies and broad diversification of the tool spectrum ensured that the company could also prove crisis-proof in 2020.

Color Metal GmbH manufactures complex 1K, 2K and 3K injection molds as well as stack molds up to a size of 1000x1400 millimeters. The company's own design department develops the molds according to the customer's sample, finished part drawing in 2D or 3D data or according to its own and third party design documents

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and standards. The customers are manufacturers of technical precision parts in the automotive, watchmaking, sanitary and electronic industries, as well as medical technology and other branches of industry, with whom Color Metal GmbH jointly develops molds up to the series production of plastic parts. Today, almost 100 employees, including ten trainees, work at 30 CAD workstations and 60 machine tools.

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EMO - Orodjarna d.o.o from Celje in Slovenia was another finalist in the category "External toolmaking company with 50 or more employees".

### **Excellence in Production: Selection of the best toolmaking companies in the German-speaking region**

The Fraunhofer Institute for Production Technology IPT and the Laboratory for Machine Tools and Production Engineering WZL of RWTH Aachen University, together with an expert jury, determined the best tool and die making companies in four categories on the basis of a detailed comparison and visited them on site during the summer months: The ten jurors from industry, politics, associations and science then determined the eleven finalists, the category winners and the overall winner. A total of 265 moldmaking and tooling companies took part in the competition, 198 of which had completed the questionnaire in full, 50 of which were shortlisted.

The "Excellence in Production" competition took place for the 18th time this year. The day after the award ceremony, selected finalists and partners of the Aachen institutes presented their strategies for success during the now already 20th International Colloquium "Toolmaking with a Future". Under the motto "Toolmaking at the turning point", the organizers and selected speakers showed strategic and technological solutions for ways out of the crisis and set impulses for a long-term successful orientation of the toolmaking industry.

### **New chance next year**

Next year, the best plant train construction and mold making companies will once again compete against each other. Interested parties can already obtain detailed information about the competition at [www.excellence-in-production.de](http://www.excellence-in-production.de) and register from December 1, 2021. All participants in the competition will receive an individual evaluation of their strengths and potential for improvement.

After registration, all participants initially complete only the first part of the questionnaire with a small number of central questions and receive an initial key figure evaluation on this basis. In the second phase of the competition, more detailed questions are then to be answered. All participants in the second phase will also be

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entered into a draw for two additional on-site visits by the toolmaking experts from Aachen.

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This year's competition is supported by Hasco Hasenclever GmbH + Co. KG, Kunststoffcluster Österreich and Swissmem, the Swiss Moldmaking and Tooling Association, the German Engineering Federation and WBA Aachener Werkzeugbau Akademie GmbH. The media partners FORM+Werkzeug, VDI nachrichten and werkzeug&formenbau promote the competition through their comprehensive coverage of the winners and finalists. Another partner of the competition is the trade fair "formnext".

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The **Fraunhofer Institute for Production Technology IPT** combines many years of knowledge and experience from all areas of production technology. In the areas of process technology, production machines, production quality and metrology, as well as technology management, the institute offers customers and project partners at the Aachen location special solutions and immediately implementable results for networked, adaptive production. The Fraunhofer IPT's range of services is geared to the individual tasks and challenges within specific industries, technologies and product areas: Tool and mold making, optics, turbomachinery, life sciences engineering and lightweight production technology.

For more than 100 years, the **Laboratory for Machine Tools and Production Engineering WZL** at RWTH Aachen University has been synonymous with successful and forward-looking research and innovation in the field of production engineering. In eight research areas, both basic research and research projects oriented to the requirements of industry are carried out and practical solutions for the rationalization of production are developed. The Laboratory for Machine Tools and Production Engineering is led by the four professors Thomas Bergs, Christian Brecher, Robert Schmitt and Günther Schuh, who together also make up the Fraunhofer IPT's board of directors.

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