

# GANTRY MILLING MACHINES

Excellent quality of motion control.



THIS IS US.  
OUR ROOTS. OUR MACHINES.





PASSION DRIVES US

*„Our customers are the focal point of everything we undertake, as we aim to inspire them through our products, services and our corporate culture.“*

Johannes Fooke & Hendrik Fooke

Hendrik Fooke  
Head of Sales &  
Business Development  
5th generation

Johannes Fooke  
CEO  
4th generation

CONTENTS

- FOOKE a family-owned business ..... 4
- There is no alternative to „quality“ ..... 5
- Automotive industry ..... 6
- Aerospace industry ..... 8
- Railway industry ..... 10
- Special machines ..... 12
- Research and development ..... 13
- FOOKE - Service ..... 14

# FOOKE A FAMILY-OWNED BUSINESS

Founded by Heinrich Fooke in 1904, the family business initially started with a bicycle trade and its own forge for sign and fence production. However, after being acquired by Johannes Fooke in 1930, the company shifted entirely to machine building.

In the post-war years, following the company's reconstruction, Heinrich Fooke assumed leadership in 1956.

Under his guidance, the company diversified its portfolio, designing and manufacturing a wide range of devices and machines, including church chandeliers, fish stick breeding machines, and modern milling machines.

In 1994, Heinrich Fooke passed on the management of the family business to his son Johannes, who introduced significant changes in the order structure, expanded into new business fields, including the aerospace-, automotive- and railway industry. Since 2017, Hendrik Fooke has been involved in sales and business field development, ensuring a seamless transition as the future managing director.



## THERE IS NO ALTERNATIVE TO „QUALITY“

We prioritize quality with our „Quality Made in Germany“ philosophy.

As the years have gone by, we have continually grown. Together with our national and international customers, we have developed a global company that operates in multiple countries all around the world.

However, we are still firmly committed to our home country, Germany. Our origins lie in Borken located in Germany's Münsterland region. Here, we have established our success and it is here that our highly qualified employees manufacture first-class quality products under optimum conditions – and will continue to do so in the future. Our suppliers are more than just procurement sources; they are rather our partners, developing with us to exceed highest quality standards.

With our extensive experience and a commitment to ongoing development, we consistently stay attuned to the market.

This approach has enabled us to cultivate a comprehensive portfolio of machines that caters to nearly every customer requirement.



Heinrich Fooke  
1st generation | 1904



Johannes Fooke  
2nd generation | 1930



Heinrich Fooke  
3rd generation | 1956



Johannes Fooke  
4th generation | 1994



Hendrik Fooke  
5th generation



**VEHICLE DESIGN**

Excellent surface quality with highly dynamic 5-sided machining of large 1:1 design models

## AUTOMOTIVE INDUSTRY: DIFFERENT TIMES, DIFFERENT REQUIREMENTS

Vehicle design | Prototype construction | Toolmaking | Mould and die production | Jig and fixture construction | Cubing

Surface quality and precision - these are the requirements of model, prototype and tool and mold making. Different materials, from rigid foam to alloyed tool steel, must be machined efficiently and reliably on one machine.

In this type of machining, the programmed feed rate must be kept almost constant and at the same time at the highest level. Maximum rigidity of the machine structure elements and the feed drives are the basis for the best surface qualities and accuracies with outstanding productivity.

Models and prototypes in particular, but also tools and molds, are now machined linearly with the narrowest path distances. Partly in the classic 3+2 operation and increasingly also 5-axis simultaneous. FOOKE offers high-performance, highly dynamic 5-axis milling machines for this purpose.



**FURTHER APPLICATIONS AND REFERENCES**

**MODEL CONSTRUCTION**

Excellent surface quality in model and mold making



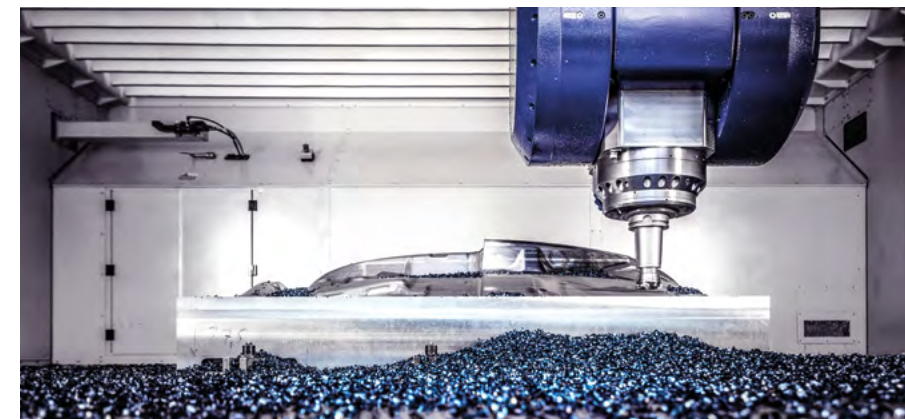
**PROTOTYPING**

Cubing models for function testing, pilot series or exclusive small series



**TOOL AND MOLD CONSTRUCTION**

Highly dynamic finishing and high precision rest machining



**FOAMING TOOL**

Optimum accessibility: 5-axis machining of the function side in one clamping





**FUSELAGE**

Mechanical removal  
- milling to residual  
wall thickness

Further information about  
outer skin machining



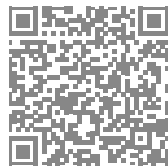
# AEROSPACE INDUSTRY: TAKE OFF FOR NEW OPPORTUNITIES

Minimum tolerances and a wide range of modern materials. These are the real challenges of the aerospace industry.

Demanding workpieces require demanding solutions. To provide these, we not only develop the machine required for the machining work, but also workpiece clamping systems specially tailored to the workpiece either as hard tooling systems or universal 'multi-tooling clamp systems'. We supply turnkey solutions, all from one single source.

– if desired, including hybrid process technology, such as abrasive water jet cutting or laser cutting and milling combined in one single system.

The high-performance chipping of aluminum or titanium and the machining of CFRP and other compound materials require different milling machines and machining centres



**FURTHER  
APPLICATIONS  
AND REFERENCES**

**STRINGER PROFILES**

Machining of 3-dimensional curved aluminum profiles with multiflexible clamping device, adjustable in each axis



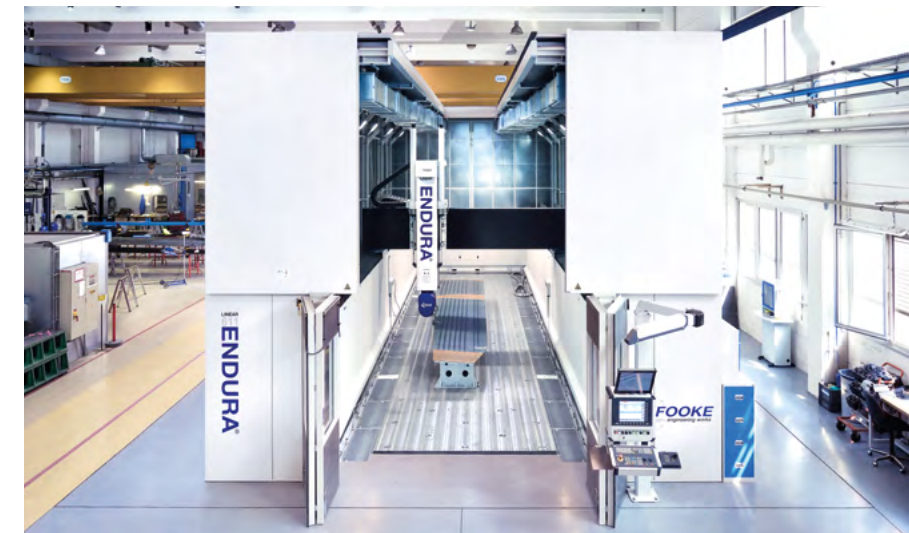
**DRILLING STATION**

Drilling and spindling of drill bushings of a vertical stabilizer in one line



**EDGE TRIMMING AND DRILLING OF CFRP WORKPIECE**

with moveable enclosure



**COCKPIT DOORS A350 XWB**

Gantry milling machine with integrated suction unit for milling and tapping workpieces made of CFRP and titanium





Market leader in the machining of aluminum profiles for rail technology

Long bed gantry milling machine  
ENDURA® 1006LINEAR  
with 2 portals

## RAILWAY INDUSTRY: MAKE WAY FOR PRODUCTIVITY

They need to be big, fast, reliable and, above all, robust: Milling systems for the manufacture of rail vehicles.

With the rise in global production of modern high-speed trains and trams made from large-volume aluminum profiles and components, FOOKE has been at the forefront.

Since the 1990s, we have developed milling systems and turnkey production centers in collaboration with various customers.

As a reliable partner, we have consistently enhanced our machines to meet the growing demands. As a result, we are proud to be the global market leader in this segment.

Our product portfolio for this industry is further complemented by friction stir welding systems, welding and joining fixtures, as well as assembly and erection stands. Our offerings are characterized by reliability, modernity and economic efficiency.



FURTHER  
APPLICATIONS  
AND REFERENCES

### SPECIALIST FOR STRINGER AND PROFIL MACHINING

Highly dynamic 5-axis machining  
of long workpieces



### CUSTOMIZED CLAMPING TECHNOLOGY

for rail applications



### SIDE WALLS, ROOF AND FLOOR ASSEMBLIES

Long bed gantry milling machine  
with a length up to 90m X-traverse



### FACE MILLING

of bogie connections



## SPECIAL MACHINES

Special requirements and procedures demand special solutions.

We work in close cooperation with our customers to develop product and process-specific machines and systems. Following an in-depth analysis of machining task, we will propose productive, cost-effective solutions and present potential alternatives. Considering the latest researches and engineering methods, we identify the system-related target setpoints :

- Rigidity
- Attenuation
- Dynamics
- Precision
- Process reliability

The design of all machine components and the holistic simulation ensure that these setpoints are all met. Our many years of experience and expertise form the basis for turning theoretical representations into reality. We can reliably determine a system's performance and productivity in advance.



FURTHER  
INFORMATION



HYBRIDi

Intelligent Lightweight Structures for  
Hybrid Machine Tools

## RESEARCH AND DEVELOPMENT

The concept of 'excellent quality of motion control' motivates us during all research and development work.

At FOOKE, we prioritize research and development, driving innovation and setting us apart from competitors. Our high-tech products in the machine tool sector are globally acclaimed as technology leaders. With decades of experience, we offer competitive advantages to customers worldwide and continuously increase the added value of our products through development activities.

Our research and development efforts are driven by the goal of creating innovative products that prioritize resource conservation.

We are committed to continuously improving the energy efficiency of machine tools, setting higher standards in this regard. Our focus remains on enhancing the quality of motion control and optimizing the interaction between the tool and the workpiece at the tool center point. These areas will continue to be key focal points for our research and development activities.

By leveraging Finite Element Method (FEM) and integrating advanced machine components like non-contact linear motors,

we achieve an optimally designed machine structure. This results in outstanding motion control quality and exceptional process stability. Our utilization of FEM and incorporation of high performance machine components enable us to deliver superior precision and reliability in our machines.



## FOOKE - SERVICE

We use a professional and flexible FOOKE service concept to meet requirements and constantly provide with optimum support.



### CHOOSE FROM THE FOLLOWING SERVICE PACKAGES:

#### FS MAINTENANCE

Repairs / servicing  
24h service  
maintenance / inspection  
machine cleaning

#### FS ROTATION

Spindle service  
Spindle store  
Spindle sales

#### FS GEOMETRY

Measuring  
Aligning

#### FS MACHINES

General overhaul  
Retrofitting  
Appraisal  
Machine relocation

#### FS CONNECT

Remote service  
Telephone service

#### FS TRAINING

Training  
Production support  
PLC and NC  
programming

### QUICK SUPPORT

Our competent service staff will handle the error reports in person and implement all necessary measures to solve it.

MONDAY TO FRIDAY

7.00 a.m. to 6.00 p.m.

SATURDAY TO SUNDAY

8.00 a.m. to 6.00 p.m.

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**FOOKE - LOCATIONS**  
Find the contact person.