# GANTRY MILLING MACHINES



Excellent quality of motion control.

THIS IS US. OUR ROOTS. OUR MACHINES.



### CONTENTS

FOOKE a family-owned busine There is no alternative to "qua Automotive industry ...... Aerospace industry ..... Railway industry ..... Special machines ..... Research and development . FOOKE - Service .....

### 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

TYPE

Hendrik Fooke Head of Sales & Business Development

5th generation

.....

1003

ENDU

Johannes Fooke CEO 4th generation

Ĭ

е	S	S																		4
ali	ity	y'	6																	5
																				6
																				8
																			1	0
																			1	2
																			1	3
																			1	4

### 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 breading machines, and modern milling machines.

In 1994, Heinrich Fooke passed on

business to his son Johannes, who

introduced significant changes in the

order structure, expanded into new

aerospace-, automotive- and railway industry. Since 2017, Hendrik

Fooke has been involved in sales

and business field development,

the future managing director.

ensuring a seamless transition as

the management of the family

business fields, including the

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.





Johannes Fooke

2nd generation | 1930

Heinrich Fooke 1st generation | 1904

# 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.



Heinrich Fooke 3rd generation | 1956



Johannes Fooke 4th generation | 1994



Hendrik Fooke 5th generation



#### MODEL CONSTRUCTION

Excellent surface quality in model and mold making

#### PROTOTYPING

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

### 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.



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











Further information about outer skin machining



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.

The high-performance chipping of aluminum or titanium and the machining of CFRP and other compound materials require different milling machines and machining centres - if desired, including hybrid process technology, such as abrasive water jet cutting or laser cutting and milling combined in one single system.



#### 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



with moveable enclosure

#### COCKPIT DOORS A350 XWB

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

8 FOOKE ENGINEERING WORKS











### 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.



#### 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.

FOOKE

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

800

Z

L

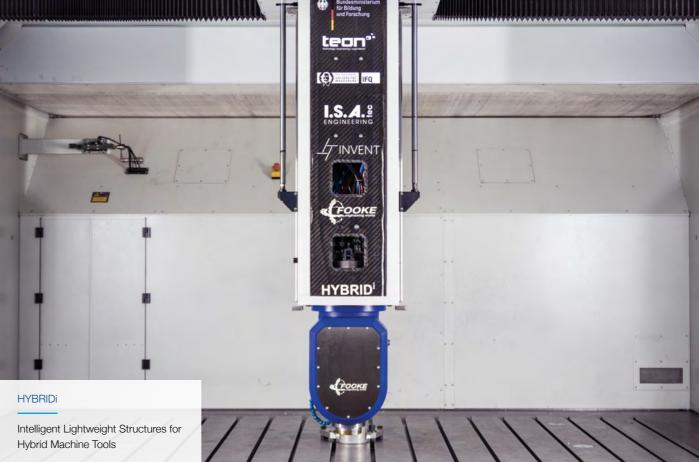
1

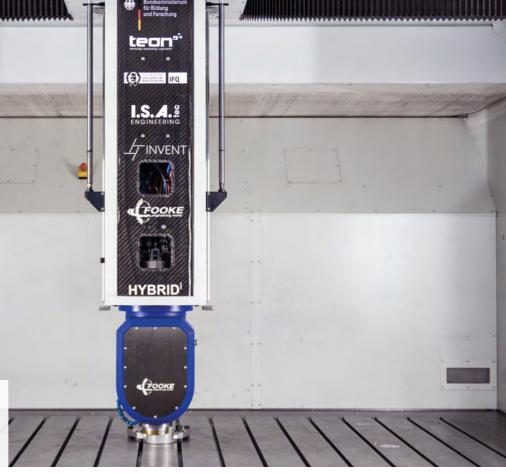
Process reliability

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** 





### 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.

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

By leveraging Finite Element

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 MONDAY TO FRIDAY SATURDAY TO SUNDAY SERVICE FON E-MAIL

### QUICK SUPPORT

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

7.00 a.m. to 6.00 p.m. 8.00 a.m. to 6.00 p.m. +49 (0) 2861 8009-573 service@fooke.de





#### HEADQUARTER

FOOKE GmbH Raiffeisenstraße 18-22 46325 Borken

Sales Fon +49 (0) 2861 8009 - 222 Sales E-Mail sales@fooke.de

www.fooke.de



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