



### WE VIEW OUR CUSTOMERS AS PARTNERS.

The majority of our customers are companies of a similar size, with a similar structure and facing similar opportunities and challenges in the international markets.

That's one of the main reasons why we've been supporting many of them in close partnerships for decades. We engage with them as equals - in every project we implement for them, with every machine we manufacture for them and in every conversation we have with them. That makes many aspects of our business a lot easier.



Our customers also appreciate the fact that we are committed to continuity and consistency in our market. We assign one single account manager permanently to each customer, and distribute our expertise across the entire team rather than pooling it with just a few members of staff. It's the face behind the product that builds trust.

MTE naturally has a comprehensive portfolio of traditional mechanical engineering services such as design, project planning and sales. And an excellent after-sales service. Our 70-strong workforce in Spain and Germany has already manufactured around 1,100 machines for the global market, and around 500 of them are currently in Germany.

It feels good to know that somebody understands you. Without any need for detailed explanations and without any friction losses. Perhaps we'll get to meet each other soon. Or maybe you'll visit our company so we can demonstrate what we mean.

Jacobo Charola
Managing Director/
Shareholder



Gunther Borbonus
Managing Director/
Shareholder



## THE FOUR PILLARS OF MILLING MACHINE CONSTRUCTION...

### STABILITY



We need milling machines that are more stable than most because we only work with highly wear-resistant materials. Before investing in our first machine in 1996 we scrutinised the product specifications of all the suppliers in the market so that we knew we were buying a machine that could satisfy our high requirements.

Some of the machines in the market don't perform to particularly high standards. When we were in the process of making our most recent investment in a floor type milling machine, MTE's FBF-S machine made a very positive impression on us as a result of its stable design and solid technical construction. We were then even more impressed by its performance in the heavy machining test.

Once it had been put into operation, the MTE machine proved to be trouble-free and reliable in everyday heavy machining operations. It's the 13th MTE machine at our production facility.

#### **Christoph Riecken**

Managing Director of H. + R. Riecken Maschinenbau GmbH, Bramsche MTE customer since 1994





### RELIABILITY



We bought our first MTE BF 3200 bed type milling machine in 1995. It's still operated every day; sometimes in double shifts.

There are now a total of 12 MTE machines in operation at our company. Need I say more?

We appreciate their outstanding reliability, their solid and reliable technology and MTE's excellent customer service, fast response times and good spare part service.

#### Gipson sen.

Proprietor of Gipson Metallverarbeitung GmbH, Mengen MTE customer since 1995





### FLEXIBILITY



We got our first MTE machine, a BF 2200, in 2007. We were very satisfied with it, so we decided to go with MTE again when we bought another bed type milling machine, an RT 30 with a built-in 12t rotary table.

The built-in rotary table and automatically swivelling head make this machine incredibly flexible. In fact, it's unbeatable for processing our parts - aluminium die-casting moulds - in a hardened material (45HRc) and bears no comparison to the milling machine that it replaced.

#### **Ralf Fett**

Production Manager at Firma Heck & Becker GmbH+Co.KG, Dautphetal

MTE customer since 2007



### PRECISION



The first MTE machine, an FBF-S 5000 floor type milling machine, was put into operation in summer 2012 and we were very pleased with it right from day one.

Not only did the machine deliver the necessary high precision, it was also extremely reliable with verifiable availability according to VDI of more than 98%. Being a machine manufacturer ourselves, that's a percentage that impresses us.

9 months after closing out the first project, one of our boring and milling machines had to be replaced due to its age. This time, the decision to buy an MTE FBF-M 12.000 floor type milling machine didn't take us anywhere near as long as our decision to buy the first MTE machine. We use the MTE FBF-M machine to manufacture precision workpieces with flange bearing seats and reference surfaces for guides, as well as stitch drilling in a tolerance range of 0.02 mm on a length of 1.500 mm.

This machine is just as reliable and offers the same high availability as the first MTE machine that we bought.

#### **Thomas Gerhardt**

Head of Mechanical Production HWS Heinrich Wagner Sinto Maschinenfabrik GmbH Bad Laasphe

MTE customer since 2012

### WE'RE A MID-SIZED COMPANY BECAUSE WE WANT TO BE

We're big enough to develop innovative milling technologies for the challenging global markets and flexible enough, as an owner-managed company, to deliver a highly individual and personal customer experience. We take the time to get to know you properly so that we can build the perfect machine for you. Your success is our incentive.

### OUR SITES

### MAIN PLANT IN SPAIN

MTE's main plant is in Itziar, in the Spanish Basque country between Bilbao and San Sebastian, a region famous for its mechanical engineering tradition.

It is a region that has always had extensive iron ore resources and hydro power capacity, which is why the metal working trade became stablished there back in medieval times, laying the foundations for the present-day tool making and mechanical engineering industry.

Over the decades and centuries this region has developed outstanding competence in the design and construction of high-precision machine tools. The fact that many of our competitors are also located here encourages us all to keep on achie-

technicians at our plant make all the core components for the machines - from the machine bed to the milling heads, which we believe are the core competence and know-how in milling machines.

Since all components for the MTE machines are cast, we have a long-standing collaboration with a local foundry that specialises in machine tool engineering. It supplies us with highest quality cast components and makes an important contribution to the stability, dimensional accuracy and precision of our machines. The depth of production, from the machining of the rough cast to final assembly in-house, and our experienced employees' high level of identification with the company, have

ving new levels of performance. The engineers and ensured 20 years of very efficient production and assembly operations with first-rate technical and design quality. The combinations of mechanical engineering tradition and commitment to innovation, of solid know-how and engaged employees, makes us an internationally respected partner for large floor type and bed type milling machines. This is clearly evident by the fact that we have built more than 1,100 machines - and supplied around 500 of them to German customers.

> Another very good indicator of our customers' satisfaction is that each of them has 2.7 MTE machines on average.







### **OUR GERMAN BRANCH**

Our sales and service branch for the German speaking market opened at a central location in Germany in 2008. We don't just want to sell milling machines, we want to cater comprehensively to our customers' needs before and after the sale.

Our aim is to deliver first-rate products to our customers. Sometimes a standard product is the perfect choice. At other times, the customer will need a custom-made product that is tailored to their application and space situation. The first thing we do to achieve this aim is to give our customers the best possible advice from the first sales talk on. Then we ensure that the entire project, from order placement to machine delivery, is implemented without any hitches and provide a competent after-sale service covering the machine's entire lifespan.

We are absolutely committed to this aim, and to continuous improvement. To ensure optimum machine availability, we have a well-trained and efficient service team and an excellent spare part service at our Montabaur site. The German market is the international technology and quality benchmark for machine tool engineering.

To be successful in this market you have to deliver top-quality products and services, and offer customers individual and flexible solutions for their requirements. Our family-run company's two sites are closely networked, have flat hierarchies, short communication paths and are under single management.

These things have helped us to build our success in our markets over the years.





# BED TYPE MILLING MACHINES



## THE MOST IMPORTANT FEATURES OF THE **K SERIES**:

- The entire machine has a compact, heavy ribbed and vibration damping cast design
- > Hardened and polished guideways with Turcite-B laminates
- > Highly dynamic digital drives
- > 24 kW main spindle motor
- > 2-speed gear drive in the RAM
- Housing with lamella curtains on the sides and 2 doors on the front
- > Ergonomic workpiece handling due to offset machine table doors

X = 2.000 - 2.500 mm Y = 1.000 mmZ = 1.100 mm

### **TABLE**

Machine table: 2.200-2.700 x 850 mm

max. workpiece load: 4.500-6.000 kg

### SPINDLE/ MILLINGHEAD

Power: 24 kW

autom. swiveling head: diagonal (2,5° x 2,5°) 3.000 (6.000) rpm

Torque:

1.020 Nm at 3.000 rpm 740 Nm at 6.000 rpm

### **FEEDS**

Rapid feed: 15.000 mm/min

Work feed: 12.000 mm/min

Max. feed force X/Y/Z: 25.000 N in all axis



The **K** series is used for tool making, and in the mechanical engineering and steel construction industries for processing medium-sized, compact workpieces.

These machines can be fitted with manual or automatically swivelling milling heads, with

or without tool changer, with full housing or simple splash guards for protruding workpieces. We can build your K series bed type milling machine to your precise individual specifications.

## BED TYPE MILLING BF MACHINES



## THE MOST IMPORTANT FEATURES OF THE **BF SERIES**:

- > The entire machine has a heavy ribbed and vibration damping cast design
- > Hardened and polished guideways with Turcite-B laminates
- > Highly dynamic digital drives
- > 32/40 kW main spindle motor
- > Oil-cooled 3-speed gear drive in the RAM
- > 4-sided housing with 2 front doors and one door on the rear side
- > Ergonomic workpiece handling due to offset machine table doors

X = 2.000 - 5.000 mm Y = 1.000 - 1.300 mmZ = 1.000 - 2.000 mm

### **TABLE**

Machine table: 2.200 x 1.000 – 5.200 x 1.000 mm

max. workpiece load: 7.200 - 15.000 kg

### SPINDLE/ MILLINGHEAD

**Power:** 32 kW alt. (40 kW)

autom. swiveling head: diagonal (2,5° x 2,5°) alt. (2,5° x 1°)

4.000 (6.000) rpm

Horizontal drilling / milling head 4.000 rpm

#### Torque:

1.520 Nm at 32 kW and 4.000 rpm 1.940 Nm at 40 kW and 4.000 rpm 1.120 Nm at 32 kW and 6.000 rpm 1.360 Nm at 40 kW and 6.000 rpm

### **FEEDS**

Rapid feed 15.000 mm/min

Work feed: 12.000 mm/min

Max. feed force X/Y/Z: 25.000 N in all axis

The **BF series** is suitable for universal applications. And we're not just saying that. They can be used for heavy machining operations in tool making, mould making and mechanical engineering. At the same time, the BF has proven to be ideal for processing fragile welded constructions.

In both areas of application the BF series machines offer generously dimensioned flat guides and optimum vibration damping.





# BED TYPE MILLING BT



## THE MOST IMPORTANT FEATURES OF THE **BT SERIES**:

- > The entire machine has a heavy ribbed and vibration damping cast design
- > INA guiding in all axes
- > Highly dynamic digital drives
- > 32 kW main spindle motor
- > Oil-cooled 3-speed gear drive in the RAM
- > 4-sided housing with 2 front doors and one door on the rear side
- > Ergonomic workpiece handling due to offset machine table doors

X = 2.000-4.000 mm Y = 1.000-1.200 mmZ = 1.000-2.000 mm

### **TABLE**

Machine table: 2.200 x 1.000 - 4.200 x 1.000 mm

max. workpiece load: 7.200 - 13.000 kg

## SPINDLE/ MILLINGHEAD

Power: 32 kW

autom. swiveling head: diagonal (2,5° x 2,5°) alt.(2,5° x 1°) 4.000 (6.000) rpm

Torque:

1.520 Nm at 32 kW and 4.000 min<sup>-1</sup> 1.120 Nm at 32 kW and 6.000 min<sup>-1</sup>

### **FEEDS**

Rapid feed: 25.000 mm/min

Work feed: 15.000 mm/min

Max. feed force X/Y/Z: 21.500 N in all axis

The **BT** series bed type milling machines feature state-of-the-art, high feed rate cutters and large milling heads and are ideally equipped for all applications.

The BT machines' high weight due to their heavy ribbed cast design, the use of INA guidings and the typical MTE oil-cooled 3-speed gear drives makes it highly dynamic, stable and precise.





# BED TYPE MILLING KT MACHINES



## THE MOST IMPORTANT FEATURES OF THE **KT SERIES**:

- The entire machine has a heavy ribbed and vibration damping cast design
- > INA guiding in all axes
- > Highly dynamic digital drives
- → 32/40 kW main spindle motor
- > Oil-cooled 3-speed gear drive in the RAM
- > 4-sided housing with 2 front doors and one door on the rear side
- > Ergonomic workpiece handling due to offset machine table doors

X = 3.000-4.000 mm Y = 1.400-1.500 mmZ = 1.500-2.000 mm

### **TABLE**

Machine table: 3.200 x 1.200-4.200 x 1.200 mm

max. workpiece load: 10.000-14.000 kg

### SPINDLE/ MILLINGHEAD

**Power:** 32 kW alt. (40 kW)

**autom. swiveling head:**diagonal (2,5° x 2,5°) alt.(2,5° x 1°)
4.000 (6.000) U/min

diagonal (0,001° x 0,001°) 4.000 (6.000) rpm

Horizontal drilling / milling head: 4.000 rpm

#### Torque:

1.520 Nm at 32 kW and 4.000 rpm 1.940 Nm at 40 kW and 4.000 rpm 1.120 Nm at 32 kW and 6.000 rpm 1.360 Nm at 40 kW and 6.000 rpm

### **FEEDS**

Rapid feed: 25.000 mm/min

Work feed: 15.000 mm/min

Max. feed force X/Y/Z: 26.000 N in all axis

The **KT series** is the BT series' big sister. It shares the same attributes and advantages, but is considerably larger.

This additional larger-dimensioned series was necessary to realise longer traverses of up to 1,500 mm with even more powerful drives, yet with constant stability.





# BED TYPE MILLING NACHINES



## THE MOST IMPORTANT FEATURES OF THE **RT SERIES**:

- The entire machine has a heavy ribbed and vibration damping cast design
- > INA guiding in all axes
- > Highly dynamic digital drives
- → 32/40 kW main spindle motor
- $\rightarrow$  Oil-cooled 3-speed gear drive in the RAM
- > 4-sided housing with 2 front doors and one door on the rear side
- > Ergonomic workpiece handling due to offset machine table doors

X = 2.000 - 3.000 mm Y = 1.000 - 1.500 mmZ = 1.000 - 2.000 mm

### **TABLE**

Rotary table sizes: 1.000 x 1.000 – 1.400 x 1.600 mm

max. workpiece load: 5.000 - 15.000 kg

### SPINDLE/ MILLINGHEAD

Power: 32 kW alt. (40kW)

**autom. swiveling head:** diagonal (2,5° x 2,5°) alt.(2,5° x 1°) 4.000 (6.000) rpm

diagonal (0,001° x 0,001°) 4.000 (6.000) rpm

Horizontal drilling / milling head: 4.000 rpm

#### Torque:

1.520 Nm at 32 kW and 4.000 rpm 1.940 Nm at 40 kW and 4.000 rpm<sup>1</sup> 1.120 Nm at 32 kW and 6.000 rpm 1.360 Nm at 40 kW and 6.000 rpm

### **FEEDS**

Rapid feed: 25.000 mm/min

Work feed: 25.000 mm/min

Max. feed force X/Y/Z: 26.000 N in all axis

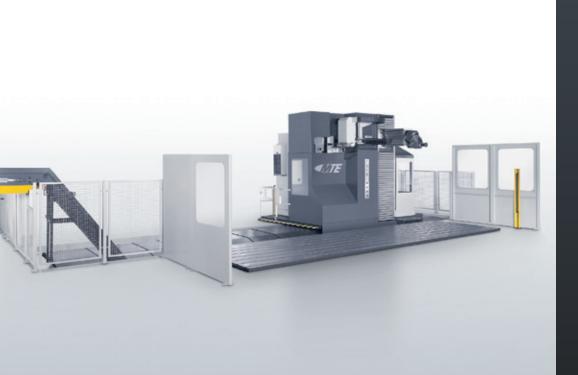
The **RT bed type** milling machine unites all the advantages of a traditional table type boring mill with those of a milling machine.

The combination of a highly stable built-in NC rotary table with an automatically swivelling milling head makes it possible, in addition to regular drill centre machining operations, to make complex workpieces with five sides and all conceivable angle positions in a single set-up with up to 5 processing axes.





# FLOOR TYPE FBF-S MILLING MACHINES FBF-S





## THE MOST IMPORTANT FEATURES OF THE **FBF-S SERIES**:

- The entire machine has a heavy ribbed and vibration damping cast design
- > INA guiding in all axes
- > Highly dynamic digital drives
- > 32 kW main spindle motor
- > Oil-cooled 3-speed gear drive in the RAM
- Spacious and ergonomic operator platform that can be moved vertically and horizontally
- > Individually adapted, practical housing

X = 4.000 - 26.000 mm Y = 1.500 - 2.250 mmZ = 1.000 - 1.300 mm

### SPINDLE/ MILLINGHEAD

Power: 32 kW

**autom. swiveling head:** diagonal (2,5° x 2,5°) alt.(2,5° x 1°) 4.000 (6.000) rpm

Torque:

1.520 Nm at 32 kW and 4.000 rpm 1.120 Nm at 32 kW and 6.000 rpm

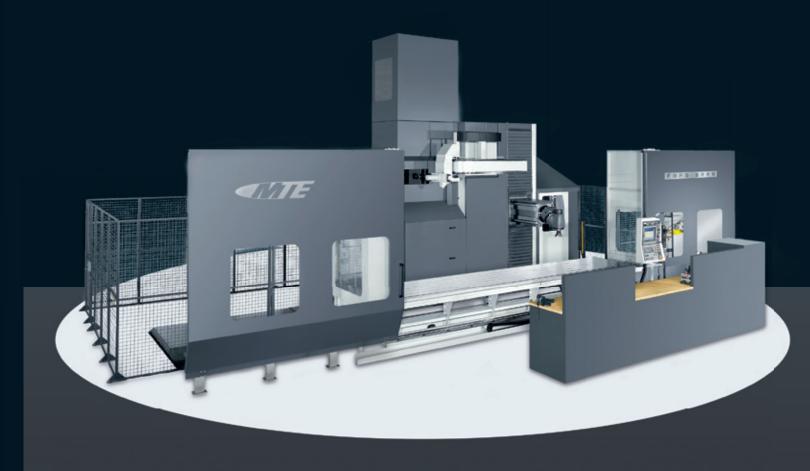
### **FEEDS**

Rapid feed: 25.000 mm/min

Work feed: 15.000 mm/min

Max. feed force X/Y/Z: X = 28.000 N

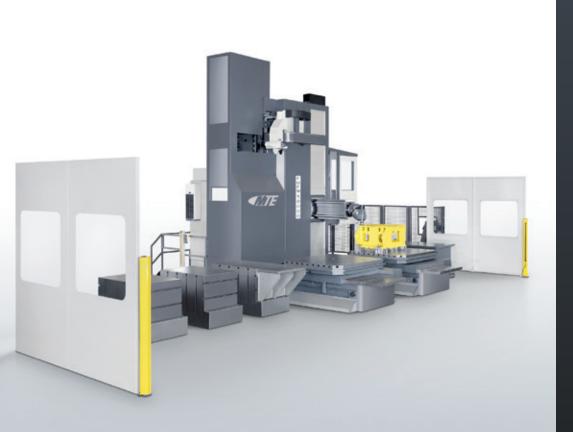
Y/Z = 25.000 N



The **FBF-S machine** is a stable floor type milling machine for small to medium work-pieces with a vertical travel of up to 2,250 mm. It is used for general mechanical engineering applications and, due to its incredibly flexible configuration possibilities, now also for contract manufacturing and increasingly for tool and mould making.

The FBF-S series' strengths – high stability and powerful drive through optional pendulum machining and the combination with NC rotary tables - can also be realised in considerably higher spindle running times.

# FLOOR TYPE FBF-V



## THE MOST IMPORTANT FEATURES OF THE **FBF-M SERIES**:

- The entire machine has a heavy ribbed and vibration damping cast design
- > INA guiding in all axes
- > Highly dynamic digital drives
- > 32/40 kW main spindle motor
- Spacious and ergonomic operator platform that can be moved vertically and horizontally
- > Individually adapted, practical housing

X = 4.000 - 26.000 mm Y = 2.000 - 3.000 mmZ = 1.000 - 1.500 mm

### SPINDLE/ MILLINGHEAD

**Power:** 32 kW alt. (40 kW)

autom. swiveling head:

diagonal (2,5° x 2,5°) alt.(2,5° x 1°)

4.000 (6.000) rpm

diagonal (0,001° x 0,001°)

4.000 (6.000) rpm

Horizontal drilling / milling head:

4.000 rpm

Torque:

1.520 Nm at 32 kW and 4.000 rpm 1.940 Nm at 40 kW and 4.000 rpm 1.120 Nm at 32 kW and 6.000 rpm 1.360 Nm at 40 kW and 6.000 rpm

### **FEEDS**

Rapid feed: 25.000 mm/min

Work feed: 15.000 mm/min

Max. feed force X/Y/Z:

X = 35.000 NY/Z = 30.500 N



The **FBF-M** series with its extremely stable design is predominantly used for mechanical engineering applications, and for the processing of medium-sized and heavy workpieces with a vertical travel of up to 3,000 mm. The series has fully automatic head changing systems with up to 4 different milling heads, rotary and traveling tables and tool changers, as well as optional shuttle

machining, offering practical and maximum flexibility in the high-precision processing of extremely complex workpieces.

In some cases the machine is even used to process complex large tool moulds in high strength-to-density ratio materials.

# FLOOR TYPE FBF-X



## THE MOST IMPORTANT FEATURES OF THE **FBF-X SERIES**:

- The entire machine has a heavy ribbed and vibration damping cast design
- > INA guiding in all axes
- > Highly dynamic digital drives
- > 40 kW main spindle motor
- Oil-cooled 3-speed gear drive in the RAM
- Spacious and ergonomic operator platform that can be moved vertically and horizontally
- > Individually adapted, practical housing

X = 6.000 - 26.000 mm Y = 3.000 - 4.500 mmZ = 1.600 - 1.800 mm

### SPINDLE/ MILLINGHEAD

Power: 40 kW

**autom. swiveling head:**diagonal (2,5° x 2,5°) alt. (2,5° x 1°)
4.000 (6.000) rpm

diagonal (0,001° x 0,001°) 4.000 (6.000) rpm

Horizontal drilling / milling head: 4.000 rpm

**Torque:** 1.940 Nm at 40 kW and 4.000 rpm 1.360 Nm at 40 kW and 6.000 rpm

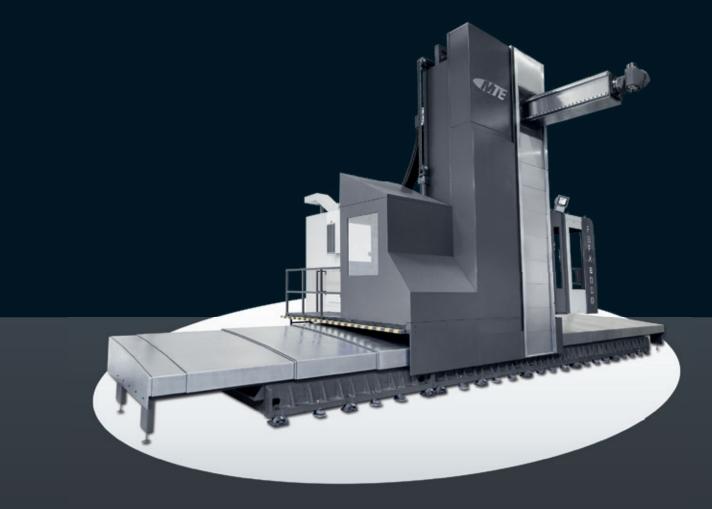
### **FEEDS**

Rapid feed: 25.000 mm/min

Work feed: 15.000 mm/min

Max. feed force X/Y/Z:

X = 38.000 NY/Z = 32.000 N



The **FBF-X series** has the same technical design as big sister, of the FBF-M series, but with a vertical travel of up to 4,500 mm and a horizontal traverse of up to 1,800 mm, which are pretty impressive dimensions. As a result, it can be used to process larger and heavier workpieces in one set-up.

The machines in this series are also equipped with a fully automatic head changing system with up to 4 different milling heads for the high-precision processing of extremely complex large workpieces.

The features of a rotary and traveling table and tool changers, as well as optional shuttle machining, permit the very cost-effective processing of complex workpieces and reduce set-up times.

# THE RIGHT MILLING HEAD FOR YOUR REQUIREMENTS

## MILLING HEAD TECHNOLOGY MADE BY MTE:

All milling heads are developed, tested and manufactured by our Spanish plant.

### DIAGONAL DESIGN

4,000 / 6,000 rpm 740 Nm - 1,940 Nm Automatically indexing 2.5° x 2.5° / 2.5° x 1° / 0.001° x 0.001°

### ORTHOGONAL DESIGN

4,000 rpm 1,520 Nm - 1,940 Nm Automatically indexing 2.5° x 2.5° / 1°x1°





## SPECIAL-PURPOSE SOLUTION





### HORIZONTAL DESIGN

(DRILL SPINDLE) WITH AND WITHOUT C-AXIS

2,500 - 4,000 rpm 740 Nm - 1,940 Nm C-axis optionally 1° or 2.5° Automatically indexing Diameter: 130-200 mm, length: 300-800 mm



## AUTOMATIC HEAD CHANGING SYSTEM

With the automatic head changing system it makes no difference whether your machine's standard milling head has a diagonal or orthogonal design because it can be quickly and fully automatically be changed to a horizontal drill spindle. That protects your milling head when you're performing roughing operations, increases your flexibility when you enter narrow workpiece passages and you can process complicated workpieces in combination with an adapted angular milling head. The little angular milling head can also be adapted to the standard head, either fully or semi-automatically, via a serration around the spindle.

The pick-up station with the changer heads can fully automatically drive into the machine room, perform the head change, and then drive out of the work area again.

These features extend the range of applications for the floor type milling machine considerably. They make it an incredibly flexible processing machine that is capable of overcoming any challenge.





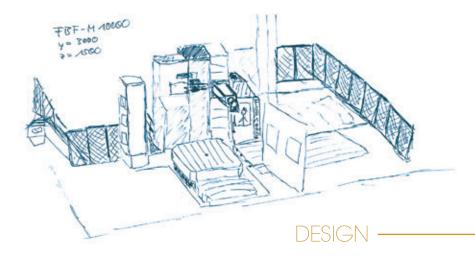


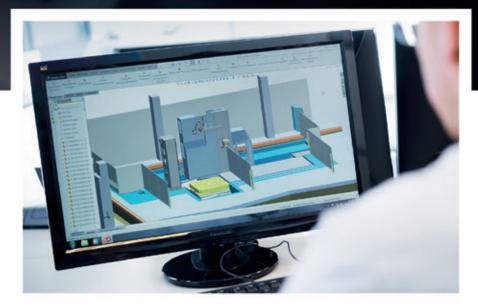
## OUR SELLING PRINCIPLE

## TALK TO US ABOUT YOUR REQUIREMENTS:

- > What exactly does the new machine have to do?
- > How will it supplement your existing machine park?
- > Which features are "a must" and which are just "nice to have"?
- How can we adapt the machine to your on-site situation?

We take the time to get to know you properly so that we can build the ideal machine for you. This guarantees that your investment is money well spent.





## PROJECT MANAGEMENT



### PROJECT MEETINGS

When you place your order, our project manager and the sales consultant come out to see you from Montabaur.

They take the measurements of the installation site for the new machine at your premises, define the connections with you and discuss the preparations that have to be made by us and you before the machine is delivered.

They also talk to you about the timeframe and do a test run of the in-house transportation of the delivered machine, its installation and the acceptance procedure.

## 2 LAYOUT CREATION

This is the phase when the project developer's work begins. First of all he creates a 2D layout based on the information we collected at your site and the machine's design data. After we have finalised the layout with you, we create a realistic 3D rendition of the installation site and the local situation.

Parallel to this, the machine layouts are finalised and the foundation, force and conduit diagrams are prepared.

## FOUNDATION MEETING

The foundation is decisive to the stability and long-term precision of any large machine tool.

That's why we plan it meticulously and perform tests on it once it has been installed.

## INSTALLATION

A detailed installation plan with timeline serves as the guide for the final assembly of the machine at your company, right up to the final acceptance procedure.

The machine installation work is performed by our experienced and highly qualified technicians.

### COMMISSIO-NING AND FINAL ACCEPTANCE

The commissioning and final acceptance of your new machine are in accordance with acceptance guidelines based on the DIN 8620 and DIN VDI 3443 standards.

They include the necessary geometric measurements as per the geometry protocol, a ballbar test and laser measurements of all axes at the MTE plant. With some machine types these procedures are also performed at your premises.

### OUR SERVICE



## >

### ...BECAUSE IT SIMPLY OFFERS YOU MORE.

Service isn't something we talk about. It's something we do. We have excellently trained service engineers, experienced in-house hotline operators and provide a 24h ex-works spare part service on work days.

If you appreciate good customer service - we've got it.



## OUR MILLING HEAD LOAN SERVICE

The best service is always the service you don't need.

We give you the second-best service - a service for your MTE milling heads that you can depend on one-hundred percent whenever you need it.

We keep an extensive range of milling heads in stock so that we can loan them out to customers while theirs are being repaired. This keeps machine downtime to the minimum and improves productivity.

### HEAD LOAN



### MILLING HEAD WORKSHOP

The maintenance and repair of any milling machine's core component - the milling head - is naturally performed by us in-house at our own milling head workshop by specially trained technicians on ultra-modern machines and test systems.

After a detailed defect analysis, we dismantle the milling heads, prepare a detailed appraisal and consult with you on any necessary repairs. Then our technicians equip the milling heads with new bevel gears, ball bearings and seals etc. as required, and test their tightness and swivel function.

A test run is then performed on our special milling head test systems which involves a bearing run and a grease distribution run that were developed by us in collaboration with the bearing manufacturer. These test systems are also used to check the milling head's entire geometry and reset it if necessary before it is dispatched to your or refitted on your machine.

### SERVICE HOTLINE

We have a team of experienced and competent service hotline operators.

We help your machine operators or maintenance personnel to remedy faults and deal with error messages. If necessary, we can access your machine in real-time to perform remote maintenance (via VPN or modem).

Our hotline offers the following services:

- Remedy of error messages and faults (free of charge).
- Real-time remote access to your machine for fault diagnosis (free of charge).
- Direct intervention in the control system (machine parameters).
- Direct access to your processing software (application engineer on the phone).
- > Planning and coordination of service appointments at your premises with our technicians.

If it isn't possible to remedy a fault on the phone, we record the problem and arrange an appointment for one of our MTE service engineers to come out to you as soon as possible. At the same time, we dispatch any spare parts that are most likely to be needed from our warehouse in Montabaur.

### SPARE PART SERVICE

Our customer and service centre has an excellently stocked warehouse. We have all the necessary spare parts here for you locally - in addition to the parts in our warehouse at the production facility. This allows us to respond promptly when you need a spare part and keeps your downtime to the minimum. Our service hotline helps you to identify the spare part you need quickly and precisely on the basis of the machine's production bill of materials and exploded view drawings.

Our spare part service offers you the following:

- A comprehensive range of ex-warehouse spare parts.
- > Telephone support to identify spare parts
- Regular deliveries within 24 hours, express deliveries within 12 hours.
- > Spare part management with documentation.

#### TRAINING & WORKSHOPS

To operate a machine to its full potential, the operator has to know what he or she is doing. We offer the following training for machine operators.

- Basic operator training
- > Advanced operator training / individual training

To optimise your machine's maintenance and therefore availability, we offer the following training for maintenance personnel:

- > Basic mechanics
- Basic electronics
- Milling head maintenance and spindle bearing replacement





**GERMANY**