Aerospace Excellence Center
The aerospace sector will be a growth market for decades to come. For this growth the manufacturers and their suppliers need reliable partners along the supply chain, who can provide ample innovations, technologies and capacities, and who are prepared and able to support and even participate in long-term developments in an innovative manner. The Aerospace Excellence Center enables DMG MORI to supply solutions that set technological, qualitative and economically sustainable standards in production. These solutions extend from the initial consultation to choosing the best possible machine, to process optimisation and the complete turnkey solution. Only an integrated process chain, maximum process reliability and the best possible application-specific individual machine makes it possible to provide an excellent process.
DMU monoBLOCK® series

Maximum flexibility for BLISKS, integral and structural components

+ The universal monoBLOCK® series offers the best flexibility and accessibility with a rigid machine bed and three-point support
+ Milling and turning option and large tool attachment
  SK50 / HSK-A100 available

DMC FD duoBLOCK® series

All materials, all applications, one machine

+ Universal machine with a broad range of spindles and options
+ With special application-specific options, particularly suited to 5-axis machining of material that is difficult to machine

Portal series

Intelligently defined large 5-axis machines

+ Stable universal machine in gantry design with flexibility across multiple applications and three-point support
+ Depending on the application, the optimum machine size can be up to 6,000 mm travel in the x-axis and a passage of 3,600 mm in the y-axis

DIXI Portal series

Swiss precision – highly accurate, unique

+ Proven DIXI precision, produced in Le Locle, Switzerland, and based on the successful DMG MORI Portal series
+ Maximum precision as a result of scraped guide surfaces, perfectly coordinated cooling systems and three-point support

LASERTEC series

Laser drilling increases turbine efficiency

+ Machining using YAG, CO2 and fibre lasers
+ Absolute long-term stability as a result of a heavy, rigid machine bed
+ Ideal for drilling and shaping of cooling holes for hot parts in the power unit, such as combustion chambers, guide vanes and rotor blades
Guide vane
LASERTEC series
Inconel, 80 x 90 mm

Landing gear support beam
CTX TC series
Titanium, ø 125 x 260 mm

Structural component
Portal series
Aluminium,
ø 1,200 x 2,400 mm

Valve block
DMU eVo series
Titanium, 160 x 350 mm

Main rotor blade
ULTRASONIC series
CFRP

Fan disc
DMC FD duoBLOCK® series
Titanium, ø 950 x 400 mm

Compressor casing
DMC FD duoBLOCK® series
Jethete M152,
ø 680 x 250 mm

BLISK
DMU monoBLOCK® series
Titanium, ø 450 x 120 mm

Turbine housing
LASERTEC 65 3D ADDITIVE MANUFACTURING
Stainless steel, 180 x 150 mm

Torque link
DMU duoBLOCK® series
Titanium,
1000 x 600 x 200 mm
As a technology leader in the field of 5-axis technology, DMG MORI offers a unique product range of high-tech tool machines with industry-specific options and engineering services for parts manufacture in the aerospace industry.
**DMF series**

Universal traveling column milling machine

+ Large working area for long, thin structural parts
+ The large version also offers SK50 / HSK-A100 tool attachment
+ Optionally with milling and turning table

**DMU eVo series**

Highly dynamic 5-axis machine

+ With up to 80 m/min rapid traverse in the linear version
+ Optimum damping as a result of a polymer concrete machine bed
+ Ideally suited to smaller and complex components made from all materials

**CTX TC series**

Turn and mill complete machining

+ Maximum machining flexibility up to 5-axis interpolation through the B-axis with up to 240° swivel range with high-performance turning / milling spindle
+ Maximum temperature stability as a result of liquid-cooled main and opposing spindle

**DMC H series**

Outstanding technology with maximum productivity

+ Highly dynamic horizontal machine
+ Most productive machine on the market
+ Short non-productive times as a result of short tool and pallet changeover times

**LASERTEC 65 3D Additive Manufacturing**

Unique hybrid concept, laser welding & machining in one platform

+ Additive Manufacturing with powder nozzle process 20 x faster than traditional powder bed method
+ Flexible change between laser and milling operation to allow highest grade of 3D accessibility
+ Generation of 3D parts in casting quality, component repairs and coatings
Aerospace Excellence Center

Your partner throughout the entire process chain.

+ Technology projects
+ Feasibility studies
+ Project management
+ Process development
+ Training
+ Turnkey projects

From the idea to the finished workpiece on a DMG MORI machine

Idea from the idea to the CAD model

CAM programming with NX CAM by Siemens

1:1 Simulation with the DMG Virtual Machine

Manufacture with DMG MORI machines

In-cycle Probing
+ Application-specific measurement sensors
+ Process-specific measurement cycles
+ Automatic correction (optional)
+ Direct documentation
+ Higher process stability

Machine Protection Control
+ Process monitoring using integrated spindle sensors
+ Overload and vibration protection
+ Documentation of the process parameters
+ Integrated process control
Cooperation sustains innovation

DMG MORI Lifecycle Services

Your service: Global network – quickly on-site!

With DMG MORI you benefit from high-level availability and top performance. We offer you at all times a multitude of possibilities to maximise your productivity. Whether it be training, software, service and support, or optimisation, retrofitting and reconditioning solutions, or used machines that are available at short notice.

Original spare parts from your specialists!

Original spare parts from the manufacturer guarantee the maximum performance and durability of your DMG MORI machines. Highly motivated personnel in our service centres constantly ensure that original replacement parts for your machines are provided quickly and reliably.

Your benefits

+ A global storage and logistics network:
  Geretsried (near Munich), Wernau (near Stuttgart), Dallas,
  São Paulo, Bangalore, Shanghai, Iga (Japan)

+ More than 100,000 different spare parts available for immediate delivery

+ Global spare part availability of more than 95%

+ Maximum availability of spare parts even for older machine series

+ Continuous expansion of capacities on all continents; warehousing space in Geretsried is currently > 30,000 m²

+ Processing of more than 20,000 orders / month

+ New and replacement parts available

+ Cost-optimised returns process

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