

MACHINES, MEASURING INSTRUMENTS AND AUTOMATION TECHNOLOGY

Brochure 2019




Sumipol
Tool Professional



DMG MORI

DMG MORI brings together German and Japanese tradition, precision and technological leadership in machine tool building. Behind DMG MORI is the combined engineering mastery of 68 years of Mori Seiki and 148 years of GILDEMEISTER.

Innovative and solutions-based with new technologies. As one of the leaders in innovation in the industry, DMG MORI is continuously developing trend-setting products. Through its pooled innovative capacity, DMG MORI is optimising its product and service portfolios, and setting technological standards.

Turning

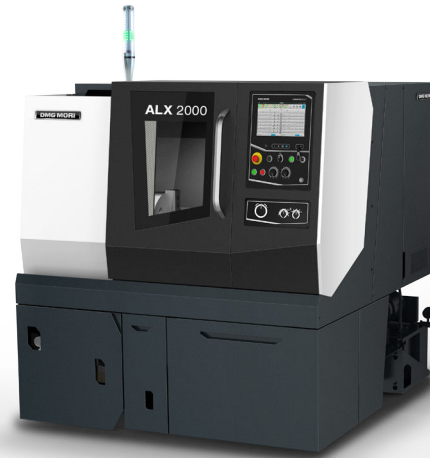
Solution-based Standard Machine for Every Shop Floor ALX 2000

DMG MORI developed the ALX Series with a desire to provide a machine that is truly reliable and can be used by various fields of customers for a long time.

With its high versatility, the ALX Series is capable of handling a broad range of workpieces in any industry.

Each of the series models elaborately designed to details is a highly reliable new standard for turning centers.

ALX 2000 | 300 is machine type of the distance between centers 300, with a 8-inch chuck size.



Turning

Rigid and precise turning center NLX Series



Highlights

- Turret equipped with BMT (Built-in Motor Turret)
- Thoroughly controlled thermal displacement
- Magnescale absolute linear measuring system
- Elaborate Design in Pursuit of Usability

Technical Data

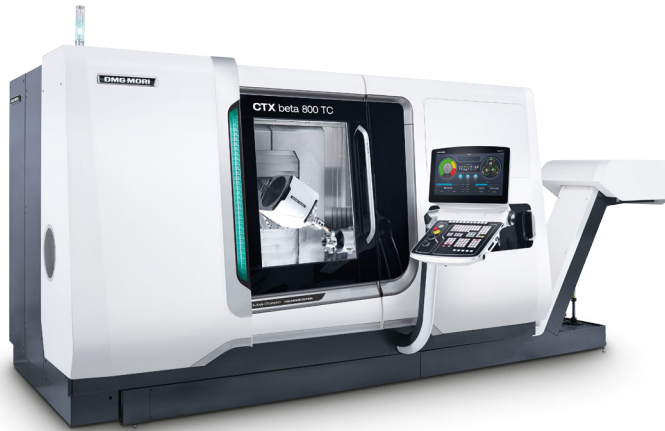
- **Max.** turning diameter **920 mm**
- **Max.** work piece length with a tailstock **2,000 mm**
- **Max.** Chuck size **610 mm**
- **Max.** spindle motor speed **8,000 rpm**
- Drive power rating (100% DC) **55 kW (AC)**
- **Max.** bar capacity diameter **116 mm**

The NLX Series impresses with its extremely rigid design and outstanding turning and milling properties

From the compact NLX 1500 to the NLX 6000 for the production of large parts, the versatile models combine an extremely rigid design, maximum drive power and state-of-the-art equipment options. The reliability, precision and user-friendliness of the NLX turning centres are properties that convince users from the automotive and mechanical engineering industries and many other branches.

The highest standard of universal turning

CTX Series



Highlights

- Modular construction with cutting diameters ranging from 200 mm to 600 mm and turning lengths from 335 mm to 2,000 mm
- Turret with driven tools and C-axis as standard
- Optional with a counter spindle for 6-sided complete machining

Technical Data

- **Max.** turning diameter **600 mm**
- **Max.** work piece length with a tailstock **2,000 mm**
- **Max.** Chuck size **500 mm**
- **Max.** spindle motor speed **6,000 rpm**
- Drive power rating (100% DC) **40 kW (AC)**
- **Max.** bar capacity diameter **110 mm**

Universal Turning Centres

The CTX series defines the standard in the field of universal machining. Outstanding is the unique equipment in this machine class with a large number of high-tech components. In addition to the extensive standard equipment, the Y-axis and a counter-spindle can also be optionally integrated for more flexibility and complete machining. As a result, the CTX provides maximum performance at all times - fast, precisely and reliably.

High-Precision, High-Efficiency Integrated Mill Turn Center

NTX Series

Highlights

- Incorporating two cutting-edge technologies: turning Centers and machining centers
- Six variations selectable according to purpose
- High-rigidity construction not susceptible to aging
- Fully equipped to support high-accuracy machining

Technical Data

- **Max.** turning diameter **660 mm**
- **Max.** turning length **1,540 mm**
- Integrated spindle motor with C-Axis (0.0001°) **6,000 rpm**
- **Max.** bar work capacity **80 mm**
- **Max.** spindle speed turn-mill spindle **12,000 rpm**
- **Max.** number of tool stations **10 Pockets**



The NTX mill/turn centres produce the most demanding workpieces with maximum precision and absolute efficiency

The NTX 1000 2nd Generation and the NTX 2000 stand in the DMG MORI portfolio as a synonym for maximum productivity in the production of complex components. The mill/turn centres master every challenge, from medical applications and precision instruments to components for the aerospace and automotive industries and on to include applications in tool and mould making.

Milling
3-Axes

Best-ever high-precision vertical machining center NVX 5000 Series 2nd Generation

Highlights

- Best surface quality - highest accuracy for any machining operations
- Unprecedented rigidity and accuracy
- Ultimate hybrid structure
- Outstanding machining capability
- Unmatched high-performance spindle
- Best chip disposal solution in the industry

Technical Data

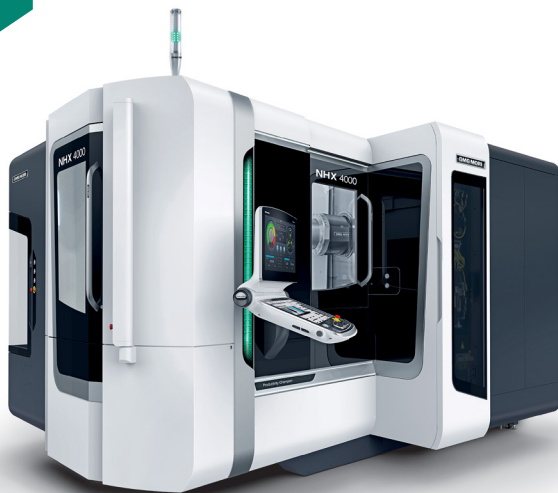
- **Max. travels (x,y,z)** 1,540 / 760 / 660 mm
- **Max. table load** 2,000 kg
- **Table length** 1,700 mm
- **Table width** 760 mm



The NVX 2nd Generation vertical machining centers achieve world's highest accuracy, with a meticulous attention to details and technical ingenuity. Offering unparalleled high-precision machining, the machines can handle a wide variety of workpieces in any industry, allowing itself to be the ideal choice for customers machining various kinds of workpieces or those considering diversifying into new fields.

Milling
3-Axes

High-Precision, High-Speed Horizontal Machining Center NHX Series



Highlights

- Strong speedMASTER-Spindle as Standard
- Compact construction for economic production
- Extensive cooling measures and multi-sensor compensation
- FEM optimized machine body and stepped travel column

Technical Data

- **Max. travels (x,y,z)** 1,700 / 1,400 / 1,510 mm
- **Max. table load** 5,000 kg
- **Table length** 1,000 mm
- **Table width** 1,000 mm

High-precision machining and maximum productivity are the strengths of the proven NHX series from DMG MORI.

With the NHX 4000 2nd Generation and NHX 5000 2nd Generation, DMG MORI presents a compact and dynamic horizontal machining center are general-purpose horizontal machining centers enabling high-efficiency, continuous machining and mass production machining in various areas such as the automotive and other mechanical fields. Both models are equipped with our latest spindle, the speedMASTER with up to 20,000 rpm speed or up to 200 Nm torque, ensuring high-speed and stable high-precision machining.

CNC Universal Milling Machine with swivel rotary table DMU 50 3rd Generation

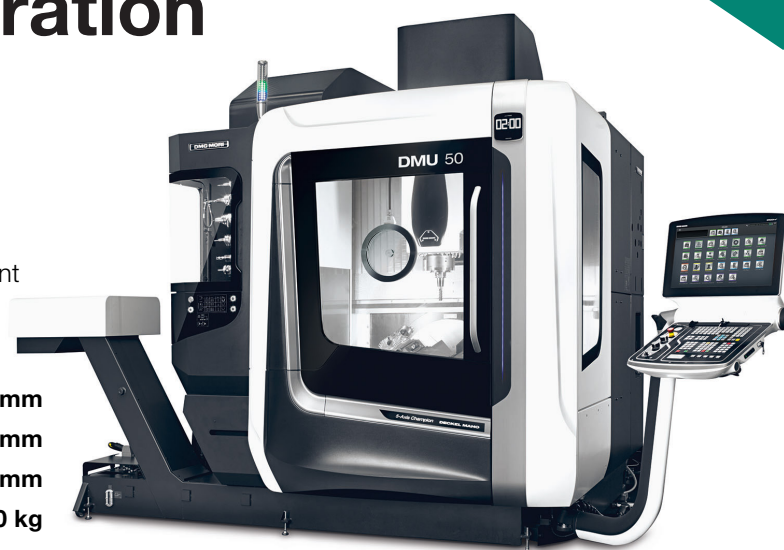
Milling
3-Axes

Highlights

- 5-axes simultaneous machining
- Swivel rotary table with large bearings
- Tool magazines - set up during machining time
- Excellent accessibility and low space requirement

Technical Data

- | | |
|--------------------------|---------------|
| • Max. X travels | 650 mm |
| • Max. Y travels | 520 mm |
| • Max. Z travels | 475 mm |
| • Max. Table load | 300 kg |
| • Table length | 630 mm |



Universal Milling Machines

The Universal Milling Machines of the DMU Series are offering the economical entry into 5-axes machining up to 5-axes simultaneous machining. The rigid swivel rotary table allows a swivel range up to 110°. With spindle speeds up to 20,000 rpm the DMU is suited for an universal use from education up to the demanding production.

The monoBLOCK series has a machine concept for every sector

Milling
3-Axes

DMU 75 monoBLOCK



Highlights

- 5-axes simultaneous machining
- Swivel rotary table with large bearings
- Tool magazines - set up during machining time
- Excellent accessibility and low space requirement

Technical Data

- | | |
|--------------------------|---------------|
| • Max. X travels | 750 mm |
| • Max. Y travels | 650 mm |
| • Max. Z travels | 560 mm |
| • Max. Table load | 600 kg |
| • Table length | 650 mm |

DMU monoBLOCK series

The monoBLOCK series has a machine concept for every sector: Be it 5-axis simultaneous machining, highly dynamic high-speed milling with spindle speeds up to 40,000 rpm, integrated mill-turning with table speeds up to 1,200 rpm, high-torque cutting with torques up to 430 Nm or the broad field of productive parts machining in 3 – 5 axes. With the new monoBLOCK machines, every component produced becomes an impressive masterpiece.