

**DMG MORI**

RIGID AND PRECISE TURNING CENTER

NLX 2500 | 700  
NLX 2500 | 1250

## NLX 2500 2<sup>nd</sup> Generation



# The Best of DMG MORI Technology: The Turning Center of the Next Era

**2nd Gen**



## Rigidity

### P06

- + Slideways for X / Y / Z axes
- + Widest-in-class sliding surface
- + Dynamic rigidity improved by 1.3 times for the left spindle and 4.0 times for the right spindle (vs. 1st Generation)

## Precision

### P08

- + Coolant circulation for casting parts
- + Ball screw center cooling (X / Y / Z axes)
- + Full closed loop control
- + MAP compensation

## Spindle

### P10

- + turnMASTER spindle
- + Equivalent performance for both spindles
- + Large through-hole spindle  $\phi 115$  mm ( $\phi 4.5$  in.)

The NLX 2500 has been completely redesigned and upgraded as the 2nd generation based on vital user feedback. With its excellent thermal stability and accuracy, improved cutting and milling performance, and a standardized Y-axis, the new machine can flexibly handle a variety of workpieces across a distance between centers of either 700 or 1250.

The ERGoline X is our new operation panel for intuitive and simple use regardless of the workpiece complexity or the experience of the operator. DMG MORI is proud to recommend the NLX 2500 2<sup>nd</sup> Generation to you.

# eneration



NLX 2500 | 1250  
2<sup>nd</sup> Generation

## Automobiles

### Outer race



φ95 mm (3.7 in.) × 200 mm (7.9 in.) <S50C>

03

## Construction machinery

### Drive shaft



φ130 mm (φ5.1 in.) × 600 mm (23.6 in.) <S50C>

## Chip disposal

P16

- + Ceramic coating & stainless cover as standard
- + Two-layer clean coolant tank
- + Built-in mist collector zeroFOG

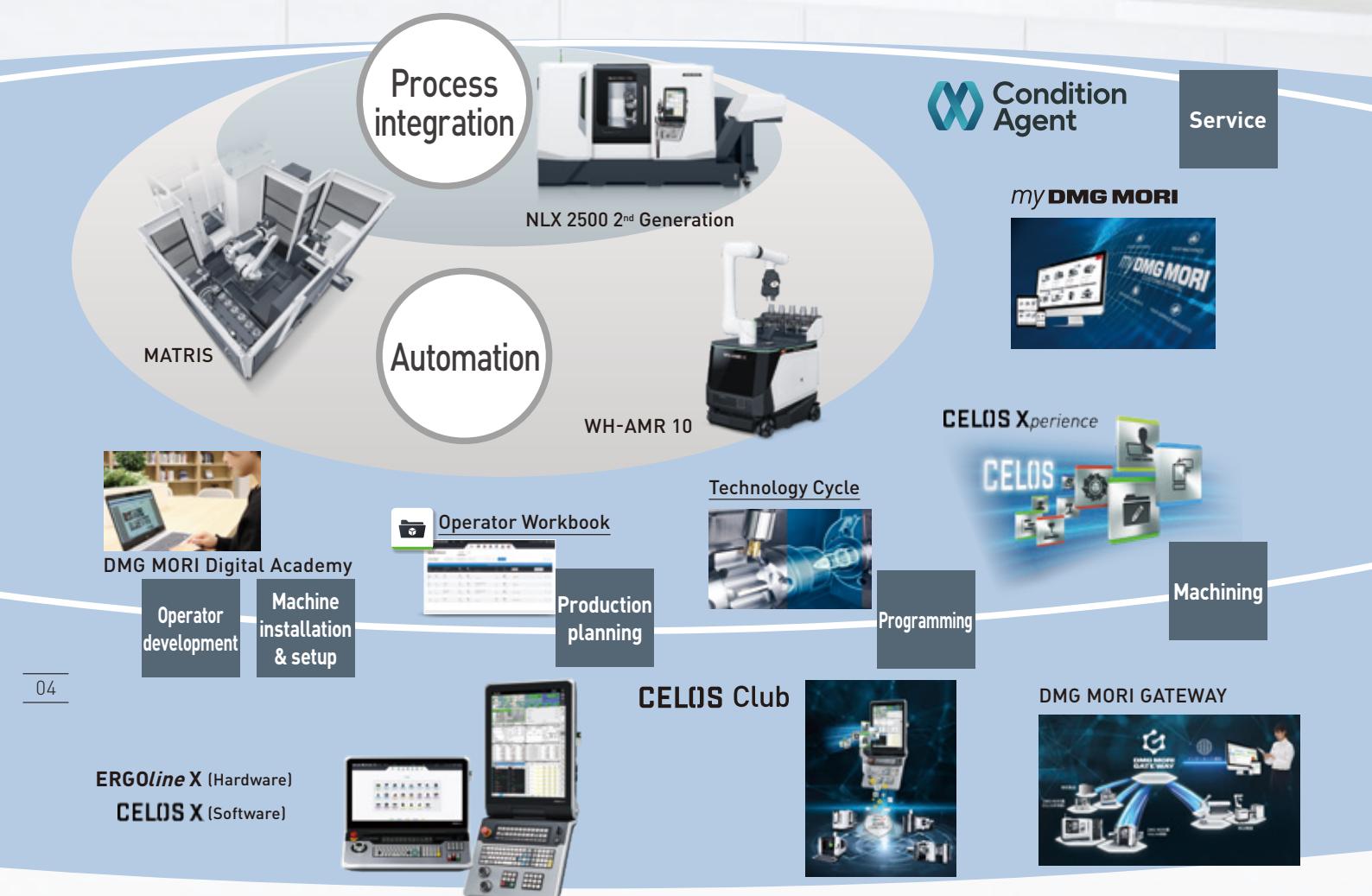
## Hydraulic unit

### Manifold block

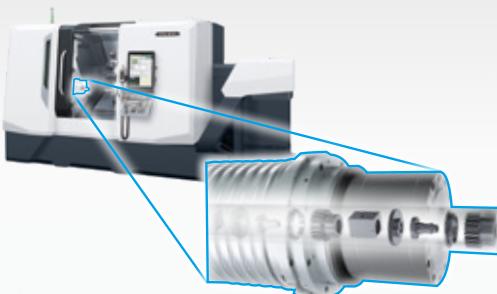


35 mm (1.4 in.) × 40 mm (1.6 in.) × 100 mm (3.9 in.) <SUS303>

# Unlock the Future of Manufacturing Process Integration, Automation, DX for GX



## Process integration ➤ P10



+ Large diameter bar feeder enables process integration for high mix production

## Automation ➤ P26



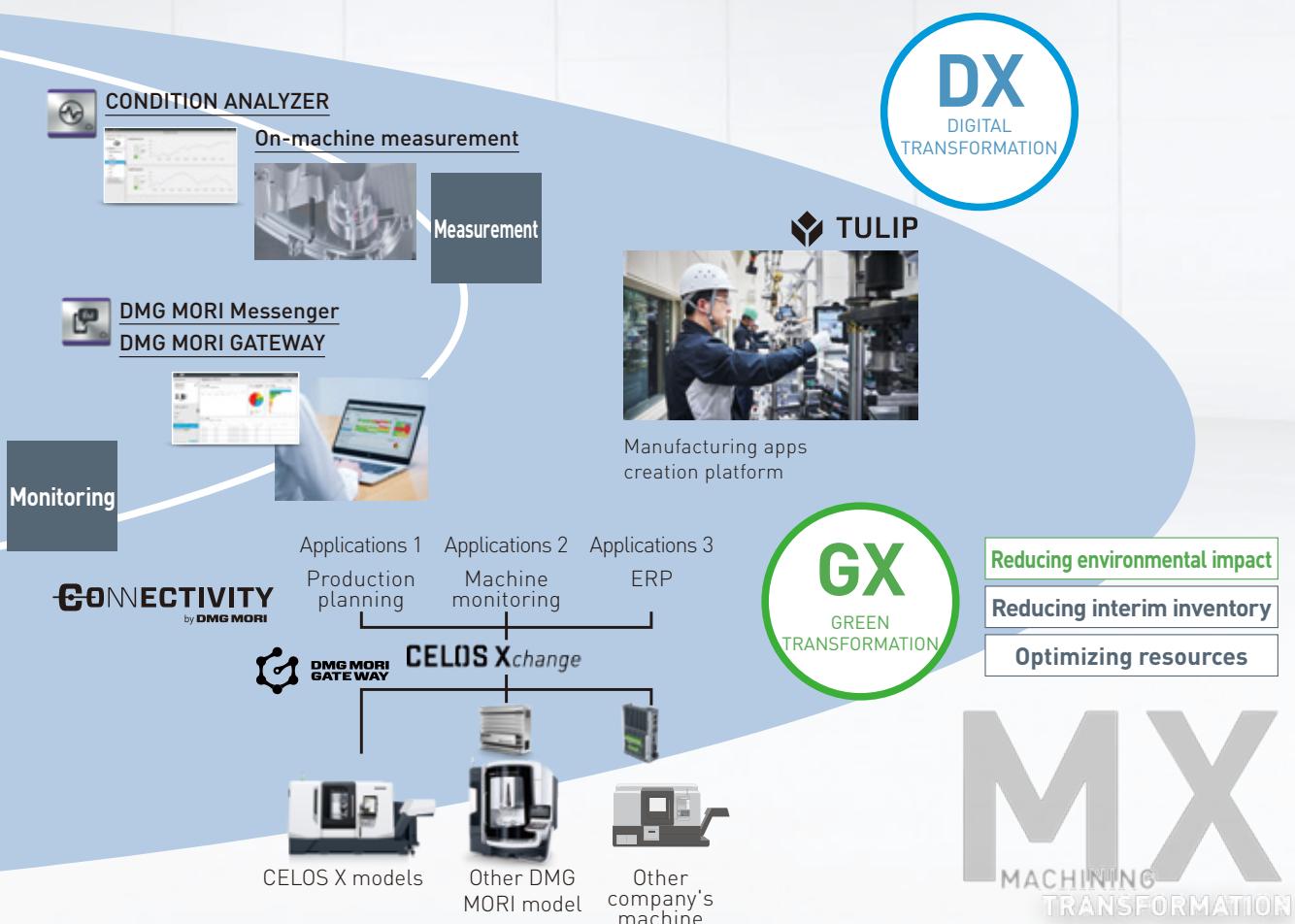
+ Machine uptime extended with automatic night & weekend operation

## DMG MORI Machining Transformation

With Machine Transformation (MX), we are driving Green Transformation (GX) through process integration and automation powered by Digital Transformation (DX). Our goal is to create a lean and clean manufacturing environment in terms of operators, resources, energy, factory floor space, and time.

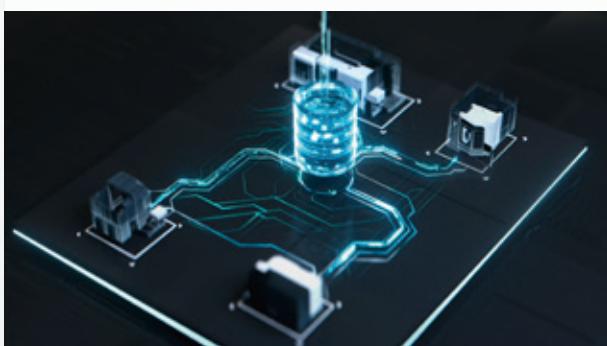
### Machining Transformation (MX)

Process integration→Automation→GX  
by DX



### DX

P30



- + Uses digital tools to improve work efficiency and create an operator-friendly shop floor

DX: Digital Transformation

### GX

P34



- + Enables energy efficient & sustainable production

GX: Green Transformation

Improved productivity and energy efficiency through process integration and automation lead to reduced CO<sub>2</sub> emissions

# Reinforced Structure to Maximize Cutting Capability

The best cutting performance requires a solid foundation.

Therefore, we have utilized digital twins from the design stage together with the possibilities of our DMG MORI technology to optimize the machine structure and realize the highest rigidity.

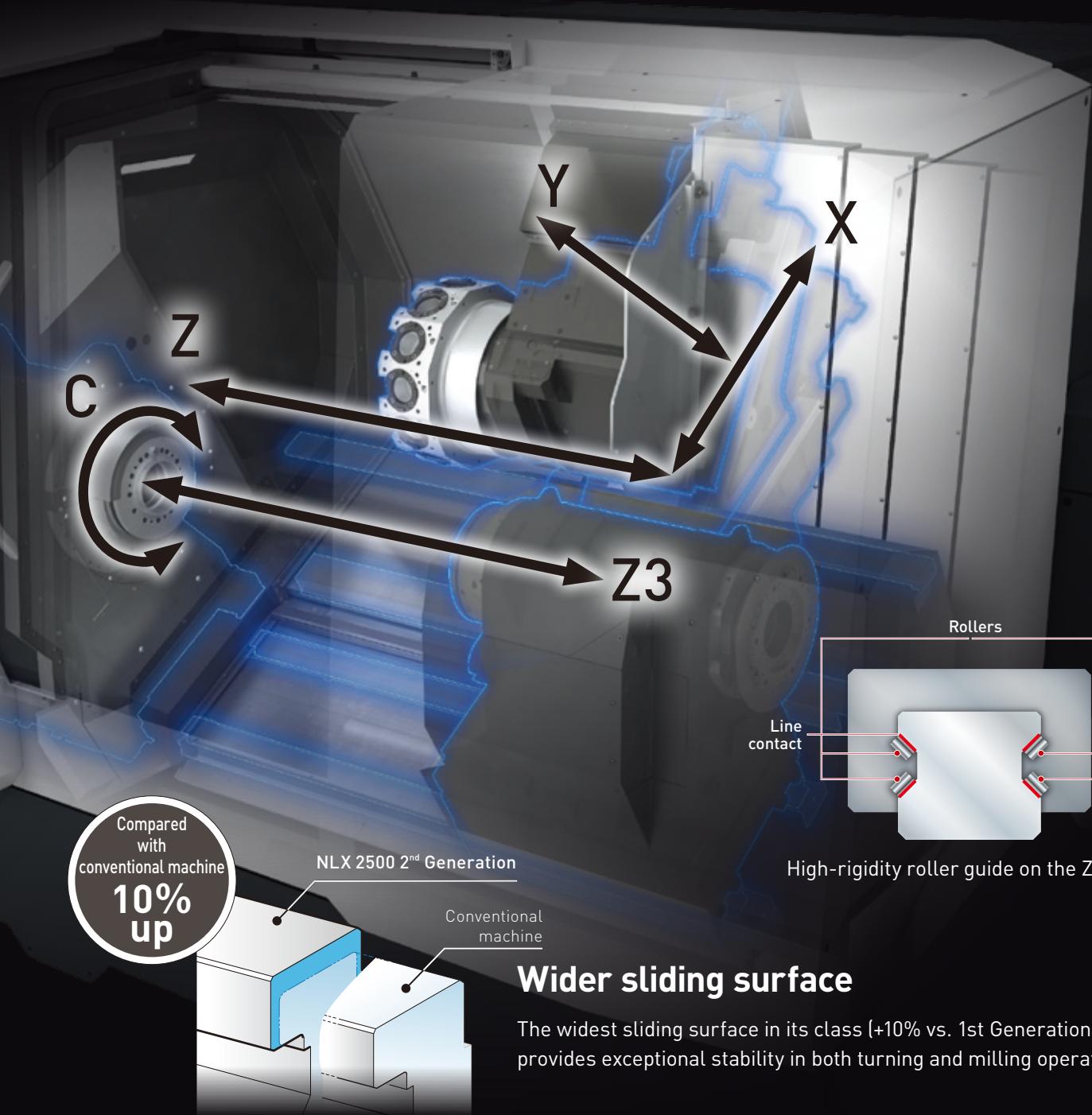
This includes adopting sliding guideways on the X / Y / Z-axes for improved vibration damping and dynamic rigidity to support excellent cutting performance.

- + High rigidity bed with slideways for X / Y / Z axes,  
optimal for heavy cutting
- + Wider Z3-axis guideway and spacing between guides  
Dynamic rigidity improved by 1.3 times for the left spindle  
and 4.0 times for the right spindle (vs. 1st Generation)
- + High surface quality even with difficult-to-cut materials and  
intermittent cutting
- + Rapid traverse rate;  
X-axis 30 m/min (98.4 fpm), Y-axis 15 m/min (49.2 fpm), Z-axis 30 m/min (98.4 fpm)  
Z3-axis (Right spindle) 30 m/min (98.4 fpm) <Right spindle>  
Tailstock 7 / 20 m/min (23.0 / 65.6 fpm) (extend / retract) <Tailstock specification>

## Excellent accuracy achieved through latest analysis technology

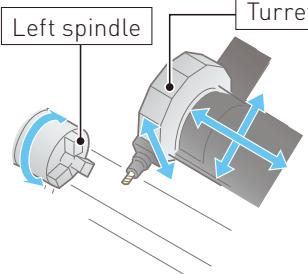
- + High accuracy & rigidity realized through digital twin simulations and thermal displacement analyses
- + Accelerated analysis cycles allowed for the intricate design adjustment



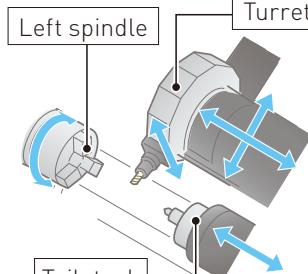


## Variations

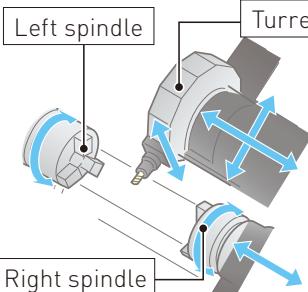
**Y-axis specification**



**Y-axis + Tailstock specification**

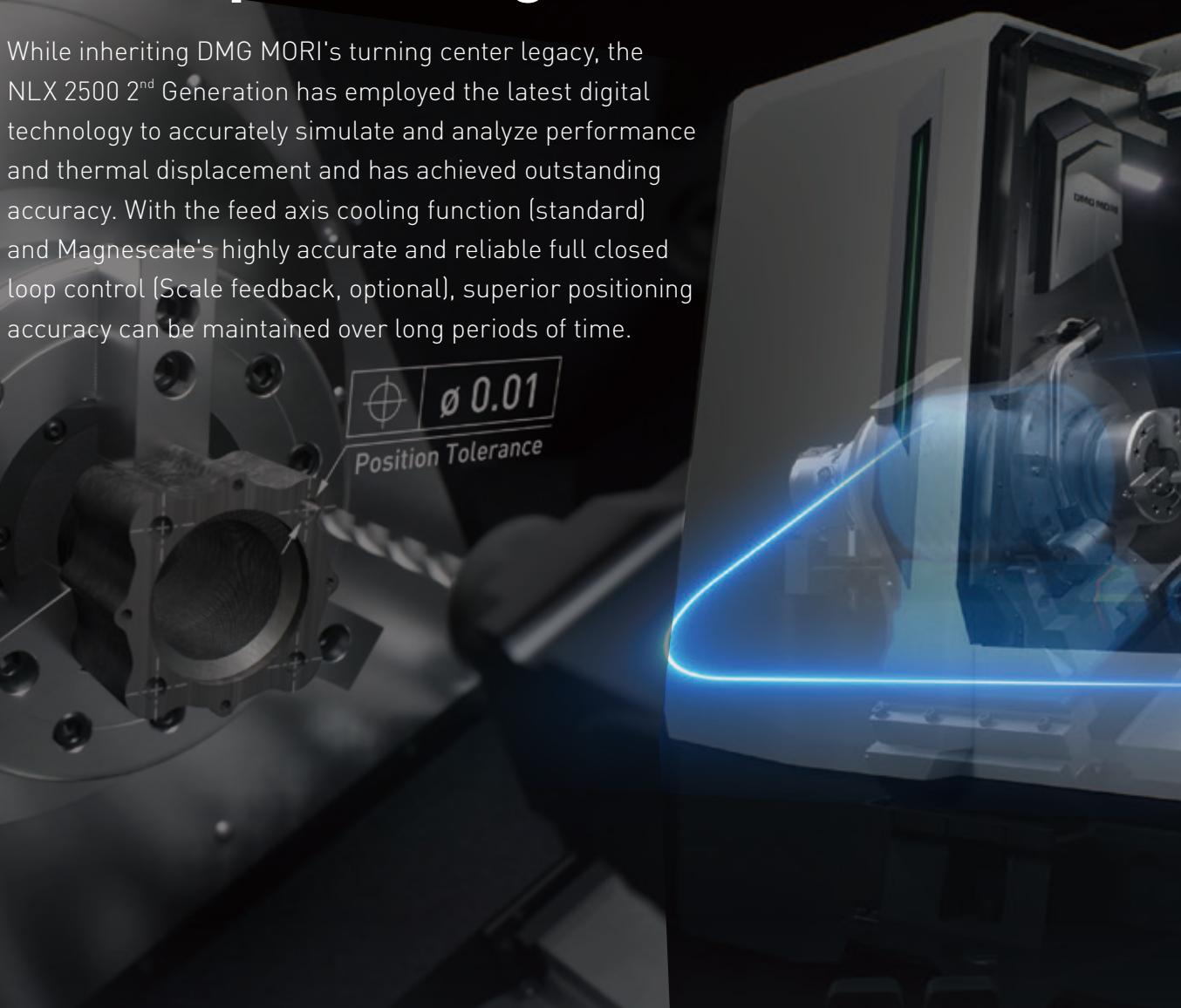


**Y-axis + Right spindle specification**



# Precision Achieved through Uncompromising Commitment

While inheriting DMG MORI's turning center legacy, the NLX 2500 2<sup>nd</sup> Generation has employed the latest digital technology to accurately simulate and analyze performance and thermal displacement and has achieved outstanding accuracy. With the feed axis cooling function (standard) and Magnescale's highly accurate and reliable full closed loop control (Scale feedback, optional), superior positioning accuracy can be maintained over long periods of time.



DBB TEST (actual result)

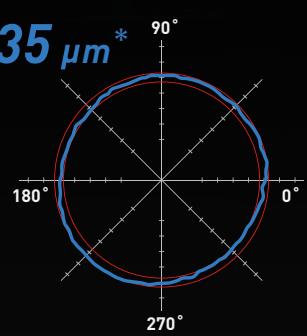


High precision of C-axis positioning

**C-axis**  
indexing accuracy  
**4.1 arcsec\***  
( Indexing speed at 400min<sup>-1</sup> )

\* MAP compensation by self-calibrating rotary encoder

Circularity (actual result)



\* The cutting test results indicated in this catalog are provided as examples.  
The results indicated in this catalog may not be obtained due to differences in cutting conditions and environmental conditions during measurement.

## Optimized structure with excellent thermal stability

X / Y / Z axis ball screws' center cooling and double anchor support as standard

Machining accuracy has been further improved with the ball screw center and feedbox cooling function, as well as double-anchor supports at both ends to enhance cooling efficiency and rigidity.

Coolant circulation for casting parts

- + Suppresses thermal displacement
- + Resistance to changes in ambient temperature
- + High-accuracy long-term machining

### Full closed loop control <Scale feedback> (Option)



- + Superior precision with the Magnescale full closed loop control (Scale feedback)
- + Magnetic measuring system with a high resolution of 0.01 µm
- + Resistance to oil and condensation due to a magnetic detection principle
- + Impact resistance of 980 m/s<sup>2</sup> (38,582.7 in./s<sup>2</sup>)
- + Vibration resistance of 250 m/s<sup>2</sup> (9,842.5 in./s<sup>2</sup>)
- + Thermal expansion coefficient matched to machine's cast iron

### MAP compensation (Standard)

Magnescale's high-resolution laser scale (master encoder) compensates for spindle encoder errors and provides excellent accuracy.

**Magnescale**

# Extensive Spindle Lineup of turnMASTER

NLX 2500 | 700

Equipped with a reliable, high-torque turnMASTER that effectively suppresses thermal displacement, the two spindles on the NLX 2500 2<sup>nd</sup> Generation support multiple chuck sizes; the left spindle for 10- and 12-inch chucks, and the right spindle for 6-, 8-, and 10-inch chucks. The right spindle offers the same performance with the left spindle, which enables double-sided continuous machining. In combination with rotary tools and Y-axis, the NLX 2500 2<sup>nd</sup> Generation can cover everything from turning to secondary and back-side machining, or integrate different machining operations.

Left:  
turnMASTER 10" Generation 2  
and turnMASTER 12"

**turnMASTER spindle with large through-hole + bar feeder = process integration & automation**

The next-generation turnMASTER spindle offers a large through-hole diameter of  $\phi 115$  mm (4.5 in.) to enable customers to connect large-diameter bar feeders and integrate high-mix production processes. The right spindle turnMASTER10" S also has a spindle through-hole diameter of  $\phi 115$  mm (4.5 in.), which is equivalent to the machining capacity of the left spindle.

Machining  
ability

**1.25  
times**

## turnMASTER for both spindles

- + Advanced labyrinth structure for frequent use of high-pressure coolant
- + Spindle air purge as standard
- + For blocking coolant and enhancing durability
- + 6-, 8-, 10-inch for the right spindle

### Max. rotational speed (left spindle)

Conventional machine      NLX 2500 2<sup>nd</sup> Generation  
**4,000 min<sup>-1</sup>**      1.25 times → **5,000 min<sup>-1</sup>**

### Max. rotational speed (right spindle)

Conventional machine      NLX 2500 2<sup>nd</sup> Generation  
**6,000 min<sup>-1</sup>**      1.17 times → **7,000 min<sup>-1</sup>**

### Spindle torque

Conventional machine      NLX 2500 2<sup>nd</sup> Generation  
**599 N·m**      1.4 times → **843 N·m**  
 (441.8 ft·lbf)      (621.8 ft·lbf)

### Spindle output

Conventional machine      NLX 2500 2<sup>nd</sup> Generation  
**18.5 kW**      1.6 times → **30 kW**  
 (24.7 HP)      (40 HP)

Right: Slim-type turnMASTER for powerful performance with minimal interference

### Spindle

Spindle type	Left spindle		Right spindle		
	turnMASTER Generation 2 10"	turnMASTER12"	turnMASTER6"	turnMASTER8" S	turnMASTER Generation 2 10" S
Chuck size inch	10	12	6	8	10
Through-spindle hole diameter mm (in.)	φ115 (φ4.5)		φ45 (φ1.7)	φ83 (φ3.2)	φ115 (φ4.5)
Max. spindle speed min <sup>-1</sup>	5,000	3,000	7,000		5,000
Spindle output kW (HP)	30 (40)	36 (48.0)	11 (15)	23 (30.7)	32 (42.7)
Spindle torque N·m (ft·lbf)	843 (621.8)	1,273 (938.9)	95 (70.1)	207 (152.7)	577 (425.6)

### Workpiece size

Specifications	NLX 2500 2 <sup>nd</sup> Generation		
	Y-axis specification	Y-axis + Tailstock specification	Y-axis + (Right spindle specification)
Max. turning diameter mm (in.)		φ 366 (φ14.4)*1	
Max. turning length mm (in.)	708 (27.8) <NLX 2500   700>*2, 1,258 (49.5) <NLX 2500   1250>*2		
Bar work capacity mm (in.)		φ 105 (φ4.1)*3	

\*1 With 35 mm (1.4 in.) tool overhang for O.D. turning

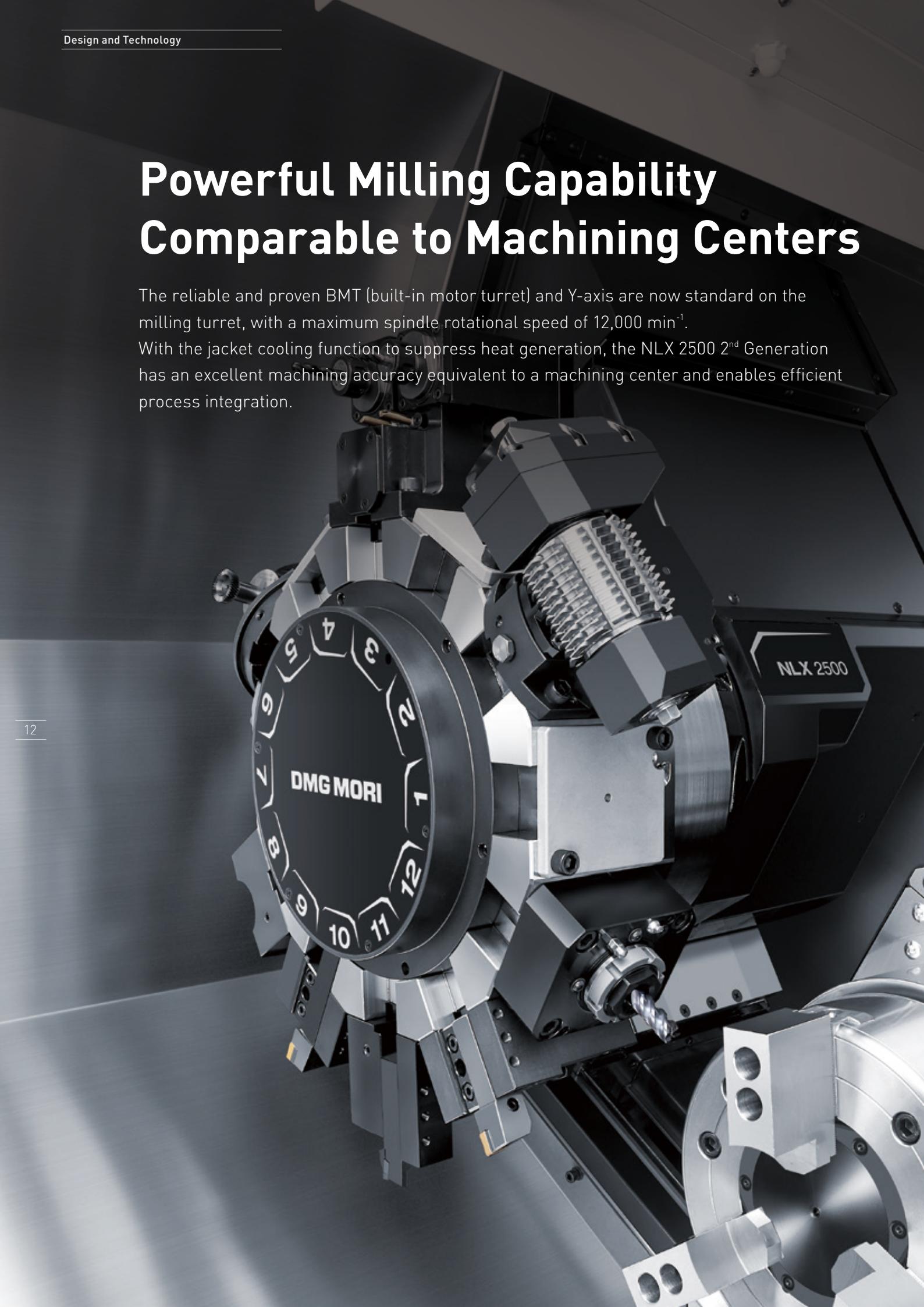
\*2 Varies depending on specifications. For details, please contact DMG MORI's representative.

\*3 Bar work capacity may be limited by the type of chuck / cylinder, etc.

# Powerful Milling Capability Comparable to Machining Centers

The reliable and proven BMT (built-in motor turret) and Y-axis are now standard on the milling turret, with a maximum spindle rotational speed of  $12,000 \text{ min}^{-1}$ .

With the jacket cooling function to suppress heat generation, the NLX 2500 2<sup>nd</sup> Generation has an excellent machining accuracy equivalent to a machining center and enables efficient process integration.



## Further evolved turret

### Max. milling spindle speed

Conventional machine

**10,000 min<sup>-1</sup>**

NLX 2500 2<sup>nd</sup> Generation

**12,000 min<sup>-1</sup>**

1.2 times

Milling  
**1.4**  
times

### Milling spindle torque

Conventional machine

**40 / 14 N · m**  
(29.5 / 10.3 ft · lbf)

NLX 2500 2<sup>nd</sup> Generation

2.15 times

**86 / 56 N · m\*** (63.4 / 41.3 ft · lbf)

**100 / 60 N · m\*** (73.8 / 44.3 ft · lbf) <High-torque>

\* With BMT 60/108

### Milling spindle output

Conventional machine

**5.5 / 5.5 / 3.7 kW**  
(7.5 / 7.5 / 5.5 HP)  
<3 min / 5 min / cont>

NLX 2500 2<sup>nd</sup> Generation

**13 / 10 kW\*** (17.3 / 13.3 HP) <10%ED / cont>

**15 / 15 kW\*** (20 / 20 HP) (10%ED / cont) <High-torque>

\* With BMT 60/108

13

## Powerful turret with wide machining area

### Advanced Built-in-Motor Turret Technology

- + Improved milling power
- + Improved milling accuracy
- + Controls the turret's heat and vibration
- + Reduced energy loss



## Turrets available in three types



### 10, 12-station Turret

+ BMT60/108

#### High-speed

Max. rotational speed:  
12,000 min<sup>-1</sup>

Output: 13 / 10 kW (17.3 / 13.3 HP)

Torque: 86 / 56 N·m (63.4 / 41.3 ft·lbf)

#### High-torque

Max. rotational speed:  
6,000 min<sup>-1</sup>

Output: 15 / 15 kW (20 / 20 HP)

Torque: 100 / 60 N·m (73.8 / 44.3 ft·lbf)



### 20-station Turret

+ BMT40/78

#### High-speed

Max. rotational speed: 12,000 min<sup>-1</sup>

Output: 13 / 10 kW (17.3 / 13.3 HP)

Torque: 40 / 40 N·m (29.5 / 29.5 ft·lbf)



### 12-station Turret

+ VDI40 Direct Drive

#### High-speed

Max. rotational speed:  
12,000 min<sup>-1</sup>

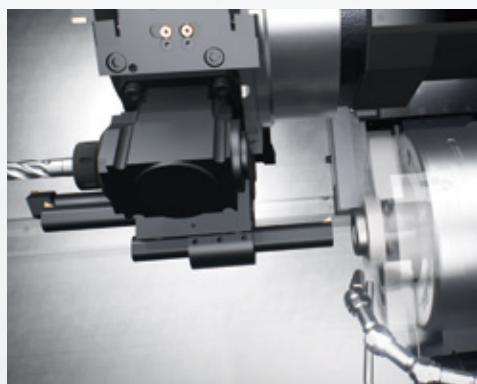
Output: 15 / 12 kW (20 / 16.0 HP)

Torque: 47.7 / 33.2 N·m (35.2 / 24.5 ft·lbf)

#### Repeatability

6 µm / 200 mm (7.9 in)

## Extended tool overhang



The maximum tool overhang has been extended to 100 mm. (3.9 in)

#### Outer diameter

Conventional machine

NLX 2500 2<sup>nd</sup> Generation

**50 mm (1.9 in) ▶ 100 mm (3.9 in.)**

#### Right spindle

Conventional machine

NLX 2500 2<sup>nd</sup> Generation

**60 mm (2.4 in) ▶ 100 mm (3.9 in.)**

## X- and Y-axis travel and bar work capacity

The Y-axis travel has been extended from the previous model to 120 mm and bar work capacity to ø105 mm, expanding the range of machinable workpieces.

### **Y-axis travel**

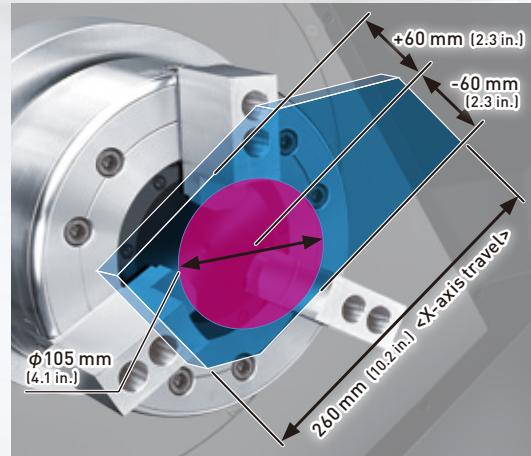
Conventional machine

**100 ( $\pm 50$ ) mm** ► **120 ( $\pm 60$ ) mm**  
(3.9 ( $\pm 1.9$ ) in.) (4.7 ( $\pm 2.3$ ) in.)

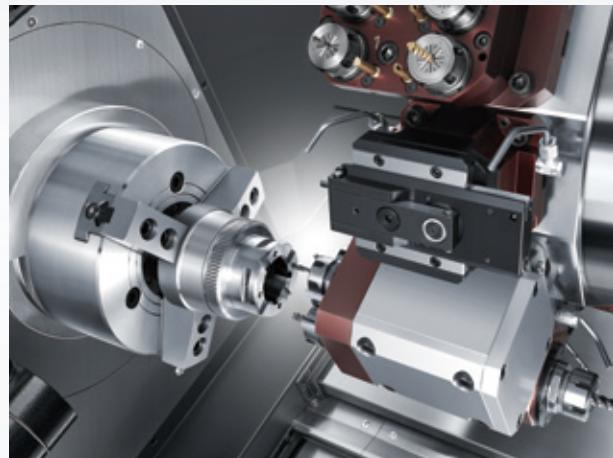
### **Bar work capacity**

Conventional machine

**ø80 mm (ø3.1 in.)** ► **ø105 mm (ø4.1 in.)**



## Multi-axis holder (Option)



Different tools can be mounted on one station, allowing for much greater capacity and flexibility in tool selection. This feature eliminates the need for turret indexing during tool changes and reduces cycle time. The increased Y-axis travel also expands the range of workpieces machinable.

## In-machine tool presetter

Tilting type for the left spindle and detachable type for the right spindle are offered as standard. Detachable type and automatic tilting type are also available as options for the left spindle.



# Unique Solutions against Chip, Coolant, Mist Troubles to Advance Process Integration & Automation

Chips, coolant, and mist generated during machining can cause severe machine troubles and are major hindrances to automation. The NLX 2500 2<sup>nd</sup> Generation adopt state-of-the-art technology to eliminate such problems, enabling long unmanned machine utilization for maximized automation effects.

●3 machining troubles: Cutting chips, coolant, and mist hinder stable and continuous production and deteriorate the factory environment.

## Two-layer clean coolant tank (Standard)

In addition to the main tank, a secondary coolant tank is equipped as standard to store filtered clean coolant.

The additional tank is located above the main tank, increasing capacity without extra floor space.

Options (e.g. ultra-high pressure coolant system, coolant chiller) are also available without additional floor space.

- + Coolant capacity: 687 L (181.4 gal.) <1.9 times x 1st Generation><sup>\*</sup>
- + Suppresses coolant temperature rise
- + Filtered clean coolant on top

\* For NLX 2500 | 700 2<sup>nd</sup> Generation



## Built-in mist collector zeroFOG available without additional floor space (Option)

### CLEAN

- + Air quality comparable to household air purifiers  
Mist collection efficiency over 99.97% for 0.3 µm particles
- + Stable collection performance realized by filter clogging monitoring and automatic motor control<sup>\*1</sup>

### COMPACT

- + Attachable to the machine body<sup>\*2</sup>  
No additional floor space necessary Unified design concept with the machine

### High maintainability

- + Frequent filter cleaning no longer necessary.  
Automatic cleaning of the primary filter prevents filter clogging
- + Notification of filter exchange timing

### ENERGY-SAVING

- + Contribution to SDGs: less energy consumption and carbon emission



Access here for the details of zeroFOG

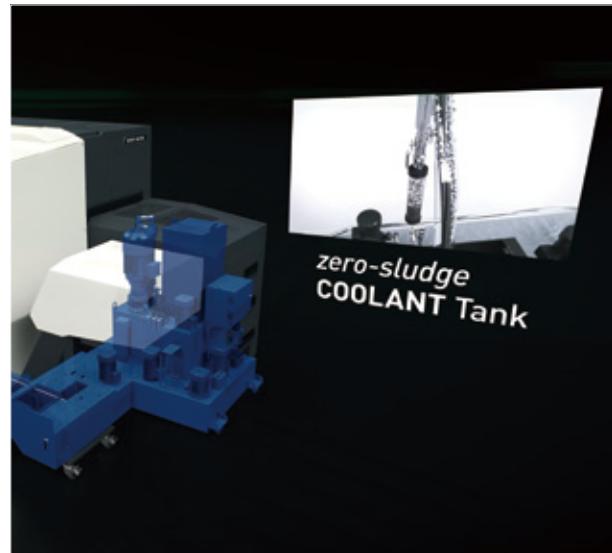


<sup>\*</sup>1 Airflow may decrease depending on operating conditions such as mist concentration, oil type, and machining details.  
<sup>\*</sup>2 The method of mounting on the machine varies depending on the model and specifications.

## zero-sludgeCOOLANT (Option)

Multiple coolant nozzles are arranged to stir coolant and efficiently collect fine casting sludge with a highly accurate cyclone filter.

- + Reduce cleaning work of the coolant tank dramatically
- + Prevent clogging of pipes / coolant nozzles and pump breakage
- + Expand coolant life
- Not compatible with oil-based coolant.



Access here for  
the video

## zero-sludgeCOOLANT pro (Option)

The newly developed vertical coolant tank is compact in size, energy-saving and offers high capacity. This makes it the optimal coolant solution for continuous operation of highly productive automation systems.

Innovative  
Vertical  
Coolant Tank



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the video

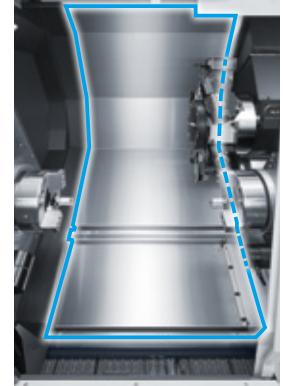
## Ceramic coating (Standard)

Ceramic coating is applied to chip accumulation areas and supports efficient removal. This prevents chip buildup even during long-hour operation.



## Stainless cover (Standard)

Stainless steel cover provides durability against direct contact with cutting chips.



## High-pressure through-spindle coolant unit for up to 10.0 MPa (1,450 psi) <variable pressure> (Option)

- + Coolant pressure adjustable from 1.0 to 10.0 MPa (145 to 1,450 psi) for different tools
- + Pressure feedback and inverter control drastically reduce power consumption and coolant heat generation
- + Chip removal process optimized for each case



Material	Steel	20 mm [0.8 in.]	
Chip form	Long	Short	Powdery
Hinge type + With box filter	○	○	△*1
Hinge type + Drum filter type	○	○	△*1
Hinge type (Aluminum)	—	—	—
Hinge type (Resin)	—	—	—
Scraper type	—	○	△*1
Magnet scraper type	—	○	△*1

\*1 Fine chips may pass through the filter or conveyor and accumulate in the coolant tank. To avoid possible damage on machining accuracy, secondary filtration equipment may be recommended.

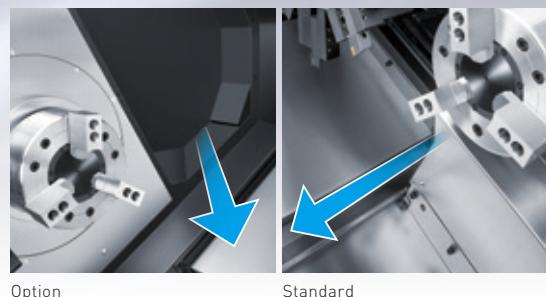
\*2 Technology Cycle "Chip Breaking" recommended

● Please consult our sales representative if the chip length exceeds 200 mm [7.9 in.].

● [Chip size criteria] Powdery: minute particles / Short: 50 mm [2.0 in.] or less in length,  $\phi$ 40 mm ( $\phi$ 1.6 in.) or less in diameter [a lump of chips] / Long: over 50 mm [2.0 in.]

## Chip flushing coolant

Chip flushing coolant from both sides improves chip removal efficiency.

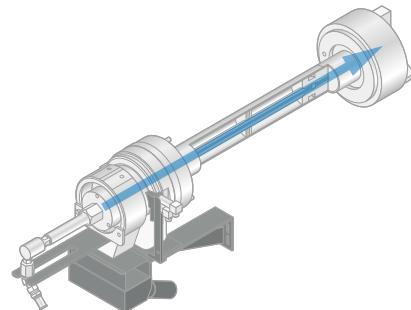


Option

Standard

## Through-spindle coolant system (Option)

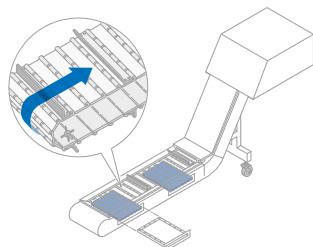
Coolant supplied through the center of the chuck removes chips generated during I.D. machining.



## Chip conveyor (Option)

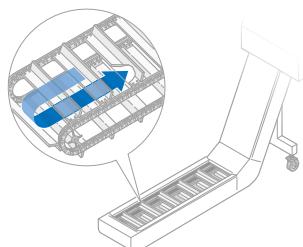
Handles various types of chips and ejects them in a highly efficient way.

### Hinge type + With box filter



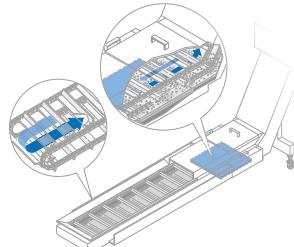
Box filter filters coolant and reduces chip contamination. For chips of various sizes.

### Scraper type



A plate called scraper collects and discharges chips at the bottom of the chip conveyor. For short or powdery chips.

### Magnet scraper type



Chips are collected with magnetic plates at the bottom of the tank. For fine magnetic chips such as castings.

○: Suitable △: Consideration required —: Not suitable

Cast iron		Aluminum, non-ferrous metal			Resin
Short	Powdery	Long	Short	Powdery	Short
○	△ <sup>*1</sup>	○	○	△ <sup>*1</sup>	—
○	△ <sup>*1</sup>	○	○	△ <sup>*1</sup>	—
—	—	—	○	—	—
—	—	—	—	—	○ <sup>*2</sup>
○	—	—	—	—	—
○	—	—	—	—	—

- The options table shows the general options when using coolant. Changes may be necessary if you are not using coolant, or depending on the amount of coolant, compatibility with machines, or the specifications required.
- Please select a chip conveyor to suit the shape of your chips. When using special or difficult-to-cut material (chip hardness HRC45 or higher), please consult our sales representative.
- Chip conveyors are available in various types for handling chips of different shape and material. For details, please consult our sales representative.

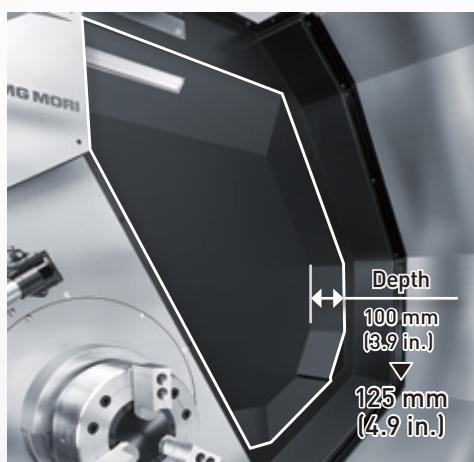
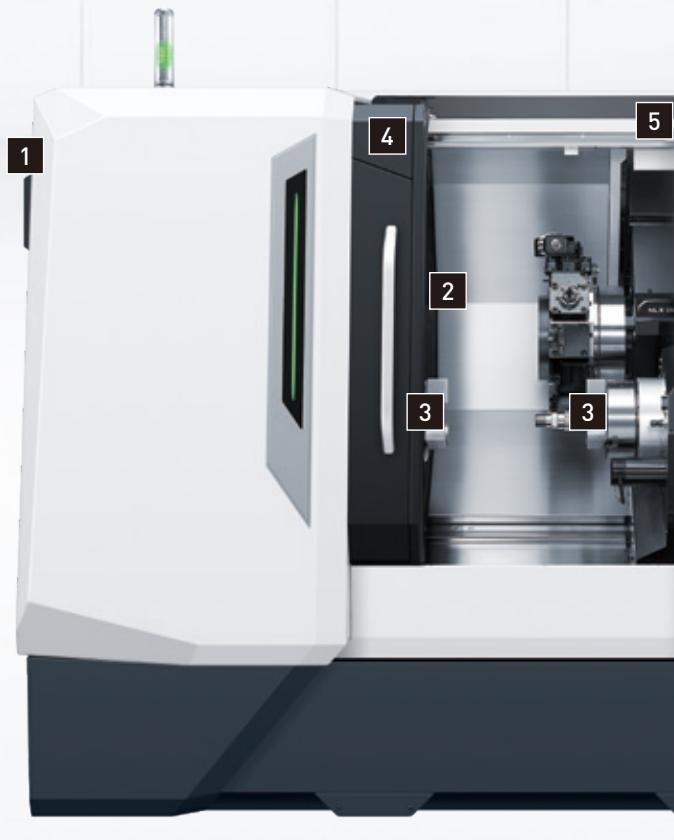
# Pursuit of Ergonomics and User-friendliness

The NLX 2500 2<sup>nd</sup> Generation is also designed to maximize operability and maintainability and enhance machine availability. Based on the extensive analysis of user feedback, we have increased the door opening width and improved the spindle accessibility. Since all the components are easily reachable for regular inspection, the operators can enjoy the maximum machine performance and a high level of work productivity at all times.



## 1 zeroFOG (Option)

Easy filter replacement



## 3 NC-CLAMP

- + Chuck clamping force and spindle center thrust adjustable on the operation panel
- + Chuck stroke visible on the operational panel
- + Reduced setup time for chucks and tailstock
- + Supports high-mix production
- + Program-based pressure check
- + Detects workpiece setting errors
- + Inch function as standard
- + Two chuck foot switches as standard



## 4 Cover optimized for chip and coolant management

The optimized cover prevents chips and coolant from leaking out of the machine, keeping the body clean at all times.

## 5 Servo automatic door (Option)

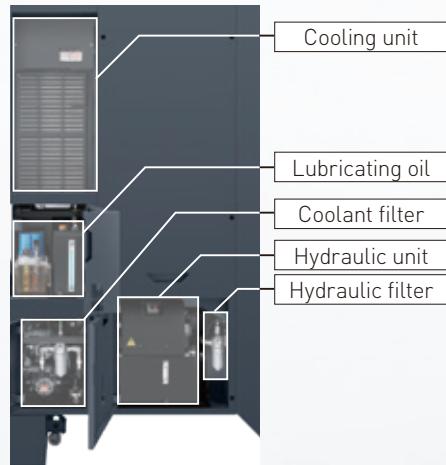
- + Door acceleration / deceleration controlled for safety and speed
- + Door can be stopped at any position by pressing a button, or automatically stopped at a pre-defined position. This feature keeps coolant and chips inside the machine during manual workpiece cleaning.
- + Push-open function \*<sup>1</sup>: Door opens automatically when pushed in the moving direction
- + Retry function \*<sup>2</sup>: Prevents machine stops due to collision detection alarms (e.g. chips caught on the door rail)

\*<sup>1</sup> For door opening only  
\*<sup>2</sup> For door closing only



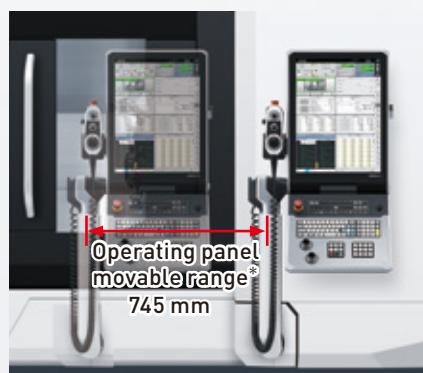
## 6 All maintenance equipment located at the rear side of the machine

For maximum operability and maintainability, all service equipment are located at the rear of the machine. With reduced lubricating oil consumption and a larger oil tank, there is less need for refills.



## 7 ERGoline X Touch with Superior Operability

The movable\*, swivel touch-screen operating panel can move 745 mm (29.3 in.) in both the left and right directions to ensure better accessibility to the spindle and the workpiece.



\* NLX 2500 | 1250 2<sup>nd</sup> Generation only.

# Complex Processing Made Simple & Quick

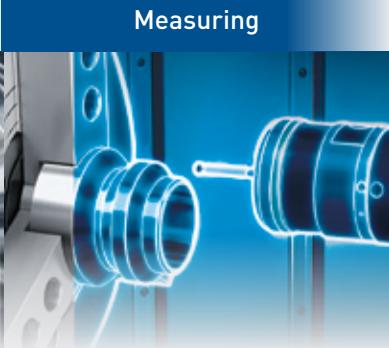
## DMG MORI Technology Cycles

Technology Cycles are the perfect solution for combining highly advanced simultaneous 5-axis milling machines, mill-turn machines and machining centers with state-of-the-art tools, measuring equipment, robots, sensors, and other peripheral technologies to boost customer productivity. Without the need for specialized machines, programs, or tools, customers can quickly start high-quality production in a simple and timely manner.

Shaping



Measuring



Monitoring



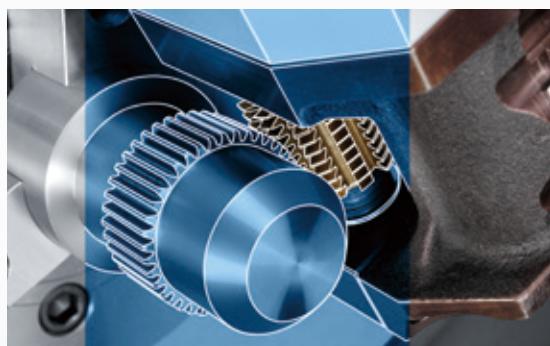
Handling



For  
process  
integration

### Gear hobbing

Optimal programming achieves hobbing with a general-purpose machine



- + Hobbing program can be easily created by conversational input
- + Hob cutter's machining position can be changed, maximizing the tool life
- + Consolidation of machining operations into the general-purpose machine reduces setup time and enhances accuracy such as concentricity due to no setup change
- + ISO gear accuracy grade 8

### gearSKIVING

High-speed gear cutting including internal teeth



- + Can easily program a machining technique called gear skiving
- + Internal teeth that cannot be machined by hobbing can be cut
- + Consolidation of processing operations into the general-purpose machine reduces setup time and enhances accuracy such as concentricity due to no setup change
- + ISO gear accuracy grade 8

## Chip Breaking

Effectively prevents chip problems by breaking chips into small pieces



## Alternating speed

Stable machining in which chatter hardly occurs



## Multi-threading 2.0

Cutting special thread



## Excentric machining

Easy programming of excentric machining



## Easy tool monitoring

Monitoring load of spindle and traveling axes



## Polygon Cutting

Highly efficient cutting of polygons



# ERGOLine X with CELOS X

## Smooth and Time-saving Operation

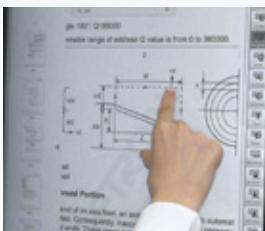
The refined ergonomic design ensures easy usage down to the smallest detail. The dustproof and waterproof design (IP54 rating) is ideal for factory environments and realizes comfortable and safe operation.

### 1 Large touch screen

Superior visibility and intuitive operation.

- + 10% larger screen and increased text size
- + All necessary information displayed on one screen for higher work efficiency
- + Remote access: machining programs on office PCs are visible on the shop floor as well
- + Can also be operated with touch pen<sup>\*1</sup>

<sup>\*1</sup> Option



Electrostatic touch panel



Can also be operated with gloves on



### FANUC

- + Upper panel: Front 10°, Back 20°
- + Lower panel: 0 to 84° (adjustable in 7 steps at 12° each)

### 2 Hardware buttons that are easy to press

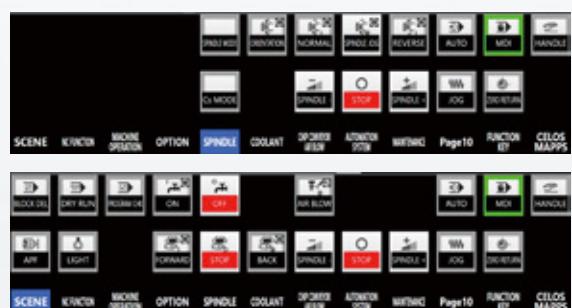
Ideal for program input where accuracy is required.



- + Dustproof, waterproof and durable design
- + Optimized button ergonomics for comfort pressing

### 3 HYBRID BAR<sup>\*2</sup>

Only displays the buttons that are necessary for the current operation. Prevents errors and improves workability.



Example of displayed buttons

- + Switches displayed buttons automatically to suit your current operation
- + LCD panel with comfortable push sensation
- + Synchronized with open programs on the touch screen

<sup>\*2</sup> FANUC only



## SIEMENS

- + Upper panel: Front 0°, Back 30°
- + Lower panel: 10° - 85° (stepless adjustment)

## 4 Useful applications that reinforce your production processes



### Operator Workbook

CELOS App for easy job processing from the office or factory floor

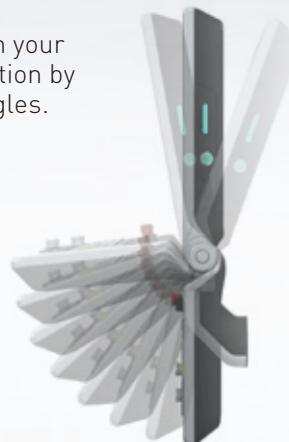


### Application Connector

CELOS App to enable display and operation of other IT systems on the operational panel

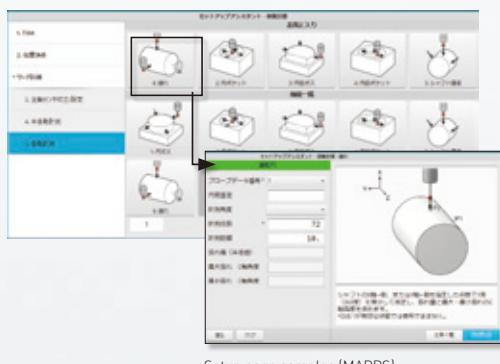
## 5 Upper and lower panel can be adjusted to your optimal viewing angle

Operate the machine in your most comfortable position by adjusting the panel angles.



25

## 6 Simple input screen for smooth completion of setup

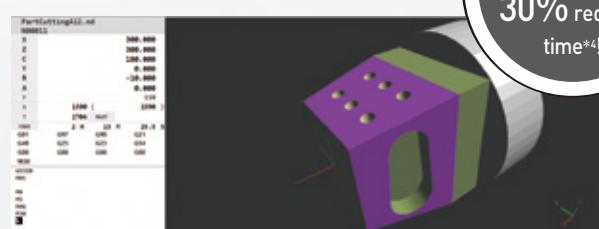


Setup page samples (MAPPS)

- + Easy-to-understand animations and diagrams guide you through the setup
- + For tool change, simply select a tool from the list
- + Enables anybody to safely perform tool change or measuring
- + Significantly reduces setup time

## 7 Drawing and complex machining simulations are processed in high speed.

- + CPU:Intel Core i5
- + Memory 32 GB
- + 6 GB program storage area
- + USB 2 ports



Drawing simulation

\*4 Based on actual results. Figure may differ depending on the machining program

Intel Core is a trademark or registered trademark of Intel Corporation

# Extensive Automation Solutions

The NLX 2500 2<sup>nd</sup> Generation can achieve full automation from material supply to finished part unloading. Below are our automation solutions to reduce spindle idle time, such as bar feeder specifications and workpiece unloader.

## Bar feeder (Option)

The combination of workpiece unloader enables automation of machining of bar materials.

- + Bar work capacity:  $\phi$ 105 mm ( $\phi$ 4.1 in.)

### Recommended accessories for bar feeder specification

- |                 |                 |
|-----------------|-----------------|
| + Bar feeder    | + Guide bushing |
| + Multi counter | + Work stopper  |
| + Signal lamp   |                 |



\* Depending on the chuck / cylinder used and its restrictions, it may not be possible to reach full bar work capacity.

## Right-side workpiece unloader (Option)

Transport can be selected by hand gripper or bucket with servo drive on all axes to enable clamping and high-speed unloading in any position.

- + Applicable workpiece diameter: 105 mm (4.1 in.)
- + Applicable workpiece length: 250 mm (9.8 in.)
- + Max. transfer mass: 6.0 kg (13.2 lb.)



## Left-side workpiece unloader (Option)

We have evolved the conventional parts catcher to allow easy adjustment by the customer, while enlarging the compatible workpiece size for use on both spindles.

- + Applicable workpiece diameter: 105 mm (4.1 in.)
- + Applicable workpiece length: 200 mm (7.9 in.)
- + Max. transfer mass: 4.0 kg (8.8 lb.)

● Not available when the steady rest is selected, because of interference.



## GX Loader (Option)

Loader type		<b>GX5</b>	<b>GX10T</b>
Gantry loader	Max. travel speed	X-axis <hand up / down> m/min (fpm) Z-axis <loader unit left / right> m/min (fpm)	180 (590.6) 200 (656.2)
	Model		Parallel hands, back end hands
Loader hand	Max. transfer weight	kg (lb.)	Back end hands
	Applicable workpiece diameter	mm (in.)	5 × 2 (11 × 2)
	Applicable workpiece length	mm (in.)	$\phi$ 40 - $\phi$ 150 ( $\phi$ 1.5 - $\phi$ 5.9)
	Number of pallet tables	Pallet	10 × 2 (22 × 2)
Work stocker	Max. loading capacity	kg (lb.)	20 - 120 (0.7 - 4.7)
	Max. workpiece stacked height	mm (in.)	20 - 150 (0.7 - 5.9)
			14, 20, 26
			10, 20
			35 (77) / Pallet
			75 (165) / Pallet
			470 (18.5)



● Depending on the shape of the workpiece, it may not be possible to machine with standard specifications. For details, please consult our sales representative.  
● Please consult our sales representative in the case that a workpiece diameter is less than  $\phi$ 40 mm ( $\phi$ 1.6 in.), or a workpiece length is less than 20 mm (0.8 in.).

## MATRIS Light

- + Fence-less and space-saving cooperative robot system
- + Easy-to-use HMI powered by plug-in software
- + Robot cart size of 600 × 900 mm [23.6 × 35.4]\*, equivalent to the operator's workspace: no need for additional space
- + Maximum payload: 10 kg (22 lb.) <MATRIS Light10>

\* Excluding protruding parts

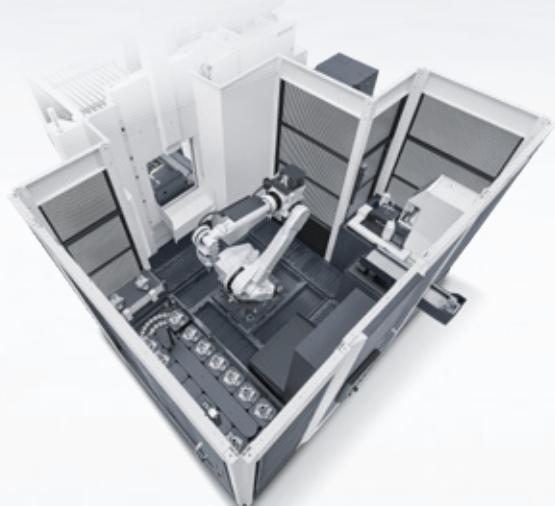


Access here for the  
details of MATRIS Light



## MATRIS

- + Flexible automation system for high-mix, variable-volume production
- + Standardized peripherals ensure easy customization to meet your specific needs
- + Job order system allows simple operation without programming
- + Seamless system management with MATRIS controller



## WH-AMR 10

- + Collaborative robot
- + Guideless, fenceless, cableless
- + Automates shop floor logistics
- + Add-on to existing machines possible
- + Stable travel even on steps <up to 35 mm (1.4 in.)>
- + Arm positioning accuracy: ±1 mm (±0.04 in.)



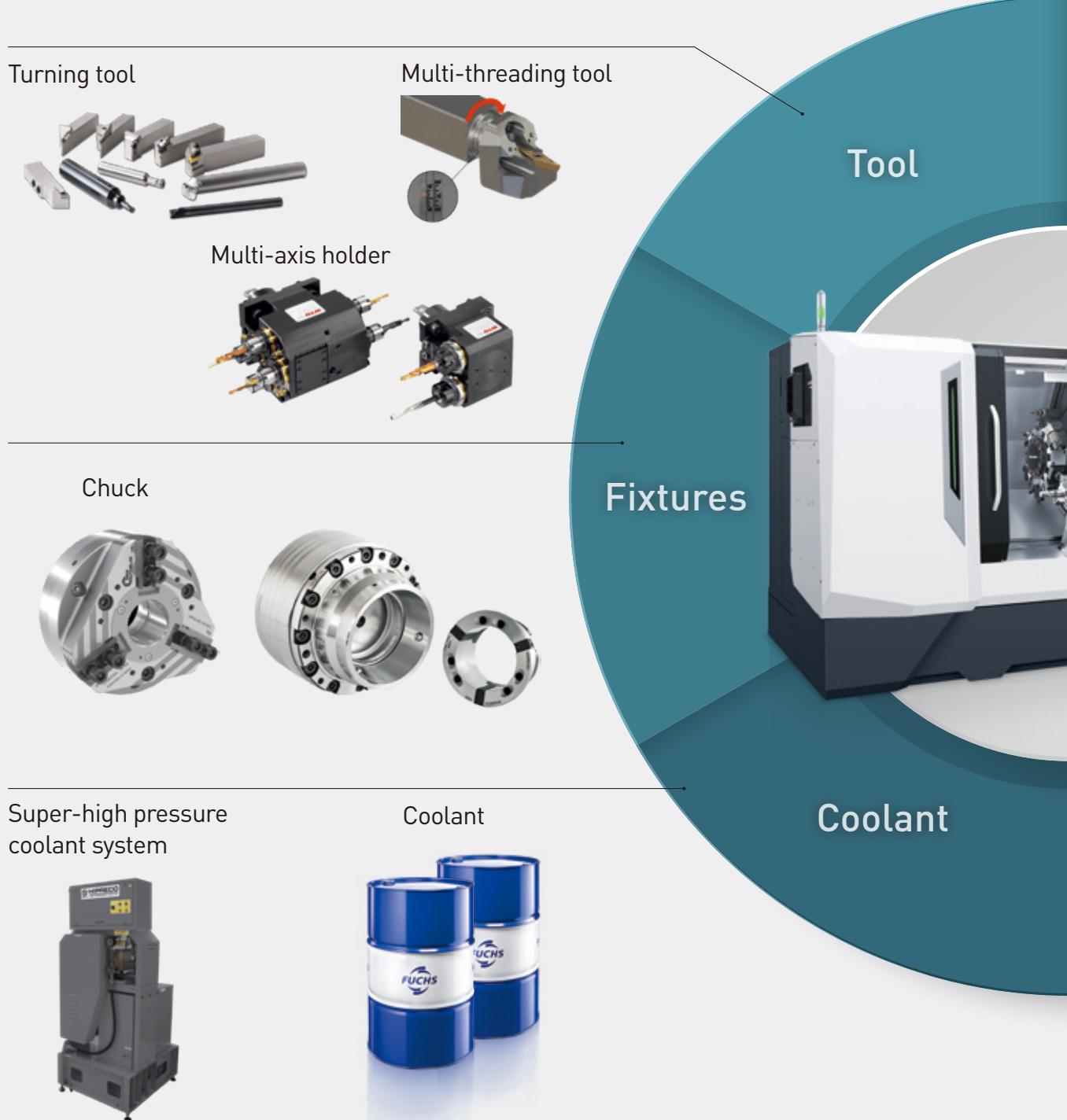
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for the video



# DMG MORI Qualified Products

## One-stop Service for Various Needs

The DMG MORI Qualified Products (DMQP) program is designed to certify peripherals that meet DMG MORI standards in quality, performance and maintainability. DMG MORI is your single-source supplier for customer-optimized peripheral equipment, including all connection and setup work. DMQPs come with the same 2-year warranty as our machine tools.





Shrink fit system



Tool presetter



Bar feeder



Robot system



Air dryer



Air compressor



Multi dry filter



# Digital Solutions to Promote the Digital Transformation of Your Shop floor

DMG MORI's digital solutions visualize production-related information and eliminate inefficient work. The power of digital technology supports workers on the shopfloor, improving overall productivity and promoting work style innovation.

## CELOS Club It is a standard service available for 3 years after machine delivery.

CELOS Club connects DMG MORI and customers via a network, enabling machine monitoring, preventive maintenance, and remote troubleshooting.



### DMG MORI Messenger Secured Connection (4G)

**Real-time machine operation monitoring**  
**Monthly reports to maximize uptime**

- + Easy to view machine operation rate, cycle time, machining results, and alarm history
- + Real-time data accessible from PCs, tablets, and smartphones
- + E-mail notifications of job completion and alarms



### Preventive Maintenance Call

**Constant critical alarm monitoring to prevent troubles in advance**

- + DMG MORI's service engineers remotely collect and analyze your machine operation data
- + Critical alarms and trends monitored for early signs of machine troubles
- + DMG MORI's service engineers call customers for early signs and preventive measures



### NETSERVICE

**Quick recover from any problems**

- + DMG MORI's service engineers can access your machine and check troubles remotely
- + Quick and accurate understanding of your machine status to drastically reduce downtime



## Robust security

Securely connect machines to the network and prevent problems and accidents caused by cyber attacks.

- + Only executes programs registered in the whitelist to prevent malicious programs
- + Prevents virus infection through machine bodies by blocking the execution of malicious programs in the first place

## Whitelist security software



## Digital Transformation of programming Program Creation in CAD / CAM

- + Ideal for machining complex shapes with 5-axis machines and mill-turn centers
- + Toolpath optimization increases machining efficiency and accuracy
- + Post processor translation ensures easy programming with different NC controls
- + DMG MORI proposes the optimal CAM for each customer's needs

**hyperMILL** **Mastercam** **SIEMENS CAM-TOOL**



## CELOS DYNAMICpost<sup>\*1</sup>

Post Processor / NC Simulation / Cutting Force Optimization integrated in one software Reliable bridge between CAM and machine tools

- + DMG MORI post processors maximize machine capacity
- + Interference check for safe and secure processing
- + Cutting force optimization reduces cutting time by 20%\*<sup>2</sup> and tool breakage during roughing
- + Free trial available

\*1 Option

\*2 Listed figures may not be achieved depending on the type of machining.

Access here for the video



**TULIP**

Access here for the detail of TULIP



Supports the digitization of your factory.  
Eliminates all redundancies from your shopfloor.

- + Easily create work procedure manuals with applications and make your shopfloor paperless
- + Real-time visualization of on-site production processes
- + Linkage with existing internal systems to manage data in one place



## Condition Agent

Predictive maintenance monitoring by AI  
for feed shafts, spindles, ATC, and APC

- + Detects potential issues in advance with DMG MORI's data library and AI
- + Diagnoses and visualizes machine aging to minimize downtime by scheduled maintenance
- + Reduces maintenance costs through early detection of bearing defects
- + Ready in 60 min., same-day diagnostics available



# Network Construction and Connection Services for Factories

## DMG MORI GATEWAY



32  
DMG MORI GATEWAY is a one-stop service for hardware installation, network setup, and cloud connection tailored to customers' machine setup and network environment.

Through the IoT integration of machines and equipment, customers can advance the digital transformation (DX) on the shop floor with operation monitoring, NC program transfers, and seamless data sharing for tool and production management systems.

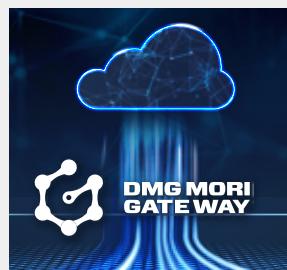
### DMG MORI GATEWAY

Connectable to third-party machines and peripherals

Data stored in the DMG MORI cloud

Shop floor network built by DMG MORI engineers

Remote monitoring of network and machine status.  
Instant notification in case of an alarm



# Your Contact for After-sales and Service: **my DMG MORI**



Access here for  
the video



my DMG MORI is a web-based platform that facilitates communication between customers and DMG MORI during repair and maintenance work. Unlike phone calls, the digital communication allows both parties to exchange detailed information. You can also view the updated status and history anytime, anywhere.

33

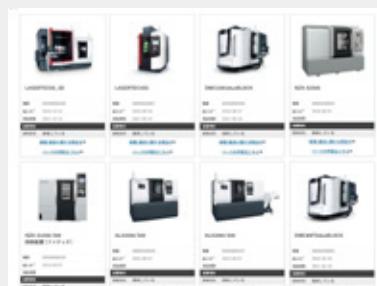
## MORE SERVICE

- + No queue:  
Simple online problem description
- + Pre-filled service inquiries: Send machine details, photos or videos
- + Immediate processing:  
The "right" service expert will process the inquiry with priority



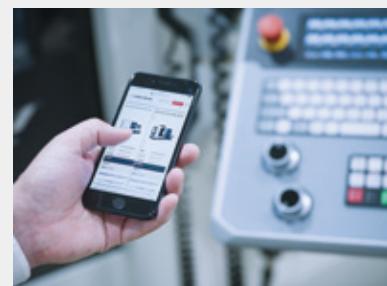
## MORE KNOWLEDGE

- + Full machine history: All machine events are retrievable in a structured format
- + All documents digital: Library for technical and commercial documents available
- + Real-time access to processing status: More transparency for service and spare part inquiries



## MORE AVAILABILITY

- + Free access, 24/7:  
From anywhere, at any time
- + Your portal, your rules:  
The customer controls who sees what
- + On any device :  
Computer, Smart-phone or via CELOS



# For Sustainable Production

DMG MORI is making every effort to reduce power consumption and CO<sub>2</sub> emissions and achieve energy-efficient production. Our initiatives for process integration, automation and DX are designed for an energy-saving, sustainable shop floor. Having achieved the SBT certification\* in 2021, we are now set to reduce carbon footprint of the entire supply chain.



**Annual CO<sub>2</sub> reduction per machine  
(in terms of camphor trees)**

Equivalent to

**63 camphor trees**



For NLX 2500 | 700 2<sup>nd</sup> Generation

34

ACCREDITED BY SBT\*



## Carbon footprint reduction targets by 2030

2030

2050

Scope 1 and Scope 2

▲ 46.2%

(Based on base year 2019, total emission volume base)

Scope 3

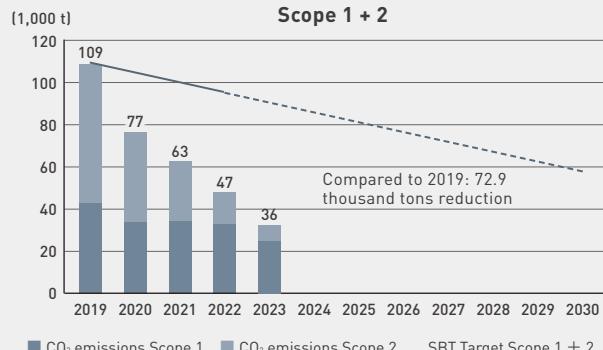
▲ 27.5%

(Based on base year 2019, total emission volume base)

▲ 90%

(Total of Scope 1, Scope 2 and Scope 3)

## Carbon footprint trend (SBT target value ratio) Scope 1 + 2



\* Abbreviation for Science Based Targets. Greenhouse gas emissions reduction targets set by companies for the next 5-15 years in accordance with the levels required by the Paris Agreement (limit global temperature increase to below 2 °C or 1.5 °C compared to pre-industrial levels).



Scan the QR code for DM MORI's approach towards sustainability

## Energy saving achieved by GREENMODE functions and higher machine performance

Besides the GREENMODE functions, higher machine performance contributes to shorter machining time and less power consumption.

### Higher machine performance

Optimal discharge pressure for each tool realizes energy-saving high pressure applications with low heat generation

- + Adjustable pressure <1.0 to 10.0 MPa (145 to 1,450 psi)><sup>\*1</sup> for each tool
- + Pump speed control contributes to energy savings  
(Conventional machine: pressure fixed for all tools, pump speed constant)

\*1 Option



### GREENmode

#### GREEN monitoring

- + Visualize power consumption and CO<sub>2</sub> emission amount

#### GREEN device

- + High-brightness LED light
- + Inverter-equipped hydraulic pump

#### GREEN idle reduction

- + Shut off the power of the servo motor, spindle and coolant pump at a time of machine stop
- + Turn off the operation panel screen when a machine is not in operation for a certain time

#### GREEN control

- + Quicken standard M codes
- + Simultaneous acceleration / deceleration of the spindle and feed axes
- + Inverter-controlled coolant supply

## Reduced machining time and energy consumption by process integration

Conventional process (turning centers × 1, 2 processes, vertical Machining Center × 1, 1 processes) Cycle time

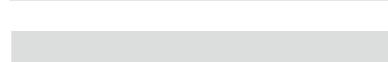


Process integration with NLX 2500 2nd Generation (NLX 2500 2nd Generation x 1, 2 processes) Cycle time



## Power consumption and CO<sub>2</sub> emissions per workpiece

Conventional process (turning centers × 1, 2 processes, vertical Machining Center × 1, 1 processes) Cycle time



Process integration with NLX 2500 2nd Generation (NLX 2500 2nd Generation x 1, 2 processes)



	Conventional models	NLX 2500 2 <sup>nd</sup> Generation
Power consumption (kWh)	10.0	8.8
CO <sub>2</sub> emissions (kg-CO <sub>2</sub> )	4.51	3.97

For NLX 2500 | 700 2<sup>nd</sup> Generation

### Workpiece: gear shaft

- Power consumption and CO<sub>2</sub> emissions are calculated based on customer examples using 4-axis horizontal machining centers in conventional operations. The result may vary for different models and machining processes.
- CO<sub>2</sub> base emission factor: 0.451 (kg-CO<sub>2</sub>/kWh)

### Annual CO<sub>2</sub> reduction

-1,890 kg (4,158 lb.)

Equivalent to

Equivalent to  
63\* camphor trees

When operating a machine for 2,000 hours to produce 3,500 parts

For NLX 2500 | 700 2<sup>nd</sup> Generation

\*CO<sub>2</sub> absorption per camphor tree: 30 kg (66 lb.) per year

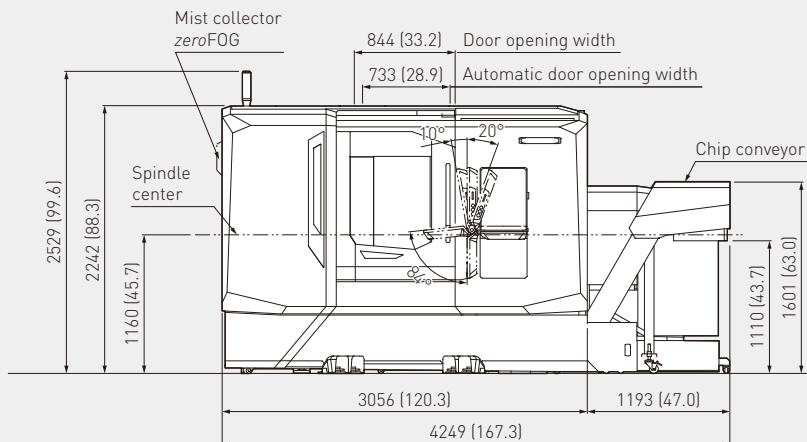


# Machine size

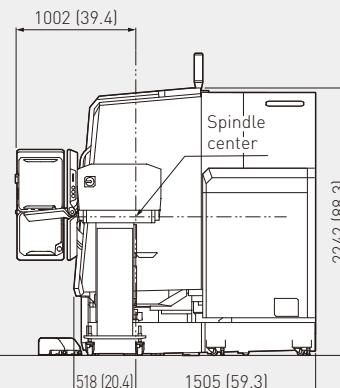
NLX 2500 | 700 2<sup>nd</sup> Generation (FANUC F31iB Plus)

mm (in.)

Front view



Side view

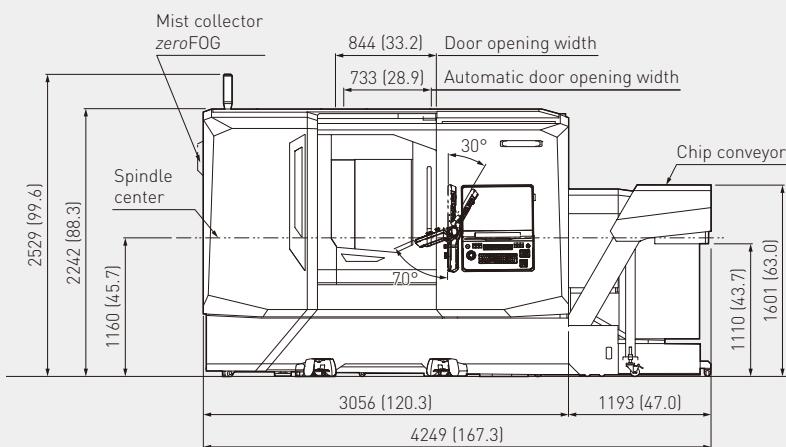


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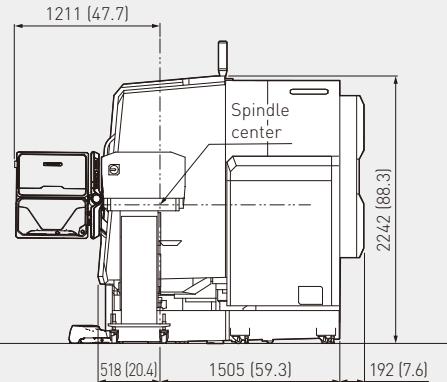
NLX 2500 | 700 2<sup>nd</sup> Generation (SIEMENS SINUMERIK ONE)

mm (in.)

Front view

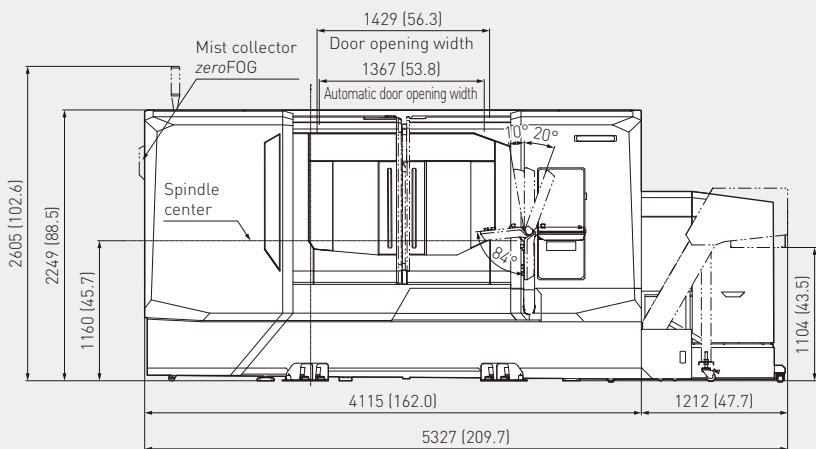


Side view

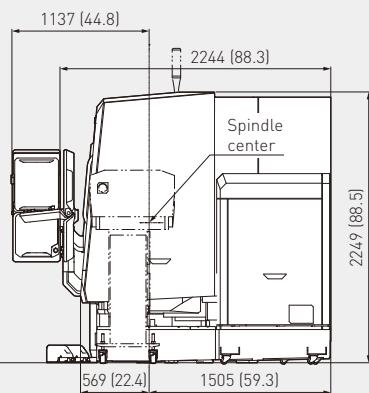


NLX 2500 | 1250 2<sup>nd</sup> Generation (FANUC F31iB Plus) mm (in.)

**Front view**



**Side view**

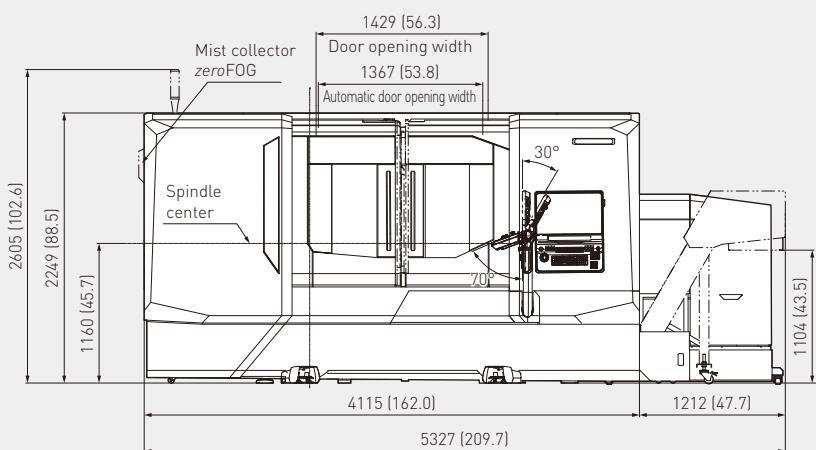


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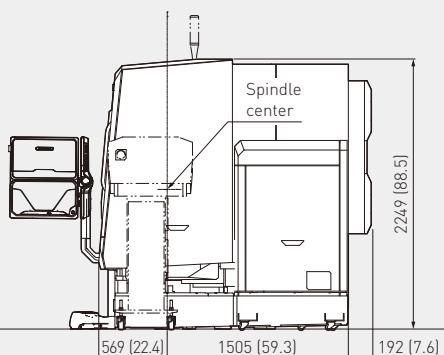
NLX 2500 | 1250 2<sup>nd</sup> Generation (SIEMENS SINUMERIK ONE) mm (in.)

37

**Front view**



**Side view**



# Machine specifications (FANUC F31iB Plus)

		NLX 2500 2 <sup>nd</sup> Generation						
		T	M	C	L	S	Y	
		—	—	—	—	—	—	RS
<b>Basic specification</b>								
<b>Optional specifications</b>								
<b>Capacity</b>								
Swing over bed	mm [in.]	945 [37.2] <interference with front cover:660 [25.9]>						
Swing over cross slide	mm [in.]	760 [29.9]						
Max. turning diameter <sup>*1</sup> <sup>*2</sup>	mm [in.]	366 [14.4] <sup>*1</sup> , 356 [14.0] <sup>*2</sup> , 406 [15.9] <12-station VDI>, 278 [10.9] <20-station Turret>						
Max. turning length	mm [in.]	708 [27.8]						
Bar work capacity <sup>*3</sup>	mm [in.]	105 [4.1]						
<b>Travel</b>								
X-axis travel	mm [in.]	260 [10.2]						
Y-axis travel	mm [in.]	±60 [±2.3]						
Z-axis travel	mm [in.]	795 [31.2]						
Right spindle travel [Z3-axis]	mm [in.]	—						734 [28.8]
<b>Left spindle</b>								
Max. Spindle speed <sup>*4</sup>	min <sup>-1</sup>	5,000, 3,000 <High torque>						
Spindle nose		JIS A <sub>2</sub> -8						
<b>Right spindle</b>								
Max. Spindle speed <sup>*4</sup>	min <sup>-1</sup>	—						7,000 5,000 <sup>*5 *6</sup>
Spindle nose		—						JIS A <sub>2</sub> -5 JIS B 6109-2 - No.5 <sup>*5</sup> JIS B 6109-2 - No.8 <sup>*6</sup>
<b>Turret</b>								
Number of tool stations		12 <BMT60, VDI40 Direct Drive>, 10 <BMT60>, 20 <BMT40>						
Shank height for square tool	mm [in.]	25 (1.0) <BMT60>, 20 (3/4) <BMT40, VDI40 Direct Drive>						
Max. milling spindle speed	min <sup>-1</sup>	12,000 <BMT60, VDI40 Direct Drive, BMT40>, 6,000 <BMT60> <High torque>						
<b>Feedrate</b>								
Rapid traverse rate	X-axis	mm/min (ipm)	30,000 (1,181.1)					
	Y-axis	mm/min (ipm)	15,000 (590.6)					
	Z-axis	mm/min (ipm)	30,000 (1,181.1)					
	Tailstock spindle	mm/min (ipm)	—	7,000 (275.6) <extend> 20,000 (787.4) <retract> <sup>*7</sup>				—
	Z3-axis	mm/min (ipm)	—					30,000 (1,181.1)
<b>Tailstock</b>								
Tailstock travel	mm [in.]	—	734 [28.9]					—
Taper hole of tailstock spindle		—	MT5 <Live centers> MT3 <Built-in center> MT4 <Built-in center>					—
<b>Motors</b>								
Left spindle drive motor (15%ED / 40%ED / cont)	kW (HP)	30 / 22 / 22 (40 / 30 / 30), 36 / 30 / 25 (48.0 / 40 / 33.3) <10%ED / 30 min / cont> <High torque>						
Right spindle drive motor (10%ED / 25%ED / 40%ED / cont)	kW (HP)	—	11 / 11 / 11 / 7.5 (15 / 15 / 15 / 10) 23 / 20 (30.7 / 26.7) (40%ED / cont) <sup>*5</sup> 32 / 28 / 27 / 25 (42.7 / 37.3 / 36.0 / 33.3) (15%ED / 25%ED / 40%ED / cont) <sup>*6</sup>					
Milling spindle drive motor	kW (HP)	13 / 10 (17.3 / 13.3) <10%ED / cont> <BMT60 High speed, BMT40> 15 / 15 (20 / 20) <10%ED / cont> <BMT60 High torque> 15 / 12 (20 / 16.0) (25%ED / cont) <VDI40 Direct Drive>						
<b>Machine size</b>								
Machine height	mm [in.]	2,242 [88.3]						
Floor space [Width X Depth]	mm [in.]	4,249 X 2,023 (167.3 X 79.6) <Including right-discharge chip conveyor, excluding operational panel>						
Mass of machine	kg (lb.)	7,600 (16,720)	7,900 (17,380)					8,400 (18,480)

<sup>\*1</sup> With 35 mm (1.3 in.) tool overhang for O.D. turning<sup>\*2</sup> With 40 mm (1.5 in.) tool overhang for O.D. turning<sup>\*3</sup> Depending on the chuck / cylinder used and its restrictions, it may not be possible to reach full bar work capacity.<sup>\*4</sup> Depending on restrictions imposed by the workpiece clamping device, fixture and tool used, it may not be possible to rotate at the maximum spindle speed.<sup>\*5</sup> Through-spindle hole diameter 83 mm (3.2 in.)<sup>\*6</sup> Through-spindle hole diameter 115 mm (4.5 in.)<sup>\*7</sup> Retraction speed is limited to 7 m/min (23.0 fpm) for the fixed steady rest, hydraulic steady rest (bolt-tightened), or hydraulic quill specifications.

● The information in this catalog is valid as of October 2024.

Standard     Option  
**T**: Turret    MC: Milling    Y : Y-axis  
**LS**: Left spindle    **RS**: Right spindle    **TS**: Tailstock  
 ● The right spindle specification (RS) is not equipped with a tailstock (TS).

NLX 2500   1250 2 <sup>nd</sup> Generation			
	TS	MC	LS Y
		RS	
<b>Basic specification</b>			
Optional specifications			
<b>Capacity</b>			
Swing over bed	mm (in.)	945 (37.2) <interference with front cover:660 (25.9)>	
Swing over cross slide	mm (in.)	760 (29.9)	
Max. turning diameter <sup>*1*2</sup>	mm (in.)	366 (14.4) <sup>*1</sup> , 356 (14.0) <sup>*2</sup> , 406 (15.9) <12-station VDI>, 278 (10.9) <20-station Turrets> 1,258 (49.5) 1,236 (48.6) <Right spindle through-hole ϕ83 mm (ϕ3.2 in.)> 1,216 (47.8) <Right spindle through-hole ϕ115 mm (ϕ4.5 in.)>	
Max. turning length	mm (in.)	1,258 (49.5)	
Bar work capacity <sup>*3</sup>	mm (in.)	105 (4.1)	
<b>Travel</b>			
X-axis travel	mm (in.)	260 (10.2)	
Y-axis travel	mm (in.)	±60 (±2.3)	
Z-axis travel	mm (in.)	1,345 (52.9)	
Right spindle travel (Z3-axis)	mm (in.)	—	1,284 (50.5)
<b>Left spindle</b>			
Max. Spindle speed <sup>*4</sup>	min <sup>-1</sup>	5,000, 3,000 <High torque> JIS A <sub>2</sub> -8	
Spindle nose			
<b>Right spindle</b>			
Max. Spindle speed <sup>*4</sup>	min <sup>-1</sup>	— 7,000 5,000 <sup>*5 *6</sup>	
Spindle nose		— JIS A <sub>2</sub> -5 JIS B 6109-2 - No.5 <sup>*5</sup> JIS B 6109-2 - No.8 <sup>*6</sup>	
<b>Turret</b>			
Number of tool stations		12 <BMT60, VDI40 Direct Drive>, 10 <BMT60>, 20 <BMT40>	
Shank height for square tool	mm (in.)	25 (1.0) <BMT60>, 20 (3/4) <VDI40 Direct Drive> <20-station Turret>	
Max. milling spindle speed	min <sup>-1</sup>	12,000 <BMT60, VDI40 Direct Drive, BMT40>, 6,000 <BMT60> <High torque>	
<b>Feedrate</b>			
Rapid traverse rate	X-axis	mm/min (ipm)	30,000 (1,181.1)
	Y-axis	mm/min (ipm)	15,000 (590.6)
	Z-axis	mm/min (ipm)	30,000 (1,181.1)
	Tailstock spindle	mm/min (ipm)	7,000 (275.6) <extend> 20,000 (787.4) <retract> <sup>*7</sup>
	Z3-axis	mm/min (ipm)	— 30,000 (1,181.1)
<b>Tailstock</b>			
Tailstock travel	mm (in.)	1,284 (50.5)	—
Taper hole of tailstock spindle		MT5 <Live centers> MT3 <Built-in center> MT4 <Built-in center>	—
<b>Motors</b>			
Left spindle drive motor (15%ED / 40%ED / cont)	kW (HP)	30 / 22 / 22 (40 / 30 / 30), 36 / 30 / 25 (48.0 / 40 / 33.3) <10%ED / 30 min / cont> <High torque>	
Right spindle drive motor (10%ED / 25%ED / 40%ED / cont)	kW (HP)	— 11 / 11 / 11 / 7.5 (15 / 15 / 15 / 10) 23 / 20 (30.7 / 26.7) [40%ED / cont] <sup>*5</sup> 32 / 28 / 27 / 25 (42.7 / 37.3 / 36.0 / 33.3) (15%ED / 25%ED / 40%ED / cont) <sup>*6</sup>	
Milling spindle drive motor	kW (HP)	13 / 10 (17.3 / 13.3) <10%ED / cont> <BMT60 High speed, BMT40> 15 / 15 (20 / 20) <10%ED / cont> <BMT60 High torque> 15 / 12 (20 / 16.0) (25%ED / cont) <VDI40 Direct Drive>	
<b>Machine size</b>			
Machine height	mm (in.)	2,249 (88.5)	
Floor space (Width × Depth)	mm (in.)	5,327 × 2,074 (209.7 × 81.7) <Including right-discharge chip conveyor, excluding operational panel>	
Mass of machine	kg (lb.)	9,400 (20,680)	9,900 (21,780)

\*1 With 35 mm (1.3 in.) tool overhang for O.D. turning

\*2 With 40 mm (1.5 in.) tool overhang for O.D. turning

\*3 Depending on the chuck / cylinder used and its restrictions, it may not be possible to reach full bar work capacity.

\*4 Depending on restrictions imposed by the workpiece clamping device, fixture and tool used, it may not be possible to rotate at the maximum spindle speed.

\*5 Through-spindle hole diameter 83 mm (3.2 in.)

\*6 Through-spindle hole diameter 115 mm (4.5 in.)

\*7 Retraction speed is limited to 7 m/min (23.0 fpm) for the fixed steady rest, hydraulic steady rest (bolt-tightened), or hydraulic quill specifications.

● The information in this catalog is valid as of September 2025.

# Machine specifications (SIEMENS SINUMERIK ONE)

		NLX 2500 2 <sup>nd</sup> Generation						
		T	M	C	L	S	Y	
		—	—	—	—	—	—	RS
<b>Basic specification</b>								
<b>Optional specifications</b>								
<b>Capacity</b>								
Swing over bed	mm [in.]	945 [37.2] <interference with front cover:660 [25.9]>						
Swing over cross slide	mm [in.]	760 [29.9]						
Max. turning diameter <sup>*1 *2</sup>	mm [in.]	366 [14.4] <sup>*1</sup> , 356 [14.0] <sup>*2</sup> , 406 [15.9] <12-station VDI>, 278 [10.9] <20-station Turret>						
Max. turning length	mm [in.]	708 [27.8]						
Bar work capacity <sup>*3</sup>	mm [in.]	105 [4.1]						
<b>Travel</b>								
X-axis travel	mm [in.]	260 [10.2]						
Y-axis travel	mm [in.]	±60 [±2.3]						
Z-axis travel	mm [in.]	795 [31.2]						
Right spindle travel [Z3-axis]	mm [in.]	—						734 [28.8]
<b>Left spindle</b>								
Max. Spindle speed <sup>*4</sup>	min <sup>-1</sup>	5,000, 3,000 <High torque>						
Spindle nose		JIS A <sub>2</sub> -8						
<b>Right spindle</b>								
Max. Spindle speed <sup>*4</sup>	min <sup>-1</sup>	—						7,000 5,000 <sup>*5 *6</sup>
Spindle nose		—						JIS A <sub>2</sub> -5 JIS B 6109-2 - No.5 <sup>*5</sup> JIS B 6109-2 - No.8 <sup>*6</sup>
<b>Turret</b>								
Number of tool stations		12 <BMT60, VDI40 Direct Drive>, 10 <BMT60>, 20 <BMT40>						
Shank height for square tool	mm [in.]	25 (1.0) <BMT60>, 20 (3/4) <BMT40, VDI40 Direct Drive>						
Max. milling spindle speed	min <sup>-1</sup>	12,000 <BMT60, VDI40 Direct Drive, BMT40>, 6,000 <BMT60> <High torque>						
<b>Feedrate</b>								
Rapid traverse rate	X-axis Y-axis Z-axis	mm/min (ipm) mm/min (ipm) mm/min (ipm)	30,000 (1,181.1) 15,000 (590.6) 30,000 (1,181.1)					
	Tailstock spindle	mm/min (ipm)	—	7,000 (275.6) <extend> 20,000 (787.4) <retract> <sup>*7</sup>				—
	Z3-axis	mm/min (ipm)	—	—				30,000 (1,181.1)
<b>Tailstock</b>								
Tailstock travel	mm [in.]	—	734 [28.9]					—
Taper hole of tailstock spindle		—	MT5 <Live centers> MT3 <Built-in center> MT4 <Built-in center>					—
<b>Motors</b>								
Left spindle drive motor (15%ED / 40%ED / cont)	kW (HP)	30 / 22 / 22 (40 / 30 / 30), 36 / 30 / 25 (48.0 / 40 / 33.3) <10%ED / 30 min / cont> <High torque>						
Right spindle drive motor (10%ED / 25%ED / 40%ED / cont)	kW (HP)	—	11 / 11 / 11 / 7.5 (15 / 15 / 15 / 10) 23 / 20 (30.7 / 26.7) (40%ED / cont) <sup>*5</sup> 32 / 28 / 27 / 25 (42.7 / 37.3 / 36.0 / 33.3) (15%ED / 25%ED / 40%ED / cont) <sup>*6</sup>					
Milling spindle drive motor	kW (HP)	13 / 10 (17.3 / 13.3) <10%ED / cont> <BMT60 High speed, BMT40> 15 / 15 (20 / 20) <10%ED / cont> <BMT60 High torque> 15 / 12 (20 / 16.0) (25%ED / cont) <VDI40 Direct Drive>						
<b>Machine size</b>								
Machine height	mm [in.]	2,242 [88.3]						
Floor space [Width X Depth]	mm [in.]	4,249 × 2,215 [167.3 × 87.2] <Including right-discharge chip conveyor, excluding operational panel>						
Mass of machine	kg (lb.)	7,600 (16,720)	7,900 (17,380)	8,400 (18,480)				

<sup>\*1</sup> With 35 mm (1.3 in.) tool overhang for O.D. turning<sup>\*2</sup> With 40 mm (1.5 in.) tool overhang for O.D. turning<sup>\*3</sup> Depending on the chuck / cylinder used and its restrictions, it may not be possible to reach full bar work capacity.<sup>\*4</sup> Depending on restrictions imposed by the workpiece clamping device, fixture and tool used, it may not be possible to rotate at the maximum spindle speed.<sup>\*5</sup> Through-spindle hole diameter 83 mm (3.2 in.)<sup>\*6</sup> Through-spindle hole diameter 115 mm (4.5 in.)<sup>\*7</sup> Retraction speed is limited to 7 m/min (23.0 fpm) for the fixed steady rest, hydraulic steady rest (bolt-tightened), or hydraulic quill specifications.

● The information in this catalog is valid as of October 2024.

Standard     Option  
**T**: Turret    MC: Milling    **Y**: Y-axis  
**LS**: Left spindle    **RS**: Right spindle    **TS**: Tailstock  
 ● The right spindle specification (RS) is not equipped with a tailstock (TS).

NLX 2500   1250 2 <sup>nd</sup> Generation			
	TS	MC	LS Y
		RS	
<b>Basic specification</b>			
<b>Optional specifications</b>			
<b>Capacity</b>			
Swing over bed	mm (in.)	945 (37.2) <interference with front cover: 660 (25.9)>	
Swing over cross slide	mm (in.)	760 (29.9)	
Max. turning diameter <sup>*1 *2</sup>	mm (in.)	366 (14.4) <sup>*1</sup> , 356 (14.0) <sup>*2</sup> , 406 (15.9) <12-station VDI>, 278 (10.9) <20-station Turrets>	1,258 (49.5)
Max. turning length	mm (in.)	1,258 (49.5)	1,236 (48.6) <Right spindle through-hole φ83 mm (φ3.2 in.)> 1,216 (47.8) <Right spindle through-hole φ115 mm (φ4.5 in.)>
Bar work capacity <sup>*3</sup>	mm (in.)		105 (4.1)
<b>Travel</b>			
X-axis travel	mm (in.)	260 (10.2)	
Y-axis travel	mm (in.)	±60 (±2.3)	
Z-axis travel	mm (in.)	1,345 (52.9)	
Right spindle travel (Z3-axis)	mm (in.)	—	1,284 (50.5)
<b>Left spindle</b>			
Max. Spindle speed <sup>*4</sup>	min <sup>-1</sup>	5,000, 3,000 <High torque>	
Spindle nose		JIS A <sub>2</sub> -8	
<b>Right spindle</b>			
Max. Spindle speed <sup>*4</sup>	min <sup>-1</sup>	—	7,000 5,000 <sup>*5 *6</sup>
Spindle nose		—	JIS A <sub>2</sub> -5 JIS B 6109-2 - No.5 <sup>*5</sup> JIS B 6109-2 - No.8 <sup>*6</sup>
<b>Turret</b>			
Number of tool stations		12 <BMT60, VDI40 Direct Drive>, 10 <BMT60>, 20 <BMT40>	
Shank height for square tool	mm (in.)	25 (1.0) <BMT60>, 20 (3/4) <VDI40 Direct Drive> <20-station Turret>	
Max. milling spindle speed	min <sup>-1</sup>	12,000 <BMT60, VDI40 Direct Drive, BMT40>, 6,000 <BMT60> <High torque>	
<b>Feedrate</b>			
X-axis	mm/min (ipm)	30,000 (1,181.1)	
Y-axis	mm/min (ipm)	15,000 (590.6)	
Z-axis	mm/min (ipm)	30,000 (1,181.1)	
Rapid traverse rate			
Tailstock spindle	mm/min (ipm)	7,000 (275.6) <extend> 20,000 (787.4) <retracts> <sup>*7</sup>	—
Z3-axis	mm/min (ipm)	—	30,000 (1,181.1)
<b>Tailstock</b>			
Tailstock travel	mm (in.)	1,284 (50.5)	—
Taper hole of tailstock spindle		MT5 <Live centers> MT3 <Built-in center> MT4 <Built-in center>	—
<b>Motors</b>			
Left spindle drive motor (15%ED / 40%ED / cont)	kW (HP)	30 / 22 / 22 [40 / 30 / 30], 36 / 30 / 25 [48.0 / 40 / 33.3] <10%ED / 30 min / cont> <High torque>	11 / 11 / 11 / 7.5 [15 / 15 / 15 / 10] 23 / 20 [30.7 / 26.7] [40%ED / cont] <sup>*5</sup> 32 / 28 / 27 / 25 [42.7 / 37.3 / 36.0 / 33.3] (15%ED / 25%ED / 40%ED / cont) <sup>*6</sup>
Right spindle drive motor (10%ED / 25%ED / 40%ED / cont)	kW (HP)	—	
Milling spindle drive motor	kW (HP)	13 / 10 [17.3 / 13.3] <10%ED / cont> <BMT60 High speed, BMT40> 15 / 15 [20 / 20] <10%ED / cont> <BMT60 High torque> 15 / 12 [20 / 16.0] (25%ED / cont) <VDI40 Direct Drive>	
<b>Machine size</b>			
Machine height	mm (in.)	2,249 (88.5)	
Floor space (Width × Depth)	mm (in.)	5,327 × 2,266 [209.7 × 89.2] <Including right-discharge chip conveyor, excluding operational panel>	
Mass of machine	kg (lb.)	9,400 (20,680)	9,900 (21,780)

\*1 With 35 mm (1.3 in.) tool overhang for O.D. turning

\*2 With 40 mm (1.5 in.) tool overhang for O.D. turning

\*3 Depending on the chuck / cylinder used and its restrictions, it may not be possible to reach full bar work capacity.

\*4 Depending on restrictions imposed by the workpiece clamping device, fixture and tool used, it may not be possible to rotate at the maximum spindle speed.

\*5 Through-spindle hole diameter 83 mm (3.2 in.)

\*6 Through-spindle hole diameter 115 mm (4.5 in.)

\*7 Retraction speed is limited to 7 m/min (23.0 fpm) for the fixed steady rest, hydraulic steady rest (bolt-tightened), or hydraulic quill specifications.

● The information in this catalog is valid as of September 2025.

# Standard & optional features (FANUC F31iB Plus)

●: Standard ○: Option —: not applicable

NLX 2500 2<sup>nd</sup> Generation

	T	M	L	S	Y
	—	—	TS	—	RS
<b>Basic specification</b>					
<b>Optional specifications</b>					
<b>Spindle</b>					
Left spindle					
5,000 min <sup>-1</sup> : 30 / 22 / 22 kW [40 / 30 / 30 HP] <15%ED / 40%ED / cont>			●	●	●
3,000 min <sup>-1</sup> : 36 / 30 / 25 kW [48.0 / 40 / 33.3 HP] <10%ED / 30 min / cont> <High torque>			○	○	○
7,000 min <sup>-1</sup> : 11 / 11 / 11 / 7.5 kW [15 / 15 / 15 / 10 HP] <10%ED / 25%ED / 40%ED / cont>			—	—	●
<Right spindle through-hole $\phi$ 45 mm ( $\phi$ 1.7 in.)>			—	—	○
Right spindle			—	—	○
5,000 min <sup>-1</sup> : 23 / 20 kW [30.7 / 26.7 HP] <40%ED / cont>			—	—	○
<Right spindle through-hole $\phi$ 83 mm ( $\phi$ 3.2 in.)>			—	—	○
5,000 min <sup>-1</sup> : 32 / 28 / 27 / 25 kW [42.7 / 37.3 / 36.0 / 33.3 HP] <15%ED / 25%ED / 40%ED / cont>			—	—	○
<Right spindle through-hole $\phi$ 115 mm ( $\phi$ 4.5 in.)>			—	—	○
<b>Turret</b>					
10-station, bolt-tightened turret					
12,000 min <sup>-1</sup> : 10 / 13 kW [13.3 / 17.3 HP] <10%ED / cont> <High-speed>			○	○	○
6,000 min <sup>-1</sup> : 15 / 15 kW [20 / 20 HP] <10%ED / cont> <High torque>			○	○	○
12-station, bolt-tightened turret			●	●	●
6,000 min <sup>-1</sup> : 15 / 15 kW [20 / 20 HP] <10%ED / cont> <High torque>			○	○	○
12-station VDI quick-change turret			○	○	○
20-station, bolt-tightened turret			○	○	○
<b>Tailstock</b>					
Tailstock spindle live center <sup>*1</sup>					
MT5			—	●	—
MT3			—	○	—
Tailstock spindle built-in center			—	○	—
MT4			—	○	—
No-tailstock					
Tailstock with the hydraulic quill					
<b>Fixture</b>					
Steady rest <sup>*2</sup>					
Fixed steady rest $\phi$ 20 - $\phi$ 200 mm ( $\phi$ 0.8 - $\phi$ 7.9 in.)			—	○	○
Hydraulic steady restt $\phi$ 6 - $\phi$ 70 mm ( $\phi$ 0.24 - $\phi$ 2.8 in.)			—	○	○
Hydraulic steady restt $\phi$ 8 - $\phi$ 101 mm ( $\phi$ 0.31 - $\phi$ 4.0 in.)			—	○	○
Hydraulic steady restt $\phi$ 4 - $\phi$ 52 mm ( $\phi$ 0.16 - $\phi$ 2.0 in.)			—	○	○
Hydraulic steady restt $\phi$ 6 - $\phi$ 80 mm ( $\phi$ 0.24 - $\phi$ 3.1 in.)			—	○	○
<b>Coolant</b>					
Coolant system					
350 / 550 W [50 / 60 Hz]			●	●	●
800 / 1,100 W [50 / 60 Hz]			○	○	○
High-pressure coolant system			○	○	○
1.1 / 1.5 MPa [159.5 / 217.5 psi], 2.2 kW [3 HP] <50 / 60 Hz>			○*	○*	○*
Super-high pressure coolant system					
Built-in high-pressure coolant 10 MPa [1,450 psi] <automatic variable pressure>			○*	○*	○*
Separate type Interface <7 MPa [1,015 psi]>			○	○	○
Separate type Interface <7 MPa [1,015 psi] KNOLL>			○	○	○
<b>Chip disposal</b>					
Air blow					
Tool tip			○	○	○
Chuck [Left spindle]			○	○	○
Tailstock spindle			—	○	—
Chip conveyor					
Right discharge, Scraper type			○	○	○
Right discharge, Magnet scraper type			○	○	○
Right discharge, Hinge type + With box filter			○	○	○
Right discharge, Hinge type [Aluminum]			○	○	○
Right discharge, Hinge type [Resin]			○ <sup>*3</sup>	○ <sup>*3</sup>	○ <sup>*3</sup>
Right discharge, Hinge type + Drum filter type			○	○	○
Rear discharge, Scraper type [NLX 2500   700]			○	○	○
Rear discharge, Magnet scraper type [NLX 2500   700]			○	○	○
Rear discharge, Hinge type + With box filter [NLX 2500   700]			○	○	○

Standard     Option  
**T**: Turret    MC: Milling    **Y**: Y-axis  
**LS**: Left spindle    **RS**: Right spindle    **TS**: Tailstock  
 ● The right spindle specification (RS) is not equipped with a tailstock (TS).

●: Standard ○: Option —: not applicable

### NLX 2500 2<sup>nd</sup> Generation

	<b>T</b>	<b>MC</b>	<b>LS</b>	<b>Y</b>
	—	—	TS	RS
<b>Basic specification</b>				
<b>Optional specifications</b>				
<b>Measurement</b>				
Manual in-machine tool presetter [Left spindle]	Pivoting type removable	●	●	●
Automatic in-machine tool presetter [Left spindle]	Pivoting type	○	○	○
Manual in-machine tool presetter [Right spindle]	removable	—	—	●
In-machine measuring system	Touch sensor with radio wave signal transmission	○	○	○
<b>High-precision control</b>				
	X-axis	○	○	○
Full closed loop control <Scale feedback>	Y-axis	○	○	○
	Z-axis	○	○	○
<b>Automation</b>				
Automatic power off	●	●	●	
Automatic door	○	○	○	
Programmable chuck pressure switch	Left spindle Right spindle	●	●	●
Workpiece unloader	Left discharge type Right discharge type (NLX 2500   700)	○	○	○
Right spindle workpiece ejector	Cylinder type	○	○	○
Mist collector	Machine built-in zeroFOG Cart-mounted zeroFOG interface	○	○	○
	Gantry loader GX5 Gantry loader GX10T	○	○	○
Loader	Work stocker (Number of pallet tables) GX5: 14 / 20 / 26 Work stocker (Number of pallet tables) GX10T: 10 / 20 Workpiece stocker layout [Right / Left]	○	○	○
<b>Others</b>				
Built-in LED worklight	Addition	●	●	●
Double slide seal	With forced lubrication	●	●	●
Signal lamp	4 colors (LED type: red, yellow, green, blue)	○	○	○
Signal lamp buzzer		○	○	○
Manual pulse generator (separate type)		●	●	●

\* DMQP (DMG MORI Qualified Products)

\*1 The center is optional.

\*2 When the fixed steady rest or hydraulic steady rest (bolt-tightened) is selected, the retraction speed of the tailstock spindle is limited to 7 m/min (23.0 fpm).

\*3 Technology Cycle "Chip Breaking" recommended

● DMQP:Please see Page 28 for details.

● The information in this catalog is valid as of September 2025.

● Specifications, accessories, safety device and function are available upon request.

● Some options are not available in particular regions. For details, please consult our sales representative.

**⚠** Flammable coolant such as oil-based coolant has a high risk of ignition, and will cause fire or machine breakage if ignited. If you have to use a flammable coolant for any reason, please be sure to consult our sales representative.

# Standard & optional features (SIEMENS SINUMERIK ONE)

●: Standard ○: Option —: not applicable

NLX 2500 2<sup>nd</sup> Generation

	T	M	C	L	S	Y
	—	—	—	TS	—	RS
<b>Basic specification</b>						
<b>Optional specifications</b>						
<b>Spindle</b>						
Left spindle						
5,000 min <sup>-1</sup> : 30 / 22 / 22 kW [40 / 30 / 30 HP] <15%ED / 40%ED / cont>		●	●	●	—	—
3,000 min <sup>-1</sup> : 36 / 30 / 25 kW [48.0 / 40 / 33.3 HP] <10%ED / 30 min / cont> <High torque>		○	○	○	—	—
7,000 min <sup>-1</sup> : 11 / 11 / 11 / 7.5 kW [15 / 15 / 15 / 10 HP] <10%ED / 25%ED / 40%ED / cont>		—	—	—	●	—
<Right spindle through-hole $\phi$ 45 mm ( $\phi$ 1.7 in.)>		—	—	—	—	—
Right spindle		—	—	—	○	—
5,000 min <sup>-1</sup> : 23 / 20 kW [30.7 / 26.7 HP] <40%ED / cont>		—	—	—	○	—
<Right spindle through-hole $\phi$ 83 mm ( $\phi$ 3.2 in.)>		—	—	—	—	—
5,000 min <sup>-1</sup> : 32 / 28 / 27 / 25 kW [42.7 / 37.3 / 36.0 / 33.3 HP] <15%ED / 25%ED / 40%ED / cont>		—	—	—	○	—
<Right spindle through-hole $\phi$ 115 mm ( $\phi$ 4.5 in.)>		—	—	—	—	—
<b>Turret</b>						
10-station, bolt-tightened turret						
12,000 min <sup>-1</sup> : 10 / 13 kW [13.3 / 17.3 HP] <10%ED / cont> <High-speed>		○	○	○	—	—
6,000 min <sup>-1</sup> : 15 / 15 kW [20 / 20 HP] <10%ED / cont> <High torque>		○	○	○	—	—
12-station, bolt-tightened turret		●	●	●	—	—
6,000 min <sup>-1</sup> : 10 / 13 kW [13.3 / 17.3 HP] <10%ED / cont> <High-speed>		○	○	○	—	—
12-station VDI quick-change turret		○	○	○	—	—
20-station, bolt-tightened turret		○	○	○	—	—
<b>Tailstock</b>						
Tailstock spindle live center <sup>*1</sup>						
MT5		—	●	—	—	—
MT3		—	○	—	—	—
Tailstock spindle built-in center		—	○	—	—	—
MT4		—	○	—	—	—
No-tailstock		●	○	—	—	—
Tailstock with the hydraulic quill		—	○	—	—	—
<b>Fixture</b>						
Steady rest <sup>*2</sup>						
Fixed steady rest $\phi$ 20 - $\phi$ 200 mm ( $\phi$ 0.8 - $\phi$ 7.9 in.)		—	○	○	—	—
Hydraulic steady restt $\phi$ 6 - $\phi$ 70 mm ( $\phi$ 0.24 - $\phi$ 2.8 in.)		—	○	○	—	—
Hydraulic steady restt $\phi$ 8 - $\phi$ 101 mm ( $\phi$ 0.31 - $\phi$ 4.0 in.)		—	○	○	—	—
Hydraulic steady restt $\phi$ 4 - $\phi$ 52 mm ( $\phi$ 0.16 - $\phi$ 2.0 in.)		—	○	○	—	—
Hydraulic steady restt $\phi$ 6 - $\phi$ 80 mm ( $\phi$ 0.24 - $\phi$ 3.1 in.)		—	○	○	—	—
<b>Coolant</b>						
Coolant system						
350 / 550 W [50 / 60 Hz]		●	●	●	—	—
800 / 1,100 W [50 / 60 Hz]		○	○	○	—	—
High-pressure coolant system		○	○	○	—	—
1.1 / 1.5 MPa [159.5 / 217.5 psi], 2.2 kW [3 HP] <50 / 60 Hz>		○*	○*	○*	—	—
Super-high pressure coolant system						
Built-in high-pressure coolant 10 MPa [1,450 psi] <automatic variable pressure>		○*	○*	○*	—	—
Separate type Interface <7 MPa [1,015 psi]>		○	○	○	—	—
Separate type Interface <7 MPa [1,015 psi] KNOLL>		○	○	○	—	—
<b>Chip disposal</b>						
Air blow						
Tool tip		○	○	○	—	—
Chuck (Left spindle)		○	○	○	—	—
Tailstock spindle		—	○	—	—	—
Chip conveyor						
Right discharge, Scraper type		○	○	○	—	—
Right discharge, Magnet scraper type		○	○	○	—	—
Right discharge, Hinge type + With box filter		○	○	○	—	—
Right discharge, Hinge type (Aluminum)		○	○	○	—	—
Right discharge, Hinge type (Resin)		○*	○*	○*	—	—
Right discharge, Hinge type + Drum filter type		○	○	○	—	—
Rear discharge, Scraper type (NLX 2500   700)		○	○	○	—	—
Rear discharge, Magnet scraper type (NLX 2500   700)		○	○	○	—	—
Rear discharge, Hinge type + With box filter (NLX 2500   700)		○	○	○	—	—

■: Standard    □: Option  
**T**: Turret    MC: Milling    **Y**: Y-axis  
**LS**: Left spindle    **RS**: Right spindle    **TS**: Tailstock  
 ● The right spindle specification (RS) is not equipped with a tailstock (TS).

●: Standard □: Option —: not applicable

### NLX 2500 2<sup>nd</sup> Generation

	<b>T</b>	<b>MC</b>	<b>LS</b>	<b>Y</b>
	—	—	TS	RS
<b>Basic specification</b>				
<b>Optional specifications</b>				
<b>Measurement</b>				
Manual in-machine tool presetter [Left spindle]	●	●	●	
Automatic in-machine tool presetter [Left spindle]	○	○	○	
Manual in-machine tool presetter [Right spindle]	—	—	●	
In-machine measuring system	○	○	○	
<b>High-precision control</b>				
X-axis	○	○	○	
Full closed loop control <Scale feedback>	○	○	○	
Y-axis	○	○	○	
Z-axis	○	○	○	
<b>Automation</b>				
Automatic door	○	○	○	
Programmable chuck pressure switch	●	●	●	
Left spindle	—	—	●	
Right spindle	—	—	●	
Workpiece unloader	○	○	○	
Left discharge type	○	○	○	
Right discharge type [NLX 2500   700]	○	○	○	
Right spindle workpiece ejector	○	○	○	
Cylinder type	○	○	○	
Machine built-in zeroFOG	○	○	○	
Mist collector	○	○	○	
Cart-mounted zeroFOG	○	○	○	
interface	○	○	○	
<b>Others</b>				
Built-in LED worklight	●	●	●	
Addition	○	○	○	
Double slide seal	●	●	●	
With forced lubrication	○	○	○	
Signal lamp	○	○	○	
4 colors (LED type: red, yellow, green, blue)	○	○	○	
Signal lamp buzzer	○	○	○	
Manual pulse generator (separate type)	●	●	●	

\* DMQP (DMG MORI Qualified Products)

\*<sup>1</sup> The center is optional.

\*<sup>2</sup> When the fixed steady rest or hydraulic steady rest [bolt-tightened] is selected, the retraction speed of the tailstock spindle is limited to 7 m/min [23.0 fpm].

\*<sup>3</sup> Technology Cycle "Chip Breaking" recommended

● DMQP:Please see Page 28 for details.

● The information in this catalog is valid as of September 2025.

● Specifications, accessories, safety device and function are available upon request.

● Some options are not available in particular regions. For details, please consult our sales representative.

**⚠** Flammable coolant such as oil-based coolant has a high risk of ignition, and will cause fire or machine breakage if ignited. If you have to use a flammable coolant for any reason, please be sure to consult our sales representative.





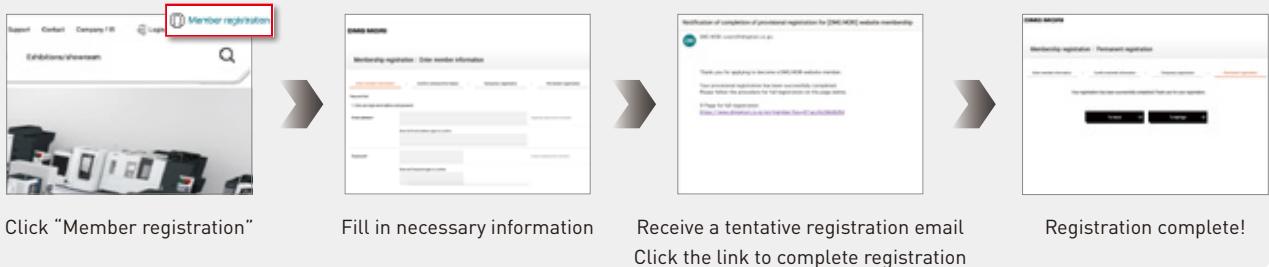
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+ The machines shown in the catalog may differ from the actual machines. The location and the size of the nameplates may also differ from the actual machines, or the nameplates may not be attached to some machines.

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