

# Machine Tools

A series of five horizontal blue lines of varying lengths, stacked vertically, serving as a decorative element to the left of the list items.

Multitasking Machines /  
5-Axis Machining Centers

CNC Lathes

Machining Centers

Grinders

IT / CNC

A large, abstract graphic at the bottom of the page consisting of multiple overlapping, flowing blue lines that create a sense of motion and depth, resembling a stylized wave or a dynamic energy field.

## Okuma is a comprehensive machine tool manufacturer that provides support for production sites worldwide

Okuma is a comprehensive machine tool manufacturer which produces not only multitasking machines, lathes, machining centers and grinders, but also control systems and peripheral equipment.

Okuma has provided machine tools at the forefront of a wide variety of industrial fields over our long history. During this time, we have faced a variety of issues in the field, together with our customers, developed a wider range of models and products, and grown into a comprehensive manufacturer of machine tools used at production sites throughout the world.

As a trusted brand, we will work to further refine the quality of our products and services, backed by our advanced technologies, in order to continue to earn the support of our customers.

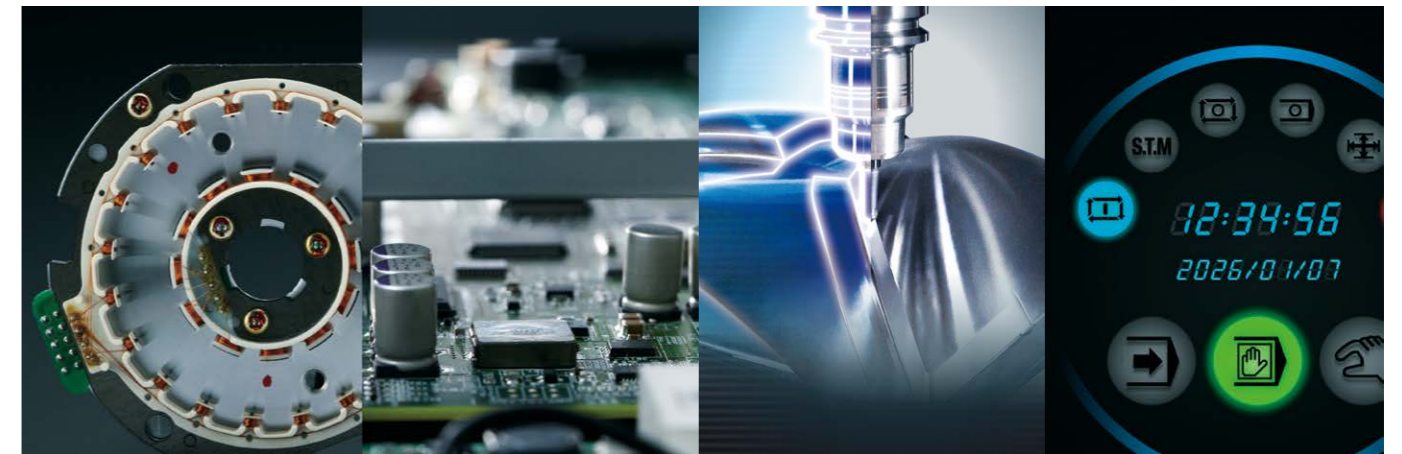


## “M-E-I-K Merging” technologies add information technology and knowledge creation to machines and electronics

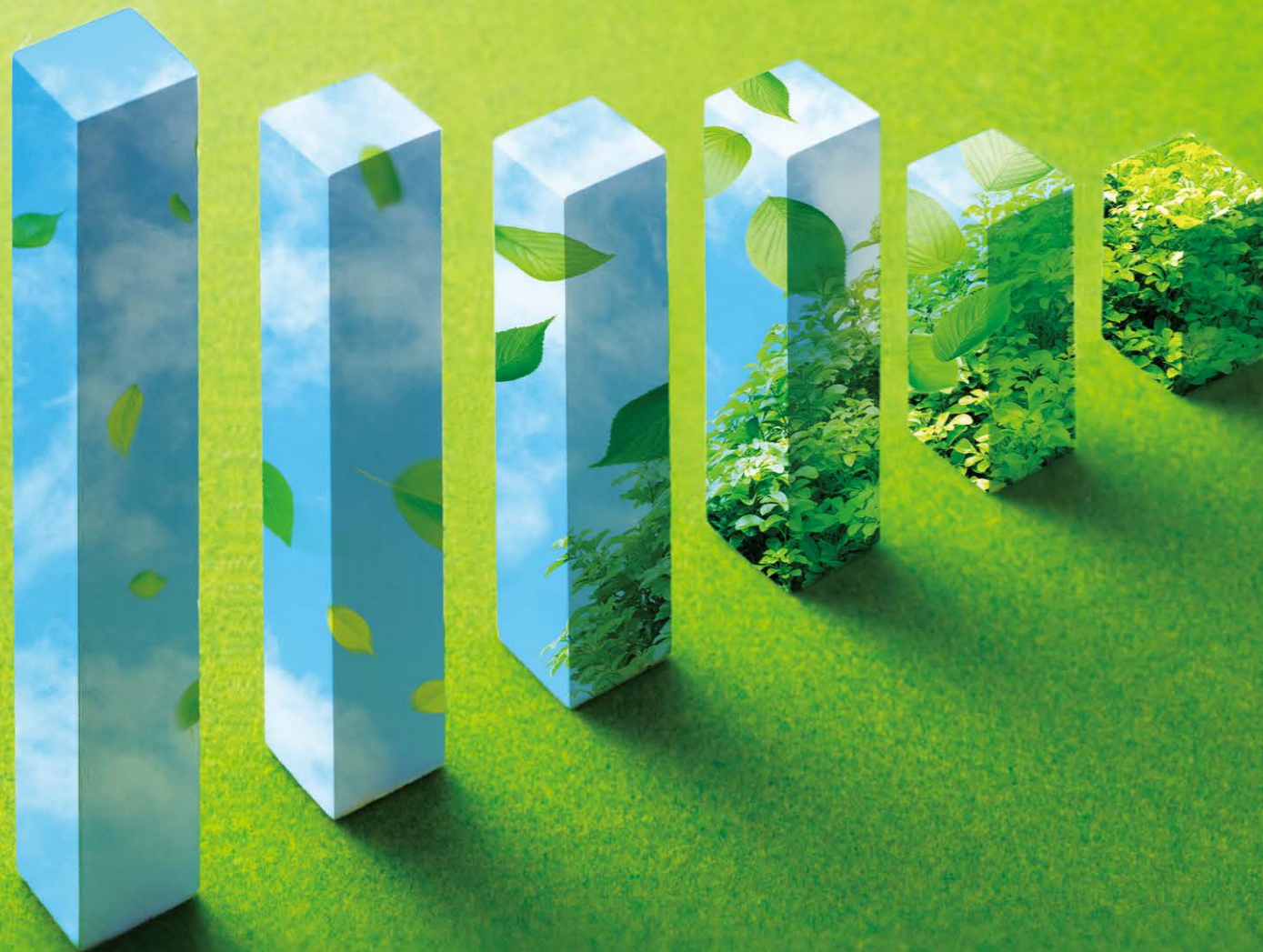
Soliciting the most out of the high potential of machine tools requires not only a CNC, but also the combination of motors, encoders and other units in their best state. At Okuma we have achieved high performance and the best balance in control by developing all of these units in-house.

Okuma’s Single Source for M-E-I-K (Mechanics - Electronics - IT - Knowledge) DNA has been cultivated over a history of more than a century since the company was founded, and passed on to each generation.

We will continue to work for future-oriented value creation with Premium Solutions produced by “M-E-I-K Merging” technologies.

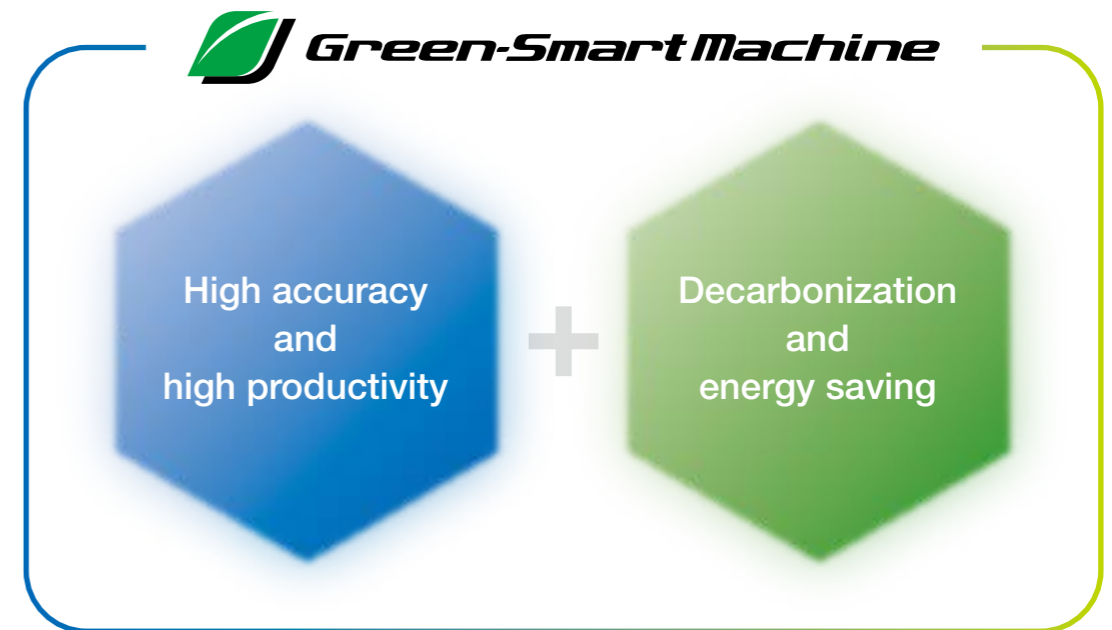


# Achieving high accuracy and high productivity while achieving decarbonization and energy saving



## Reducing energy consumption while maintaining stable high accuracy and high productivity

To work toward the realization of a carbon-free society, the industrial world is required to consider resources and the environment, and strengthen efforts to decarbonization. Okuma will contribute to the realization of a carbon-free society and help make society sustainable by working to improve the basic performance of machine tools, such as high accuracy and high productivity, as well as energy efficiency. We chose the name “Green-Smart Machine” for our machine tool that achieves high accuracy and reduced energy consumption autonomously and realizes high productivity. With Green-Smart Machines, we will contribute to the solution of social issues faced by the global manufacturing industry, together with our customers.



**Thermo-Friendly Concept**  
The Okuma Intelligent Technology that enables machines to autonomously maintain high accuracy stability

**ECO suite plus**  
A system for an energy-saving society

## Okuma's Intelligent Technologies which directly contribute to improving customer productivity

On machine shop floors, various issues can hinder the maintenance of accuracy and production, such as thermal deformation of the machines due to temperature changes and misalignment of axes in multi-axis machining. Interference or collision of machine moving parts, chatter vibration when cutting—these phenomena have been accepted unavoidable.

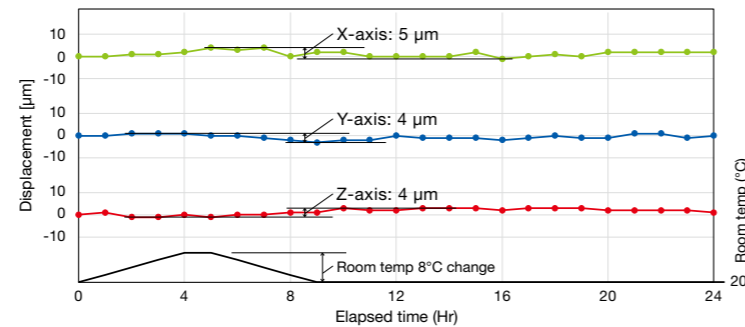
However, we believe that overcoming these issues is the mission of the machine tool manufacturer. Okuma helps customers to improve productivity with intelligent technology originating from a Single Source for M-E-I-K (Mechanics - Electronics - IT - Knowledge).

### Realization of high precision through Intelligent Technologies

#### Thermo-Friendly Concept Manageable Deformation — Accurately Controlled

Changes in the ambient temperature around machines and heat generated during cutting have a serious effect on machining accuracy. Okuma therefore uses a machine design that adapts to these temperature changes for better control of thermal deformation. By checking the machine dimensions at startup, the need for compensation thereafter can be greatly reduced.

Actual data with the MB-46V II vertical machining center  
Machining dimensional change over time: **5 μm**  
Note: Room temperature change of 8°C  
Using Thermo Active Stabilizer—Construction (TAS-C)



#### 5-Axis Auto Tuning System II Gauging and compensation of geometric error

Geometric error such as rotary axis misalignment often occurs on 5-axis machines cutting multiple surfaces with inclined machining axes. The 5-Axis Auto Tuning System conducts automatic tuning to correct geometric error in a short time. In addition, the 5-Axis Auto Tuning System II features an "accuracy stability diagnosis function" that enables the machine to self-diagnose and notify changes in accuracy, allowing high accuracy to be maintained with a minimal number of tuning operations. This enables a higher level of 5-axis machining accuracy to be achieved.

Actual data with the MU-6300V 5-axis vertical machining center  
Maximum cusp height in multi-sided machining

Manual adjustment without 5-Axis Auto Tuning System II: **Max 12 μm**  
After using 5-Axis Auto Tuning System II: **Max 3 μm**

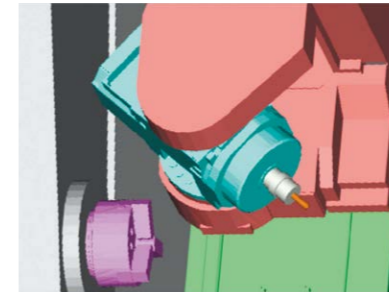


Note: The 5-Axis Auto Tuning System II is available only on 5-axis machining centers. For multitasking machines, the 5-Axis Auto Tuning System is applicable.

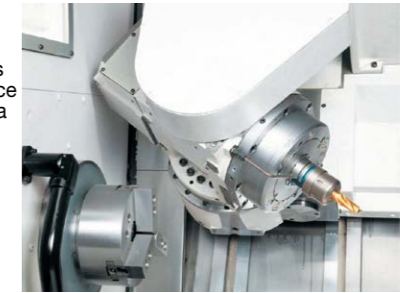
### Improved ease of use with Intelligent Technologies

#### Collision Avoidance System Collision prevention

The risk of collisions inside the machine increases in multi-surface machining with complex movements. We therefore developed a collision avoidance function utilizing advanced control technologies. This function stops the machine operation immediately before a collision in both automatic and manual operation as the world's first "Collision-Free Machines." This allows anyone to focus on machining without worry, and greatly reduces the time required for setup and first part cycle times.

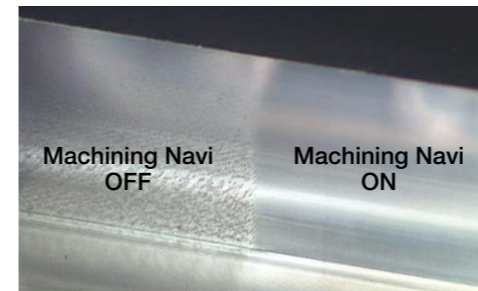


Machine movements are checked in advance and stopped before a collision occurs



#### Machining Navi Cutting condition search

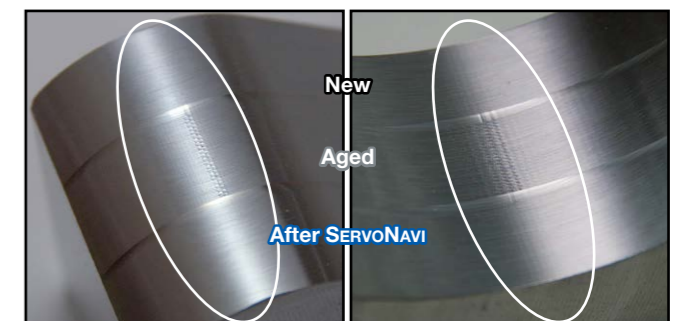
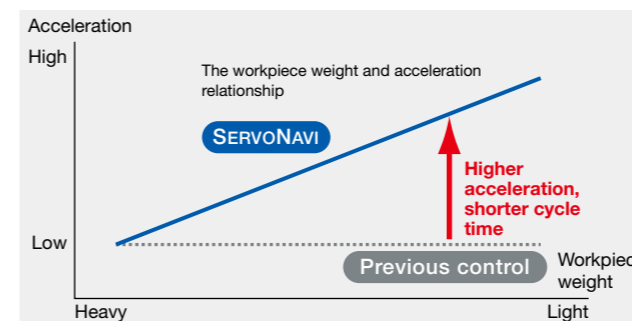
Rotation speed can't be increased due to worries about occurrence of chatter. Machining Navi solves this worry. It finds the optimal machining conditions by utilizing superior detection and control functions. This contributes not only to surface refinement, but also reduction of processing time, improvement of productivity, longer usable life for tools and consolidation of work processes.



Navigate to the best cutting conditions with spindle speed optimization and control

#### SERVO NAVI Optimized Servo Control

Machining accuracy and surface quality are improved with automatic optimization of servo control. This makes it possible to increase acceleration and reduce machining time, especially on machining centers. It can also eliminate the reversal spikes, noise, vibration, crease marks, and "fish scales" that occur with long machine use over many years, maintaining long-term accuracy and stable movements.



## Premium Solutions

### Usable, helpful and effective Okuma solutions

Okuma's accumulated solutions technology is brought together to provide valuable functions that easily and simply solve difficult, bothersome, and time-consuming machining and preparation problems for streamlining and efficiency.

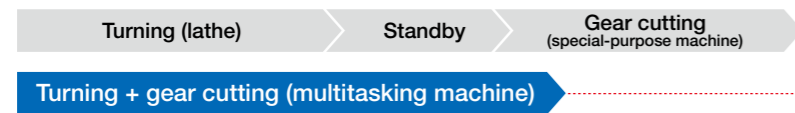
#### Gear Machining Package

Easy multitasking for gears

Highly accurate gear cutting achieved with multitasking machines and 5-axis machining centers.

Output programs just by entering the gear data.

■ MULTUS U Series (actual comparison to non-multitasking)



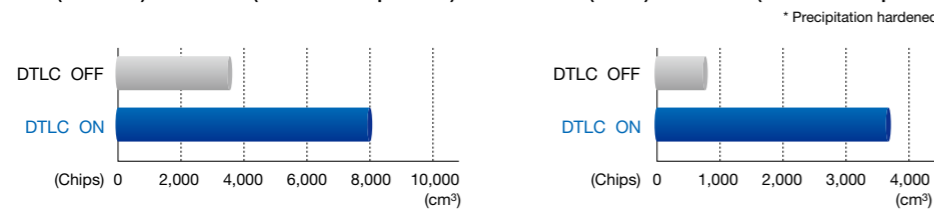
#### Dynamic Tool Load Control

Dramatically improved productivity of difficult-to-cut materials

DTLC suppresses chipping of insert tools on difficult-to-cut materials like titanium alloy, to achieve stable processing and longer tool life.

[Actual results]

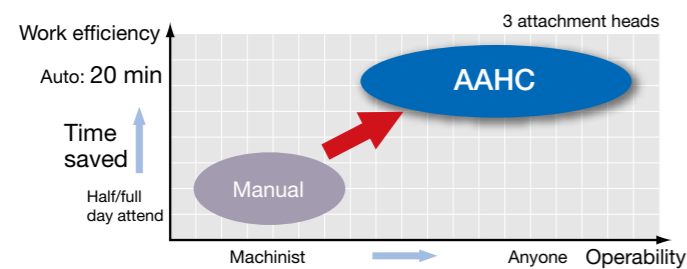
■ Tool life (titanium) 2.3 times (Okuma comparison) ■ Tool life (SUS\*) 5.2 times (Okuma comparison)



#### Auto Attachment Head Compensation

Easy rotational compensation for double columns

An easy way to compensate for attachment head rotational errors — automatically. Periodically setting rotational offsets help maintain high machining accuracy.



Note: AAHC requires Okuma's auto gauging and auto zero offset functions (with touch probe).

## Robot System

### Okuma automation systems Expanding the possibilities of manufacturing

We have expanded our lineup with compact and flexible automation systems that are easy to use even in high-mix, low-volume production environments, enabling us to propose optimal automation solutions tailored to each customer's production needs.

#### ARMROID Built-in Robot

This articulated robot is "built-in" the workspace area. ARMROID provides in-machine processing support that cannot be achieved with externally installed robots.



LB3000 EX III ARMROID  
[CNC Lathe + Built-in Robot]

Note: Photo with a workpiece stocker (option)



Articulated robot

#### Achieve high-level processing support possible only with built-in robots

ARMROID provides "in-process support" (not possible with conventional robots), such as part load/unload, part flip, chatter suppression, chip removal, and workspace cleaning.

#### Improving production efficiency through human and robot work sharing

Easily switch from a single machine to a robot automated cell simply by adding a mobile workpiece stocker (option).

For example, the robot can be on standby during the day while the operator handles small batches of part load/unload and other flexible jobs, and then automatic operations done by the robot can be done at night.

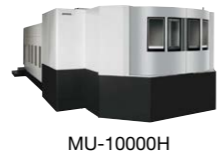
# Okuma's product lineup responds to diverse needs

## 5-Axis Machining Centers / Multitasking Machines

### P12 5-Axis Vertical Machining Centers



### P14 5-Axis Horizontal Machining Center



### Large 5-Axis Machining Centers



### P15 Multitasking Machines



### P16 Multitasking Machines



### P17 5-Axis Vertical Multitasking Machines



### Vertical Multitasking Machines



### P18 Double-Column Multitasking Machines



## CNC Lathes

### P20 1-Saddle CNC Lathes



### P22



### Twin Spindle Turning Centers



### P23 2-Saddle CNC Lathes



### P24



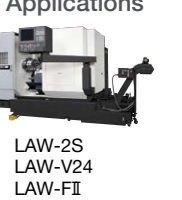
### P25 Vertical CNC Lathes



### P26



### Aluminum Wheel Applications



## Machining Centers

### P28 Vertical Machining Centers



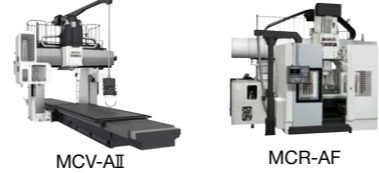
### P31 Horizontal Machining Centers



### P34 Double-Column Machining Centers (5-Face Machining)



### Double-Column Machining Centers

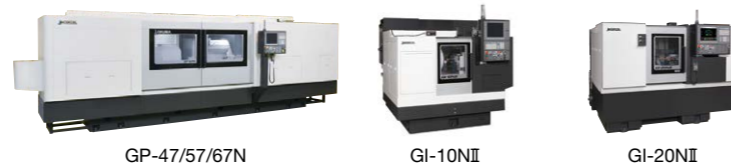


## Grinders

### P36 CNC Cylindrical Grinders



### CNC Internal Grinders



## Super Multitasking Machines



MU-6300V LASER EX  
MU-8000V LASER EX  
MULTUS U3000 LASER EX  
MULTUS U4000 LASER EX  
MULTUS U5000 LASER EX

## IT / CNC

### P39 CNC

OSP-P500

### CAD/CAM System for Parts Machining

ADMAR-Parts  
3D Virtual Monitor

### P40

### IIoT solution

Connect Plan

\* Not available with CE conformity certification.

# 5-Axis Machining Centers / Multitasking Machines

5-Axis Machining Centers  
Multitasking Machines



## 5-Axis Vertical Machining Centers

### MU-V Series

MU-4000V / MU-5000V / MU-6300V / MU-8000V



5-Axis Machining Centers  
Multitasking Machines

		MU-4000V	MU-5000V	MU-6300V	MU-8000V
Table size	mm (in)	ø400 (ø15.75)	ø500 (ø19.69)	ø630 (ø24.80)	ø800 x 630 width (ø31.50 x 24.80)
Spindle speed	min <sup>-1</sup>	15,000	10,000 6,000	10,000 6,000	10,000 6,000
Tool storage	tools	32	32	32	32
Motor	kW (hp)	22/18.5 (10 min/cont) (30/25)	11/7.5 (10 min/cont) (15/10)	11/7.5 (10 min/cont) (15/10)	11/7.5 (10 min/cont) (15/10)
Machine size (W x D x H)	mm (in)	2,399 x 3,444 x 2,950 (94.45 x 135.59 x 116.14)	3,995 x 2,750 x 3,435 (157.28 x 108.27 x 135.24) 3,995 x 2,840 x 3,435 (157.28 x 111.81 x 135.24)	4,850 x 2,990 x 3,525 (190.94 x 117.72 x 138.78)	5,280 x 2,990 x 3,625 (207.87 x 117.72 x 142.72)
Spec extension		L	L	L	L

L: Turning specification

## 5-Axis Vertical Machining Centers

### MU-400V III / MU-500V III



		MU-400V III	MU-500V III
Table size	mm (in)	ø400 (ø15.75)	ø500 (ø19.69)
Spindle speed	min <sup>-1</sup>	15,000	8,000
Tool storage	tools	32	20
Motor	kW (hp)	22/18.5 (10 min/cont) (30/25)	11/7.5 (10 min/cont) (15/10)
Machine size (W × D × H)	mm (in)	2,160 × 2,783 × 2,946 (85.04 × 109.57 × 115.98)	2,515 × 3,231 × 3,045 (99.02 × 127.20 × 119.88)

### MU-S600V



Specifications for single machine

Specifications for 2 connected machines

		MU-S600V
Table size	mm (in)	400 × 400 (15.75 × 15.75)
Spindle speed	min <sup>-1</sup>	12,000
Tool storage	tools	16
Motor	kW (hp)	15/11 (25% ED/cont) (20/15)
Machine size (W × D × H)	mm (in)	1,586 × 3,315 × 2,994 (62.44 × 130.51 × 117.87)

## 5-Axis Horizontal Machining Center

### MU-10000H



		MU-10000H
Pallet size	mm (in)	1,000 × 1,000 (39.37 × 39.37)
Max workpiece dimensions	mm (in)	ø1,500 × 1,175 (ø59.06 × 46.26)
Spindle speed	min <sup>-1</sup>	6,000
Tool storage	tools	81
Motor	kW (hp)	45/37 (20 min/cont) (60/50)
Machine size (W × D × H)	mm (in)	6,880 × 10,930 × 3,694 (270.87 × 430.31 × 145.43)

## Large 5-Axis Machining Centers

### MILLAC VH Series

#### MILLAC 800VH / MILLAC 1000VH



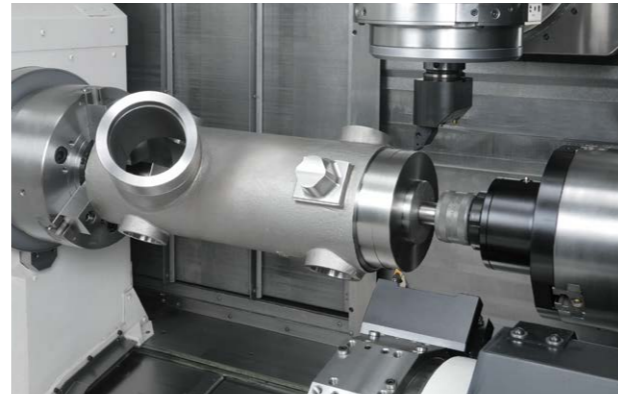
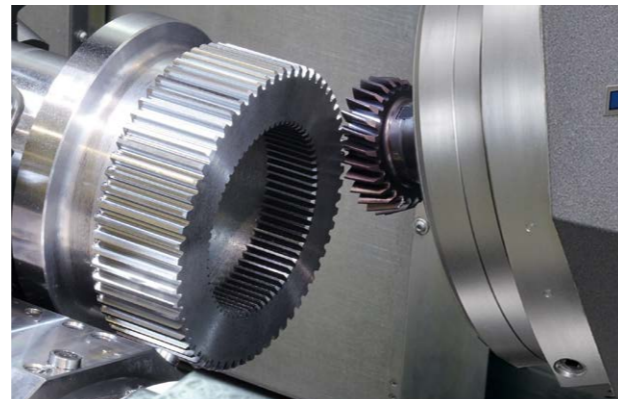
		MILLAC 800VH	MILLAC 1000VH
Pallet size	mm (in)	800 × 800 (31.50 × 31.50)	1,000 × 1,000 (39.37 × 39.37)
Spindle speed	min <sup>-1</sup>	10,000	6,000
Tool storage	tools	80	40
Motor	kW (hp)	22/18.5 (15 min/cont) (30/25)	22/18.5 (30 min/cont) (30/25)
Machine size (W × D × H)	mm (in)	4,760 × 6,390 × 3,600* (187.40 × 251.57 × 141.73)	5,228 × 7,117 × 4,455 (205.83 × 280.20 × 175.39)
CNC		OSP / FANUC	OSP / FANUC

\* Step excluded

## Multitasking Machines

### MULTUS Series

MULTUS U1000 / MULTUS U2000 / MULTUS U3000 / MULTUS U4000 / MULTUS U5000



		MULTUS U1000	MULTUS U2000	MULTUS U3000	MULTUS U4000	MULTUS U5000
Standard chuck size	in	6	8	8	10	15
Max machining dia	ømm (in)	650 (25.59)	650 (25.59)	650 (25.59)	650 (25.59)	650 (25.59)
Max work length	mm (in)	830 (32.68)	830 (32.68)	1,000, 1,500 (39.37, 59.06)	1,500, 2,000 (59.06, 78.74)	1,500, 2,000, 3,000 (59.06, 78.74, 118.11)
Spindle speed	min <sup>-1</sup>	6,000	5,000	5,000	4,200	3,000
Tool storage	tools	80	80	40	40	40
Motor	kW (hp)	11.5/7.5 (5 min/cont) (15/10)	22/15 (30 min/cont) (30/20)	22/15 (30 min/cont) (30/20)	22/15 (30 min/cont) (30/20)	37/30 (30 min/cont) (50/40)
Machine size (W × D × H)	mm (in)	4,446 × 2,345 × 2,600 (175.04 × 92.32 × 102.36)	4,446 × 2,345 × 2,600 (175.04 × 92.32 × 102.36)	4,925 × 2,995 × 2,955 (193.90 × 117.91 × 116.34) 5,425 × 2,995 × 2,955 (213.58 × 117.91 × 116.34)	5,425 × 2,995 × 2,955 (213.58 × 117.91 × 116.34) 6,175 × 2,995 × 2,955 (243.11 × 117.91 × 116.34)	5,530 × 2,995 × 2,955 (217.72 × 117.91 × 116.34) 6,280 × 2,995 × 2,955 (247.24 × 117.91 × 116.34) 8,420 × 3,278 × 3,090 (331.50 × 129.06 × 121.65)
Spec extension		W, 2S, 2SW	W, 2S, 2SW	W, 2S, 2SW	W, 2S, 2SW	W, 2S, 2SW

W: Opposing spindle, 2S: 2 saddle

## Multitasking Machines

### MULTUS BII Series

MULTUS B200II / MULTUS B250II / MULTUS B300II / MULTUS B400II

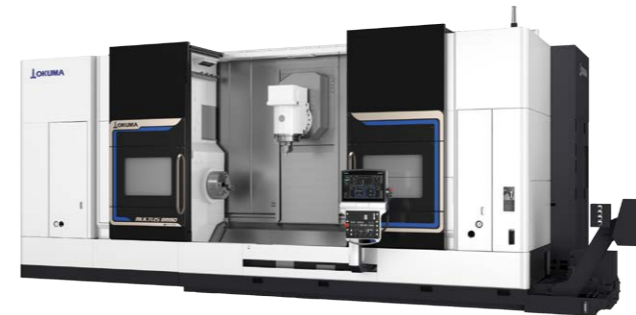


		MULTUS B200II	MULTUS B250II	MULTUS B300II	MULTUS B400II
Standard chuck size	in	6	8	8	10
Max machining dia	ømm (in)	600 (23.62)	600 (23.62)	630 (24.80)	710 (27.95)
Max work length	mm (in)	550, 750 (21.65, 29.53)	750 (29.53)	900 (35.43)	1,500, 2,000 (59.06, 78.74)
Spindle speed	min <sup>-1</sup>	6,000	5,000	5,000	3,800
Tool storage	tools	20	20	20	20
Motor	kW (hp)	11/7.5 (20 min/cont) (15/10)	15/11 (20 min/cont) (20/15)	15/11 (20 min/cont) (20/15)	22/15 (50% ED/cont) (30/20)
Machine size (W × D × H)	mm (in)	3,080 × 2,289 × 2,582 (121.26 × 90.12 × 101.65) 3,620 × 2,289 × 2,582 (142.52 × 90.12 × 101.65)	3,620 × 2,289 × 2,582 (142.52 × 90.12 × 101.65)	4,035 × 2,309 × 2,587 (158.86 × 90.91 × 101.85)	5,750 × 2,797 × 3,000 (226.38 × 110.12 × 118.11) 7,050 × 2,797 × 3,137 (277.56 × 110.12 × 123.50)
Spec extension		W	W	W	W

W: Opposing spindle

### MULTUS B Series

MULTUS B550 / MULTUS B750



		MULTUS B550	MULTUS B750
Standard chuck size	in	15	15
Max machining dia	ømm (in)	830 (32.68)	1,050 (41.34)
Max work length	mm (in)	2,000, 3,000 (78.74, 118.11)	3,000, 4,000, 6,000 (118.11, 157.48, 236.22)
Spindle speed	min <sup>-1</sup>	3,000	2,000
Tool storage	tools	40	40
Motor	kW (hp)	37/30 (30 min/cont) (50/40)	37/30 (30 min/cont) (50/40)
Machine size (W × D × H)	mm (in)	8,030 × 3,507 × 3,307 (316.14 × 138.07 × 130.20) 9,130 × 3,507 × 3,497 (359.45 × 138.07 × 137.68)	9,130 × 3,730 × 3,557 (359.45 × 146.85 × 140.04) 10,555 × 3,730 × 3,607 (415.55 × 146.85 × 142.01) 13,505 × 3,995 × 3,610 (531.69 × 157.28 × 142.13)
Spec extension		W	W

W: Opposing spindle

## 5-Axis Vertical Multitasking Machines

### VTM-YB Series

VTM-80YB / VTM-1200YB / VTM-2000YB

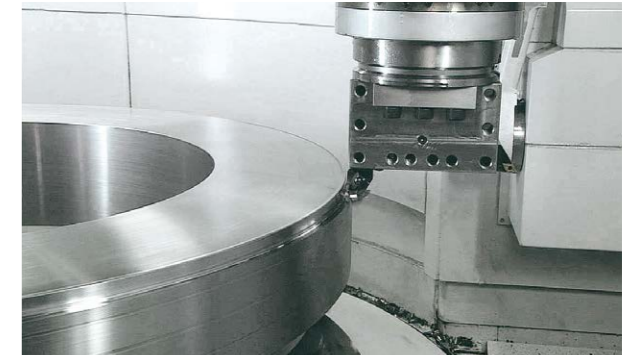


		VTM-80YB	VTM-1200YB	VTM-2000YB
Applicable chuck sizes	in	28, 32	36, 40	—
Max table size	ømm (in)	915 (36.02)	1,250 (49.21)	2,000 (78.74)
Max machining dia	ømm (in)	800 (31.50)	1,200 (47.24)	2,000 (78.74)
Max work length (height)	mm (in)	1,135 (44.69)	1,080 (42.52)	1,400 (55.12)
Spindle speed	min <sup>-1</sup>	800	500	300
Tool storage	tools	36	36	36
Motor	kW (hp)	30/22 (30 min/cont) (40/30)	30/22 (30 min/cont) (40/30)	30/22 (30 min/cont) (40/30)
Machine size (W × D × H)	mm (in)	5,256 × 4,860 × 4,350 (206.93 × 191.34 × 171.26)	5,512 × 5,471 × 4,273 (217.01 × 215.39 × 168.23)	5,970 × 6,973 × 4,967 (235.04 × 274.53 × 195.55)
CNC		OSP / FANUC	OSP / FANUC	OSP / FANUC

## Double-Column Multitasking Machines

### VTR-A Series

VTR-160A / VTR-350A



		VTR-160A	VTR-350A
Max table size	ømm (in)	1,250 (49.21)	3,000 (118.11)
Max machining dia	ømm (in)	1,600 (Max swing) (62.99)	3,500 (Max swing) (137.80)
Max work length (height)	mm (in)	1,250 (49.21)	1,600 (62.99)
Spindle speed	min <sup>-1</sup>	400	160
Tool storage	tools	23	23
Motor	kW (hp)	45/37 (30 min/cont) (60/50)	55/45 (30 min/cont) (75/60)
Machine size (W × D × H)	mm (in)	6,550 × 3,693 × 5,000 (257.87 × 145.39 × 196.85)	8,615 × 5,374 × 6,300 (339.17 × 211.57 × 248.03)

## Vertical Multitasking Machines

### VTM Series

VTM-65 / VTM-100 / VTM-200

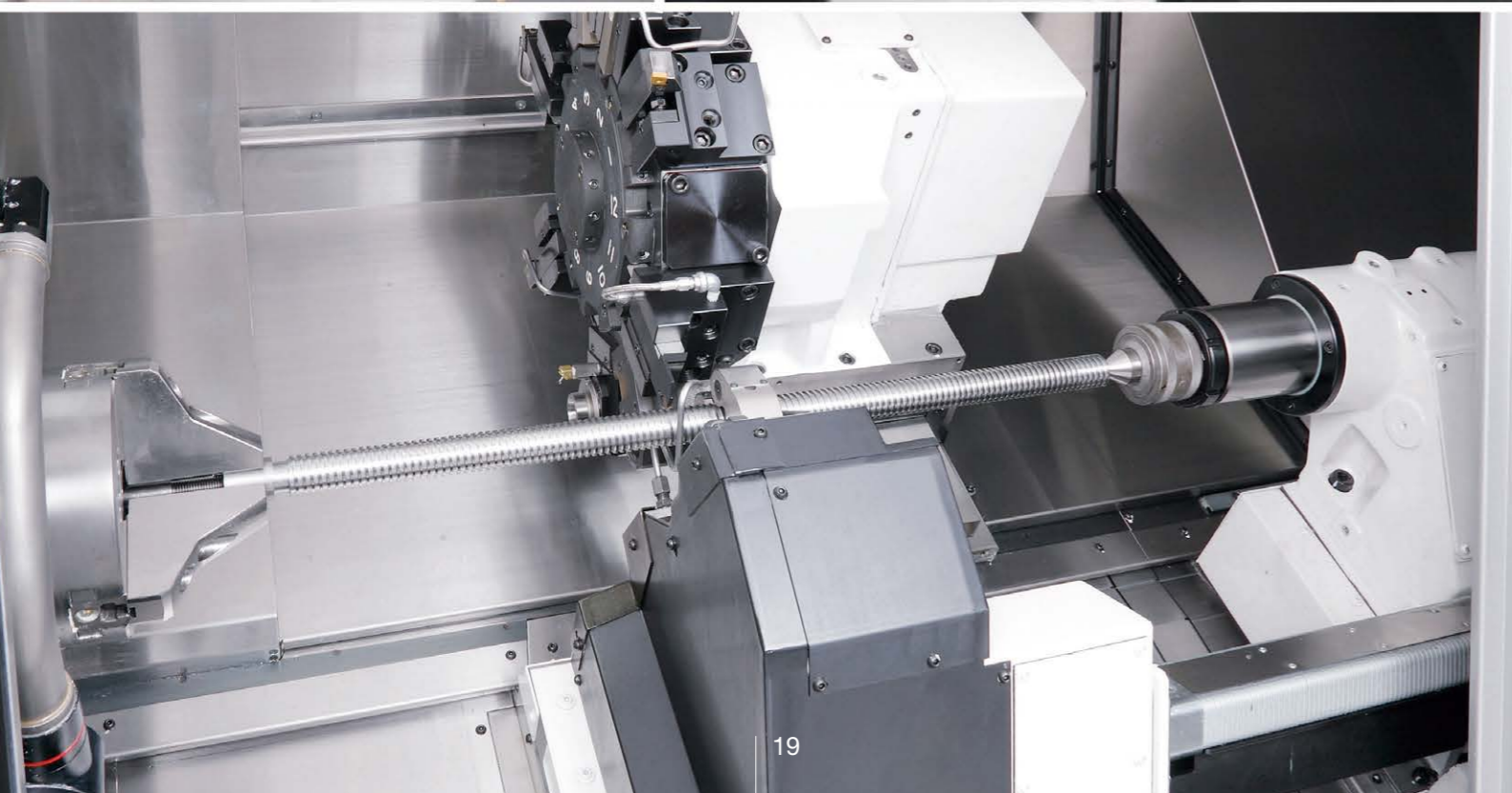


		VTM-65	VTM-100	VTM-200
Applicable chuck sizes	in	18, 21, 24	24, 28, 32, 36	—
Max table size	ømm (in)	610 (24.02)	915 (36.02)	2,000 (78.74)
Max machining dia	ømm (in)	650 (25.59)	1,000 (39.37)	2,000 (78.74)
Max work length (height)	mm (in)	635 (25.00)	840 (33.07)	1,200 (47.24)
Spindle speed	min <sup>-1</sup>	1,250	1,250	200
Tool storage	tools	36	36	36
Motor	kW (hp)	30/22 (30 min/cont) (40/30)	30/22 (30 min/cont) (40/30)	30/22 (30 min/cont) (40/30)
Machine size (W × D × H)	mm (in)	4,066 × 2,990 × 4,000 (160.08 × 117.72 × 157.48)	4,286 × 3,175 × 4,300 (168.74 × 125.00 × 169.29)	5,561 × 5,258 × 4,603 (218.94 × 207.01 × 181.22)
CNC		OSP / FANUC	OSP / FANUC	OSP / FANUC



CNC Lathes

CNC Lathes



## 1-Saddle CNC Lathes

### LB EX III Series

LB2000 EX III / LB3000 EX III  
LB4000 EX III



		LB2000 EX III	LB3000 EX III	LB4000 EX III
Standard chuck size	in	6	8	10
Max turning dia	ømm (in)	430 (16.93)	410 (16.14)	480 (18.90)
Max work length	mm (in)	300, 500 (11.81, 19.69)	250, 500, 1,000, 1,300 (9.84, 19.69, 39.37, 51.18)	750, 1,500, 2,150 (29.53, 59.06, 84.65)
Spindle speed	min <sup>-1</sup>	6,000	5,000	4,200
Turret		V12	V12	V12
Motor	kW (hp)	11/7.5 (20 min/cont) (15/10)	22/15 (30 min/cont) (30/20)	30/22 (30 min/cont) (40/30)
Machine size (W × D × H)	mm (in)	1,980 × 1,899 × 1,770 (77.95 × 74.76 × 69.69)	2,055 × 1,889 × 1,770 (80.91 × 74.37 × 69.69)	3,100 × 2,059 × 1,955 (122.05 × 81.06 × 76.97)
		2,290 × 1,899 × 1,770 (90.16 × 74.76 × 69.69)	2,340 × 1,899 × 1,770 (92.13 × 74.76 × 69.69)	4,175 × 2,249 × 2,025 (164.37 × 88.54 × 79.72)
		4,344 × 2,083 × 1,820 (171.02 × 82.01 × 71.65)	4,344 × 2,083 × 1,820 (171.02 × 82.01 × 71.65)	5,515 × 2,530 × 2,025 (217.13 × 99.61 × 79.72)
Spec extension		M, W, MY, MW, MYW	M, W, MY, MW, MYW	M, MY, MW, MYW

M: Milling, W: Sub-spindle, Y: Y-axis

## 1-Saddle CNC Lathes

**GENOS L250II-e / GENOS L400II-e**  
**GENOS L2000-e / GENOS L3000-e**



		GENOS L250II-e*1	GENOS L400II-e*1
Standard chuck size	in	8	10
Max turning dia	ømm (øin)	220 (8.66)	310, 330 (12.20, 12.99)
Max work length	mm (in)	290, 500 (11.42, 19.69)	500, 1,100 (19.69, 43.31)
Spindle speed	min <sup>-1</sup>	4,500	3,000
Turret		V12	V12
Motor	kW (hp)	11/7.5/7.5 (10 min/cont) (15/10/10)	15/11 (30 min/cont) (20/15)
Machine size (W × D × H)	mm (in)	1,482*2 × 1,917 × 1,795 (58.35 × 75.47 × 70.67) 2,129 × 1,917 × 1,856 (83.82 × 75.47 × 73.07)	2,580 × 1,951 × 2,069 (101.57 × 76.81 × 81.46) 3,537 × 2,473 × 2,305 (139.25 × 97.36 × 90.75)

\*1. Specifications may vary in different markets. \*2. Cylinder cover not included.

		GENOS L2000-e*1	GENOS L3000-e*1
Standard chuck size	in	8	10
Max turning dia	ømm (øin)	230 (9.06)	340 (13.39)
Max work length	mm (in)	290, 500 (11.42, 19.69)	500, 1,100 (19.69, 43.31)
Spindle speed	min <sup>-1</sup>	5,000	3,800
Turret		V12	V12
Motor	kW (hp)	15/11 (20 min/cont) (20/15)	22/15 (20 min/cont) (30/20)
Machine size (W × D × H)	mm (in)	2,015 × 1,843 × 1,620 (79.33 × 72.56 × 63.78) 2,480 × 1,822 × 1,620 (97.64 × 71.73 × 63.78)	2,545 × 1,865 × 1,791 (100.20 × 73.43 × 70.51) 3,560 × 2,449 × 2,057 (140.16 × 96.42 × 80.98)
Spec extension		M, MY	M, MY, MW, MYW

\*1. Specifications may vary in different markets. M: Milling, Y: Y-axis

## HL Series

HL-20 / HL-35



		HL-20	HL-35
Standard chuck size	in	8	10
Max turning dia	ømm (øin)	350 (13.78)	350 (13.78)
Max work length	mm (in)	460 (18.11)	610, 1,020 (24.02, 40.16)
Spindle speed	min <sup>-1</sup>	3,200	3,500
Turret		V8	V12
Motor	kW (hp)	15/11 (30 min/cont) (20/15)	18.5/15 (30 min/cont) (25/20)
Machine size (W × D × H)	mm (in)	1,810 × 1,600 × 1,795 (71.26 × 62.99 × 70.67)	2,430 × 1,630 × 1,895 (95.67 × 64.17 × 74.61) 3,370 × 1,630 × 1,895 (132.68 × 64.17 × 74.61)
CNC		FANUC	FANUC

## 1-Saddle CNC Lathes

**LB35III / LB45III**



		LB35III	LB45III
Standard chuck size	in	12	15
Max turning dia	ømm (øin)	460 (18.11)	660 (25.98)
Max work length	mm (in)	850, 1,500, 2,000 (33.46, 59.06, 78.74)	1,000, 2,000, 3,000, 4,000 (39.37, 78.74, 118.11, 157.48)
Spindle speed	min <sup>-1</sup>	3,200	2,800
Turret		V12	V12
Motor	kW (hp)	30/22 (30 min/cont) (40/30)	37/30 (30 min/cont) (50/40)
Machine size (W × D × H)	mm (in)	4,015 × 2,663 × 2,210 (158.07 × 104.84 × 87.01) 4,885 × 2,663 × 2,325 (192.32 × 104.84 × 91.54) 5,910 × 2,663 × 2,325 (232.68 × 104.84 × 91.54)	4,260 × 3,190 × 2,602 (167.72 × 125.59 × 102.44) 5,760 × 3,190 × 2,632 (226.77 × 125.59 × 103.62) 7,010 × 2,965 × 2,584 (275.98 × 116.73 × 101.73) 8,570 × 3,227 × 2,668 (337.40 × 127.05 × 105.04)
Spec extension		M	M, MY

M: Milling, Y: Y-axis

## LH55-N



		LH55-N
Standard chuck size	in	18
Max turning dia	ømm (øin)	1,000 (39.37)
Max work length	mm (in)	2,000, 3,000, 4,000 (78.74, 118.11, 157.48)
Spindle speed	min <sup>-1</sup>	1,200
Turret		V8, H6, H4
Motor	kW (hp)	45/37 (30 min/cont) (60/50)
Machine size (W × D × H)	mm (in)	6,740 × 4,109 × 2,457 (265.35 × 161.77 × 96.73) 7,740 × 4,109 × 2,457 (304.72 × 161.77 × 96.73) 8,740 × 4,109 × 2,457 (344.09 × 161.77 × 96.73)

## Twin Spindle Turning Centers

### LT EX Series

LT2000 EX / LT3000 EX



		LT2000 EX	LT3000 EX
Standard chuck size	in	6	8
Max turning dia	ømm (øin)	210 (8.27)	350 (13.78)
Max work length	mm (in)	130 (5.12)	200 (7.87)
Spindle speed	min <sup>-1</sup>	6,000	5,000
Turret		U/L: M-V16	U/L: M-V16
Motor	kW (hp)	L/R: 11.5/7.5 (5 min/cont) (15/10)	L/R: 22/15 (30 min/cont) (30/20)
Machine size (W × D × H)	mm (in)	3,745 × 2,540 × 2,339 (147.44 × 100.00 × 92.09)	4,504 × 2,750 × 2,650 (177.32 × 108.27 × 104.33)
Spec extension		MY, 3T	MY, 3T

M: Milling, Y: Y-axis, 3T: 3-turret

## 2-Saddle CNC Lathes

### LU EX Series

LU3000 EX / LU4000 EX / LU7000 EX



	LU3000 EX	LU4000 EX	LU7000 EX
Standard chuck size	in 8	10	21, 24
Max turning dia	ømm (oin) U: 410, L: 250 (U: 16.14, L: 9.84)	U: 480, L: 310 (U: 18.90, L: 12.20)	U: 900, L: 670 (35.43, 26.39)
Max work length	mm (in) 600, 1,000 (23.62, 39.37)	650, 1,250, 2,080, 3,080 (25.59, 49.21, 81.89, 121.26)	2,000 (78.74)
Spindle speed	min <sup>-1</sup> 5,000	4,200	1,500
Turret	U: V12, L: V8	U: V12, L: V10	U: V12, L: V10
Motor	kW (hp) 22/15 (30 min/cont) (30/20)	22/15 (30 min/cont) (30/20)	45/37 (30 min/cont) (60/50)
Machine size (W × D × H)	mm (in) 2,950 × 2,198 × 2,080 (116.14 × 86.54 × 81.89) 3,980 × 2,650 × 2,230 (156.69 × 104.33 × 87.80)	3,570 × 2,362 × 2,200 (140.55 × 92.99 × 86.61) 4,780 × 2,722 × 2,440 (188.19 × 107.17 × 96.06) 6,480 × 2,914 × 2,440 (255.12 × 114.72 × 96.06) 8,405 × 2,546 × 2,309 (330.91 × 100.24 × 90.91)	7,842 × 3,256 × 3,300 (308.74 × 128.19 × 129.92)
Spec extension	M, 2M, MY, 2MY, W, MW	M, MY	M, MY

M: Upper multitasking turret, 2M: Upper and lower multitasking turret, Y: Y-axis, W: Sub-spindle

## 2-Saddle CNC Lathes

### LU35II / LU45II



	LU35II	LU45II
Standard chuck size	in 12	15
Max turning dia	ømm (oin) U: 550, L: 360 (U: 21.65, L: 14.17)	U: 660, L: 460 (U: 25.98, L: 18.11)
Max work length	mm (in) 920, 1,570, 2,070 (36.22, 61.81, 81.50)	1,000, 2,000, 3,000 (39.37, 78.74, 118.11)
Spindle speed	min <sup>-1</sup> 3,200	2,800
Turret	U: V12, L: V10	U: V12, L: V10
Motor	kW (hp) 30/22 (30 min/cont) (40/30)	37/30 (30 min/cont) (50/40)
Machine size (W × D × H)	mm (in) 4,535 × 2,873 × 2,590 (178.54 × 113.11 × 101.97) 5,185 × 3,043 × 2,590 (204.13 × 119.80 × 101.97) 5,935 × 3,098 × 2,745 (233.66 × 121.97 × 108.07)	4,750 × 3,338 × 3,042 (187.01 × 131.42 × 119.76) 6,060 × 3,365 × 3,042 (238.58 × 132.48 × 119.76) 8,020 × 3,043 × 2,808 (315.75 × 119.80 × 110.55)
Spec extension	M	M

M: Upper multitasking turret

### LU-S1600



	LU-S1600
Standard chuck size	in 8
Max turning dia	ømm (oin) 160 (6.30)
Max work length	mm (in) 480, 550, 1,000 (18.90, 21.65, 39.37)
Spindle speed	min <sup>-1</sup> 4,000
Turret	U/L: V6
Motor	kW (hp) 11/7.5 (30 min/cont) (15/10)
Machine size (W × D × H)	mm (in) 2,440 × 1,980 × 2,054 (96.06 × 77.95 × 80.87) 3,235 × 2,282 × 2,247 (127.36 × 89.84 × 88.46)
CNC	OSP / FANUC

## Vertical CNC Lathes

### VT1000EX



VT1000EX		
Applicable chuck sizes	in	24, 28, 32, 36
Max turning dia	ømm (in)	1,000 (39.37)
Max work length (height)	mm (in)	1,000 (39.37)
Spindle speed	min <sup>-1</sup>	800
Turret		H1 (Turning-dedicated)
Motor	kW (hp)	55/45 (30 min/cont) (75/60)
Machine size (W × D × H)	mm (in)	4,317 × 3,769 × 4,435* (169.96 × 148.39 × 174.61)

\* Spindle lubricant tank and spindle cooling unit are included. Operation panel is not included.

### V Series

V40R  
V760EX  
V920EX  
V100R



### 2SP-V Series

2SP-V40  
2SP-V760EX  
2SP-V920EX



	V40R [2SP-V40]	V760EX [2SP-V760EX]	V920EX [2SP-V920EX]	V100R
Applicable chuck sizes	in 12, 15, 18	15, 18, 21, 24	24, 28, 32, 36	36, 40
Max turning dia	ømm (in) 400 (15.75)	760 (29.92)	920 (36.22)	1,000 (39.37)
Max work length (height)	mm (in) 450 (17.72)	770 (30.31)	860 (33.86)	890 (35.04)
Spindle speed	min <sup>-1</sup> 2,500	2,000	1,250	1,250
Turret	V12	V12	V12	V12
Motor	kW (hp) 22/18.5 (30 min/cont) (30/25)	30/22 (30 min/cont) (40/30)	30/22 (30 min/cont) (40/30)	45/37 (5 min/10 min) (60/50)
Machine size (W × D × H)	mm (in) 1,705 × 2,788 × 3,040 (67.13 × 109.76 × 119.69) [2,970 × 2,738 × 3,040] (116.93 × 107.80 × 119.69)	1,842 × 2,732 × 3,489 (72.52 × 107.56 × 137.36) [3,680 × 2,732 × 3,489] (144.88 × 107.56 × 137.36)	2,252 × 2,845 × 3,693 (88.66 × 112.01 × 145.39) [4,500 × 2,845 × 3,693] (177.17 × 112.01 × 145.39)	2,735 × 3,445 × 3,510 (107.68 × 135.63 × 138.19)
Spec extension	M	M	M, ATC *	M
CNC	OSP / FANUC	OSP / FANUC	OSP / FANUC	OSP / FANUC

M: Milling \* ATC can be selected in V920EX

### SV250



SV250		
Applicable chuck sizes	in	8, 10
Max turning dia	ømm (in)	250 (9.84)
Max work length (height)	mm (in)	350 (13.78)
Spindle speed	min <sup>-1</sup>	6,000
Turret		V12
Motor	kW (hp)	15/11 (short time/cont) (20/15)
Machine size (W × D × H)	mm (in)	950 × 2,600 × 2,445 (37.40 × 102.36 × 96.26)
Spec extension		M
CNC		OSP / FANUC

M: Milling

## 2-Spindle Horizontal CNC Lathes

### 2SP-H / HG Series

2SP-1500H  
1SP-2500H / 2SP-2500H  
2SP-10HG / 2SP-35HG



	2SP-1500H	1SP-2500H	2SP-2500H	2SP-10HG	2SP-35HG
Standard chuck size	in 6	8	8	6	10
Max turning dia	ømm (in) 150 [290]* (5.91 [11.42]*)	200 [410]* (7.87 [16.14]*)	200 [410]* (7.87 [16.14]*)	100 (3.94)	280 (11.02)
Max work length	mm (in) 80 [160]* (3.15 [6.30]*)	120 [200]* (4.72 [7.87]*)	120 [200]* (4.72 [7.87]*)	100 (3.94)	230 (9.06)
Spindle speed	min <sup>-1</sup> 6,000	5,000	5,000	5,000	2,000
Turret	L/R: V8	V12	L/R: V12	L/R: V8	L/R: V12
Motor	kW (hp) 15/11 (30 min/cont) × 2 (20/15)	15/11 (20 min/cont) (20/15)	15/11 (20 min/cont) × 2 (20/15)	7.5/5.5 (30 min/cont) × 2 (10/7.5)	18.5/15 (30 min/cont) × 2 (25/20)
Machine size (W × D × H)	mm (in) 1,900 × 2,605 (machine only) (74.80 × 102.56) × 2,982 (max loader ht) (× 117.40)	1,350 × 2,797 (machine only) (53.15 × 110.12) × 3,243 (max loader ht) (× 127.68)	2,200 × 2,734 (machine only) (86.61 × 107.64) × 3,257 (max loader ht) (× 128.23)	1,650 × 1,825 × 2,861 (64.96 × 71.85 × 112.64)	3,200 × 2,835 × 4,052 (125.98 × 111.61 × 159.53)
Spec extension	M	M	M	M	M
CNC	OSP / FANUC	OSP / FANUC	OSP / FANUC	FANUC	OSP / FANUC

\* Machine capacity without loader application M: Milling

## Aluminum Wheel Applications

### LAW Series

LAW-2S / LAW-V24 / LAW-FII



	LAW-2S	LAW-V24	LAW-FII
Max turning dia	ømm (in) U: 630, L: 480 (24.80, 18.90)	660 (25.98)	620 (24.41)
Max work length	mm (in) 660 (25.98)	660 (25.98)	280 (11.02)
Spindle speed	min <sup>-1</sup> 3,000	3,000	3,000
Turret	U: V6, L: V4	L/R: V6	V12
Motor	kW (hp) 55/45 (20 min/cont) (75/60)	55/45 (20 min/cont) (75/60)	37/30 (30 min/cont) (50/40)
Machine size (W × D × H)	mm (in) 4,973 × 2,580 × 2,850 (195.79 × 101.57 × 112.20)	3,650 × 3,720 × 3,881 (143.70 × 146.46 × 152.80)	3,522 × 2,800 × 2,250 (138.66 × 110.24 × 88.58)

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## Vertical Machining Centers

### MB-V Series

MB-46V II / MB-46VEII  
 MB-56V II  
 MB-66VA / MB-66VB



		MB-46V II <MB-46VEII>	MB-56V II	MB-66VA/B
Table size	mm (in)	760 x 460 <1,000 x 460> (29.92x18.11 <39.37x18.11>)	1,300 x 560 (51.18 x 22.05)	1,530 x 660 (60.24 x 25.98)
Spindle speed	min <sup>-1</sup>	15,000 6,000	15,000 6,000	8,000 / 6,000
Tool storage	tools	20	20	20
Motor	kW (hp)	22/18.5 (10 min/cont) (30/25)	22/18.5 (10 min/cont) (30/25)	11/7.5 (10 min/cont) (15/10)
		11/7.5 (10 min/cont) (15/10)	11/7.5 (10 min/cont) (15/10)	
Machine size (W x D x H)	mm (in)	1,950 x 2,810 x 2,746 (76.77 x 110.63 x 108.11)	2,520 x 3,123 x 2,746 (99.21 x 122.95 x 108.11)	3,045 x 3,404 x 3,295 (119.88 x 134.02 x 129.72)
		2,000 x 2,810 x 2,746 (78.74 x 110.63 x 108.11)		
		<2,210 x 2,810 x 2,746> (<87.01 x 110.63 x 108.11>)		

### MB-80V

### MB-100V



		MB-80V	MB-100V
Table size	mm (in)	1,600 x 800 (62.99 x 31.50)	3,000 x 1,000 (118.11 x 39.37)
Spindle speed	min <sup>-1</sup>	15,000 12,000	15,000 12,000
Tool storage	tools	32	32
Motor	kW (hp)	26/18.5 (10 min/cont) (35/25)	26/18.5 (10 min/cont) (35/25)
		33/26 (10 min/cont) (44/35)	33/26 (10 min/cont) (44/35)
Machine size (W x D x H)	mm (in)	4,500 x 2,970 x 3,320 (177.17 x 116.93 x 130.71)	8,995 x 3,095 x 3,500 (354.13 x 121.85 x 137.80)

## Vertical Machining Centers

### MF-V Series

MF-46VA / MF-46VB

Vertical Machining Centers with 2P-APC



MF-46VA/B		
Pallet size	mm (in)	760 x 460 (29.92 x 18.11)
Spindle speed	min <sup>-1</sup>	8,000 / 6,000
Tool storage	tools	20
Motor	kW (hp)	11/7.5 (10 min/cont) (15/10)
Machine size (W x D x H)	mm	2,406 x 3,270 x 2,946 (94.72 x 128.74 x 115.98)
	(in)	2,456 x 3,270 x 2,946 (96.69 x 128.74 x 115.98)

### MP-46V

Vertical Machining Center [For High-Precision Parts and Die/Mold Applications]



MP-46V		
Table size	mm (in)	760 x 460 (29.92 x 18.11)
Spindle speed	min <sup>-1</sup>	20,000
Tool storage	tools	20
Motor	kW (hp)	15/11 (10 min/cont) (20/15)
Machine size (W x D x H)	mm	2,224 x 2,734 x 2,630* (87.56 x 107.64 x 103.54)
	(in)	

\* Ball screw cooler not included

### GENOS M Series

GENOS M460-VE-e / GENOS M560-V-e / GENOS M660-V-e



		GENOS M460-VE-e*	GENOS M560-V-e*	GENOS M660-V-e*
Table size	mm (in)	1,000 x 460 (39.37 x 18.11)	1,300 x 560 (51.18 x 22.05)	1,530 x 660 (60.24 x 25.98)
Spindle speed	min <sup>-1</sup>	15,000	15,000	15,000 12,000
Tool storage	tools	32	32	32
Motor	kW (hp)	22/18.5 (10 min/cont) (30/25)	22/18.5 (10 min/cont) (30/25)	22/18.5 (10 min/cont) (30/25) 26/18.5 (10 min/cont) (35/25)
Machine size (W x D x H)	mm	2,225 x 2,810 x 2,746 (87.60 x 110.63 x 108.11)	2,564 x 3,194 x 2,746 (100.94 x 125.75 x 108.11)	3,035 x 3,325 x 3,295 (119.49 x 130.91 x 129.72)
	(in)			

\* Specifications may vary in different markets.

## Vertical Machining Centers

### MA-V Series

MA-550VB / MA-650VB



		MA-550VB	MA-650VB
Table size	mm (in)	1,300 x 560 (51.18 x 22.05)	1,530 x 660 (60.24 x 25.98)
Spindle speed	min <sup>-1</sup>	6,000	6,000
Tool storage	tools	32	32
Motor	kW (hp)	22/15/11 (10 min/30 min/cont) (30/20/15)	22/15/11 (10 min/30 min/cont) (30/20/15)
Machine size (W x D x H)	mm	3,200 x 2,862 x 2,898 (125.98 x 112.68 x 114.09)	3,750 x 3,128 x 3,030 (147.64 x 123.15 x 119.29)
	(in)		

### MILLAC V II Series

MILLAC 44V II

MILLAC 468V II / MILLAC 561V II / MILLAC 611V II

MILLAC 761V II / MILLAC 852V II / MILLAC 1052V II



		MILLAC 44V II	
		Standard	2APC
Table size	mm (in)	630 x 400 (24.80 x 15.75)	(Pallet) 400 x 400 (15.75 x 15.75)
Spindle speed	min <sup>-1</sup>		12,000
Tool storage	tools		16
Motor	kW (hp)		15/11 (25% ED/cont) (20/15)
Machine size (W x D x H)	mm	1,600 x 3,380 x 2,630 (62.99 x 133.07 x 103.54)	1,600 x 3,545 x 2,630 (62.99 x 139.57 x 103.54)
	(in)		
CNC		OSP / FANUC	

		MILLAC 468V II	MILLAC 561V II	MILLAC 611V II
Table size	mm (in)	1,050 x 460 (41.34 x 18.11)	1,350 x 560 (53.15 x 22.05)	1,600 x 610 (62.99 x 24.02)
Spindle speed	min <sup>-1</sup>	6,000 15,000	6,000 12,000	4,000
Tool storage	tools	20	20	20
Motor	kW (hp)	18.5/11 (15% ED/cont) (25/15) 26/18.5 (10 min/cont) (35/25)	15/11 (30 min/cont) (20/15) 22/18.5 (15 min/cont) (30/25)	15/11 (30 min/cont) (20/15)
Machine size (W x D x H)	mm	2,265 x 3,035 x 2,790 (89.17 x 119.49 x 109.84) 2,265 x 3,035 x 2,795 (89.17 x 119.49 x 110.04)	2,650 x 3,310 x 2,790 (104.33 x 130.31 x 109.84) 2,650 x 3,310 x 2,825 (104.33 x 130.31 x 111.22)	3,410 x 3,810 x 2,910 (134.25 x 150.00 x 114.57)
	(in)			
CNC		OSP / FANUC	OSP / FANUC	OSP / FANUC

		MILLAC 761V II	MILLAC 852V II	MILLAC 1052V II
Table size	mm (in)	1,800 x 720 (70.87 x 28.35)	2,200 x 850 (86.61 x 33.46)	2,200 x 1,050 (86.61 x 41.34)
Spindle speed	min <sup>-1</sup>	4,000	4,000	4,000
Tool storage	tools	36	36	36
Motor	kW (hp)	18.5/15 (30 min/cont) (25/20)	18.5/15 (30 min/cont) (25/20)	22/18.5 (30 min/cont) (30/25)
Machine size (W x D x H)	mm	4,300 x 4,160 x 3,230 (169.29 x 163.78 x 127.17)	5,460 x 4,495 x 3,350 (214.96 x 176.97 x 131.89)	6,760 x 4,560 x 3,520 (266.14 x 179.53 x 138.58)
	(in)			
CNC		OSP / FANUC	OSP / FANUC	OSP / FANUC

## Horizontal Machining Centers

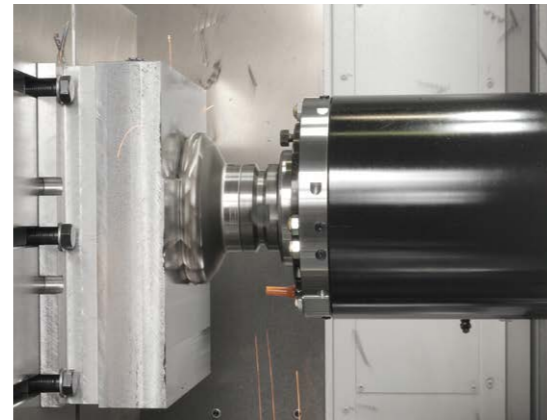
### MS-320H



MS-320H		
Table size	mm (in)	ø320 (ø12.60)
Max work size	mm (in)	ø500 × 400 (ø19.69 × 15.75)
Spindle speed	min <sup>-1</sup>	15,000
Tool storage	tools	10
Motor	kW (hp)	25/15/11 (15% ED/25% ED/cont) (33.3/20/15)
Machine size (W × D × H)	mm (in)	1,580 × 3,120 × 2,630 (62.20 × 122.83 × 103.54)

### MA-H Series

MA-4000H / MA-500HII / MA-600HIII  
MA-8000H / MA-12500H



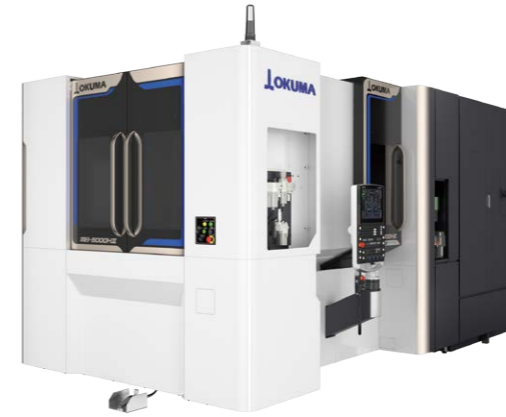
		MA-4000H	MA-500HII	MA-600HIII	MA-8000H	MA-12500H
Pallet size	mm (in)	400 × 400 (15.75 × 15.75)	500 × 500 (19.69 × 19.69)	630 × 630 (24.80 × 24.80)	800 × 800 (31.50 × 31.50)	1,250 × 1,250 (49.21 × 49.21)
Max work size	mm (in)	ø630 × 900 (ø24.80 × 35.43)	ø800 × 1,000 (ø31.50 × 39.37)	ø1,050 × 1,200 (ø41.34 × 47.24)	ø1,450 × 1,450 (ø57.09 × 57.09)	ø2,000 × 1,600 (ø78.74 × 62.99)
Spindle speed	min <sup>-1</sup>	15,000	6,000	6,000	6,000	6,000
Tool storage	tools	48	40	60	60	81
Motor	kW (hp)	38/18.5 (40% ED/cont) (51/25)	30/22 (10 min/cont) (40/30)	30/22 (10 min/cont) (40/30)	30/22 (10 min/cont) (40/30)	45/37 (20 min/cont) (60/50)
Machine size (W × D × H)	mm (in)	2,300 × 5,065 × 2,750 (90.55 × 199.41 × 108.27)	3,110 × 5,998 × 3,173 (122.44 × 236.14 × 124.92)	3,435 × 7,068 × 3,174*1 (135.24 × 278.27 × 124.96)	3,960 × 8,178 × 3,442*2 (155.91 × 321.97 × 135.51)	6,880 × 12,512 × 3,781 (270.87 × 492.60 × 148.86)

\*1. With EC drum filter lift-up chip conveyor \*2. With drum filter lift-up chip conveyor

## Horizontal Machining Centers

### MB-H Series

MB-5000HII / MB-10000H



		MB-5000HII	MB-10000H
Pallet size	mm (in)	500 × 500 (19.69 × 19.69)	1,000 × 1,000 (39.37 × 39.37)
Max work size	mm (in)	ø800 × 1,000 (ø31.50 × 39.37)	ø1,400 × 1,450 (ø55.12 × 57.09)
Spindle speed	min <sup>-1</sup>	15,000	6,000
Tool storage	tools	48	40
Motor	kW (hp)	26/18.5 (10 min/cont) (35/25)	30/22 (10 min/cont) (40/30)
Machine size (W × D × H)	mm (in)	2,540 × 5,620 × 2,885*1 (100.00 × 221.26 × 113.58)	4,545 × 6,465 × 3,410 (178.94 × 254.53 × 134.25)

\*1. With RDF drum filter lift-up chip conveyor

### MILLAC HII Series

MILLAC 44HII / MILLAC 55HII



		MILLAC 44HII		MILLAC 55HII	
		Rotary table	2APC	Rotary table	2APC
Table size	mm (in)	ø320 (ø12.60)	(Pallet) 320 × 320 (12.60 × 12.60)	ø500 (ø19.69)	(Pallet) 400 × 400 (15.75 × 15.75)
Max work size	mm (in)	ø400 × 500 (ø15.75 × 19.69)		ø500 × 600 (ø19.69 × 23.62)	
Spindle speed	min <sup>-1</sup>	12,000		8,000	
Tool storage	tools	10		30	
Motor	kW (hp)	15/11 (25% ED/cont) (20/15)		18.5/11 (15% ED/cont) (25/15)	
Machine size (W × D × H)	mm (in)	1,350 × 2,842 (53.15 × 111.89)	1,350 × 3,490 (53.15 × 137.40)	1,650 × 3,620 (64.96 × 142.52)	1,650 × 4,415 (64.96 × 173.82)
		× 2,725 (× 107.28)	× 2,725 (× 107.28)	× 2,810 (× 110.63)	× 2,810 (× 110.63)
CNC		OSP / FANUC		OSP / FANUC	



## Double-Column Machining Centers (5-Face Machining)

### MCR-A5CII



### MCR-BV



### MCR-C



### MCR-S



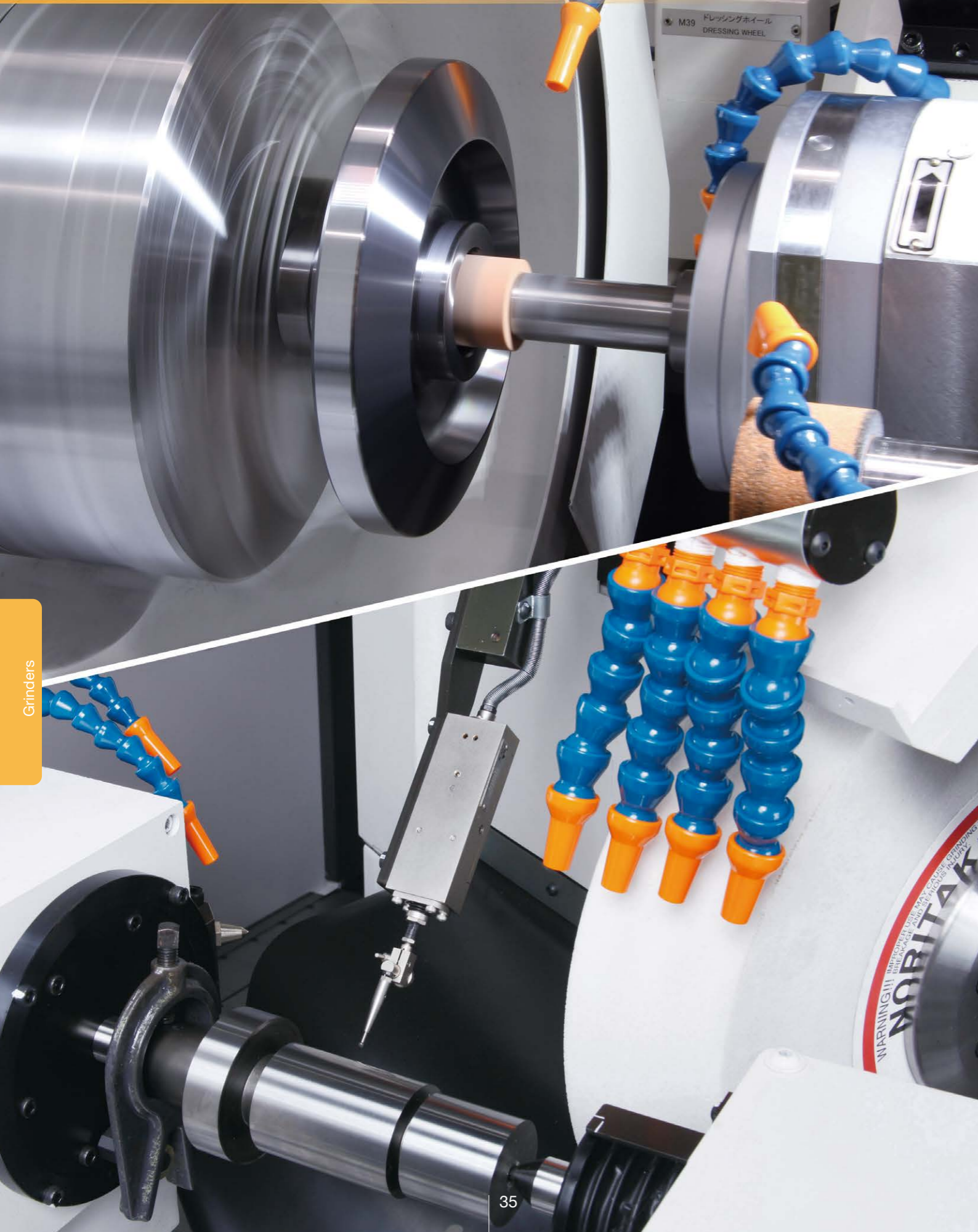
		MCR-A5CII	MCR-BV	MCR-C	MCR-S
Effective width between columns	mm (in)	2,150 to 3,650 (84.65 to 143.70)	2,650 to 3,650 (104.33 to 143.70)	2,650 to 4,650 (104.33 to 183.07)	2,650, 3,150 (104.33, 124.02)
Table working surface	mm (in)	1,500 × 3,000 to 3,000 × 12,000 (59.06 × 118.11 to 118.11 × 472.44)	2,000 × 3,000 to 3,000 × 12,000 (78.74 × 118.11 to 118.11 × 472.44)	2,000 × 4,000 to 3,700 × 12,000 (78.74 × 157.48 to 145.67 × 472.44)	2,000 × 4,000 to 2,500 × 6,500 (78.74 × 157.48 to 98.43 × 255.91)
Spindle speed	min <sup>-1</sup>	4,000	6,000	4,000	10,000
Tool storage	tools	50	50	50	50
Motor	kW (hp)	26/22 (30 min/cont) (35/30)	High speed: 43/37 (60 min/cont) (57/50)	45/37 (30 min/cont) (60/50)	26/22 (30 min/cont) (35/30)
			Low speed: 43/30 (10 min/cont) (57/40)		
Machine size (W × D × H)	mm (in)	6,180 × 8,430 × 5,820 to 7,780 × 27,930 × 6,300 (243.31 × 331.89 × 229.13 to 306.30 × 1,099.61 × 248.03)	7,370 × 8,430 × 6,420 to 8,340 × 27,930 × 6,700 (290.16 × 331.89 × 252.76 to 328.35 × 1,099.61 × 263.78)	7,810 × 10,730 × 6,620 to 9,895 × 27,930 × 7,200 (307.48 × 422.44 × 260.63 to 389.57 × 1,099.61 × 283.46)	7,370 × 10,730 × 6,420 to 7,870 × 16,430 × 6,700 (290.16 × 422.44 × 252.76 to 309.84 × 646.85 × 263.78)

## Double-Column Machining Centers

### MCV-AII / MCR-AF



		MCV-AII	MCR-AF
Effective width between columns	mm (in)	1,650, 2,050 (64.96, 80.71)	2,600 (102.36)
Table working surface	mm (in)	1,200 × 1,800 to 1,500 × 5,000 (47.24 × 70.87 to 59.06 × 196.85)	2,000 × 1,500, 2,000 × 2,000 (78.74 × 59.06, 78.74 × 78.74)
Spindle speed	min <sup>-1</sup>	4,000	8,000
Tool storage	tools	24	24
Motor	kW (hp)	22/18.5 (30 min/cont) (30/25)	26/22 (30 min/cont) (35/30)
Machine size (W × D × H)	mm (in)	4,935 × 6,260 × 4,375 to 5,335 × 12,920 × 4,585 (194.29 × 246.46 × 172.24 to 210.04 × 508.66 × 180.51)	5,560 × 4,200 × 4,670, 5,560 × 5,230 × 4,670 (218.90 × 165.35 × 183.86, 218.90 × 205.91 × 183.86)



## CNC Cylindrical Grinders

### GPW/GAW Series

GP14W / GP15W / GA14W / GA15W  
GP25W / GP26W / GA25W / GA26W



### GP/GA-FII Series

GP-34FII / GP-44FII / GA-34FII / GA-44FII  
GP-36FII / GP-47FII / GA-36FII / GA-47FII



		GP14/15W GA14/15W	GP25/26W GA25/26W	GP-34/44FII GA-34/44FII	GP-36/47FII GA-36/47FII
Swing over table	omm (in)	330 (12.99)	330 (12.99)	330, 430 (12.99, 16.93)	330, 430 (12.99, 16.93)
Distance between centers	mm (in)	250 (9.84)	400, 650 (15.75, 25.59)	350, 650, 1,000, 1,500 (13.78, 25.59, 39.37, 59.06)	350, 650, 1,000, 1,500 (13.78, 25.59, 39.37, 59.06)
Wheel size (OD x width)	mm (in)	ø405 x 75 / ø510 x 75 (ø15.94 x 2.95 / ø20.08 x 2.95)	ø510 x 75 / ø610 x 75 (ø20.08 x 2.95 / ø24.02 x 2.95)	ø455 x 75 (ø17.91 x 2.95)	ø610 x 150 (GP) (ø24.02 x 5.91) / ø760 x 150 (ø29.92 x 5.91) ø610 x 135 (GA) (ø24.02 x 5.31)
Wheel peripheral speed	m/min	2,700	2,700	2,700	2,700
Wheel motor	kW (hp)	5.5 (7.5)	7.5 (10)	7.5 (10)	15 (20)
Machine size (W x D x H)	mm (in)	1,550 x 2,734 x 2,150 (61.02 x 107.64 x 84.65)	2,052 x 2,932 x 2,218 (80.79 x 115.43 x 87.32)	2,715 x 3,134 x 2,000 (106.89 x 123.39 x 78.74)	2,715 x 3,134 x 2,000 (106.89 x 123.39 x 78.74)
			2,532 x 2,932 x 2,218 (99.69 x 115.43 x 87.32)	3,275 x 3,134 x 2,000 (128.94 x 123.39 x 78.74)	3,275 x 3,134 x 2,000 (128.94 x 123.39 x 78.74)
				5,350 x 3,214 x 2,000 (210.63 x 126.54 x 78.74)	5,350 x 3,214 x 2,000 (210.63 x 126.54 x 78.74)

### GP-N Series

GP-47N / GP-57N / GP-67N



		GP-47/57/67N
Swing over table	omm (in)	430, 580, 680 (16.93, 22.83, 26.77)
Distance between centers	mm (in)	2,150, 2,650, 3,150 (84.65, 104.33, 124.02)
Wheel size (OD x width)	mm (in)	ø760 x 130 (ø29.92 x 5.12)
Wheel peripheral speed	m/min	2,000
Wheel motor	kW (hp)	15 (20)
Machine size (W x D x H)	mm (in)	8,342 x 3,359 x 2,527 (328.43 x 132.24 x 99.49)
		9,342 x 3,359 x 2,527 (367.80 x 132.24 x 99.49)
		10,342 x 3,359 x 2,527 (407.17 x 132.24 x 99.49)

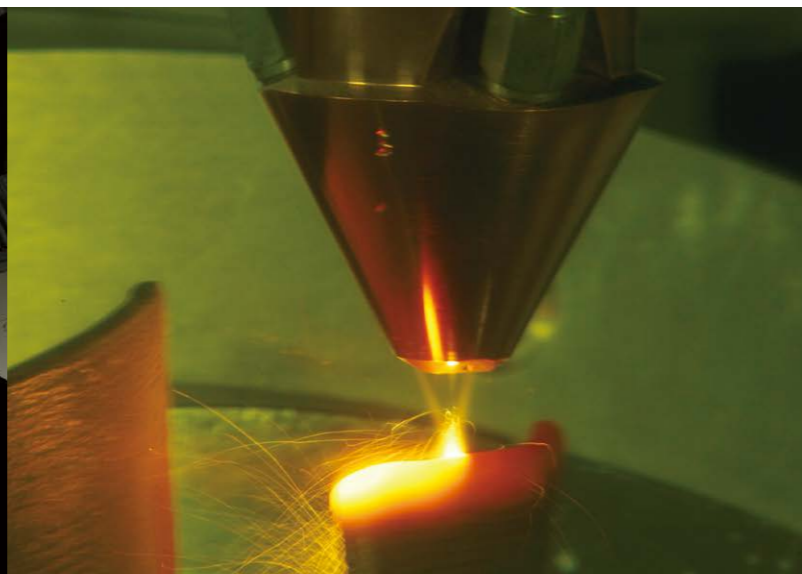
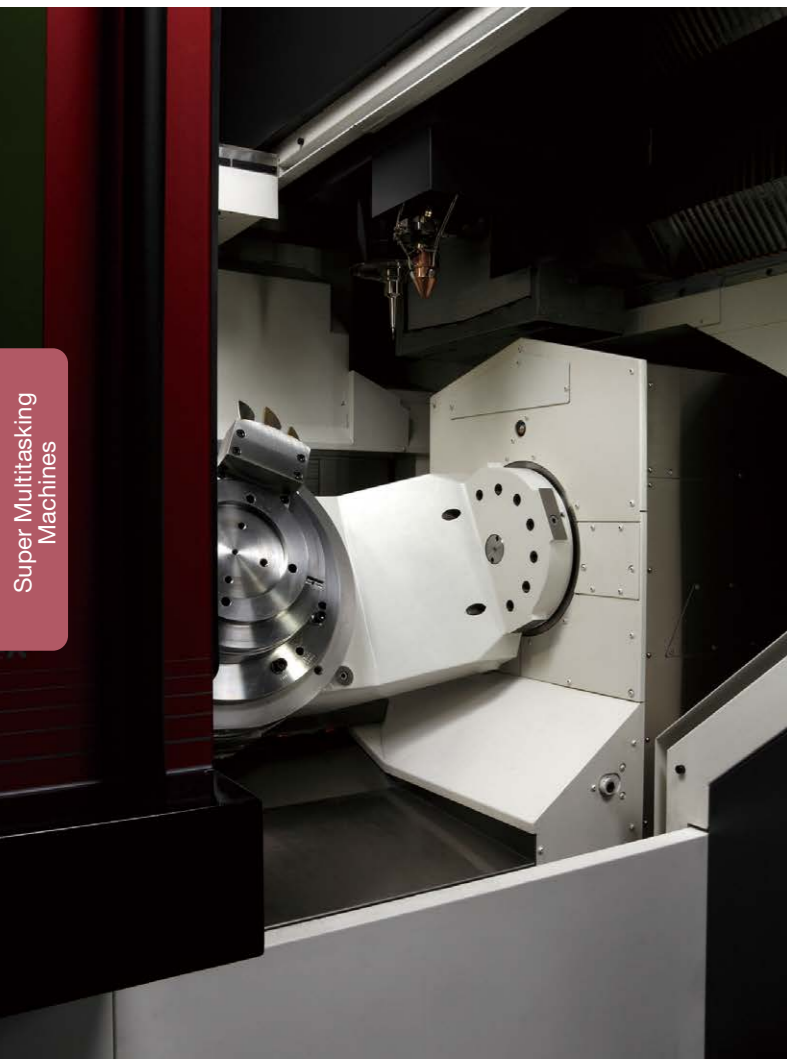
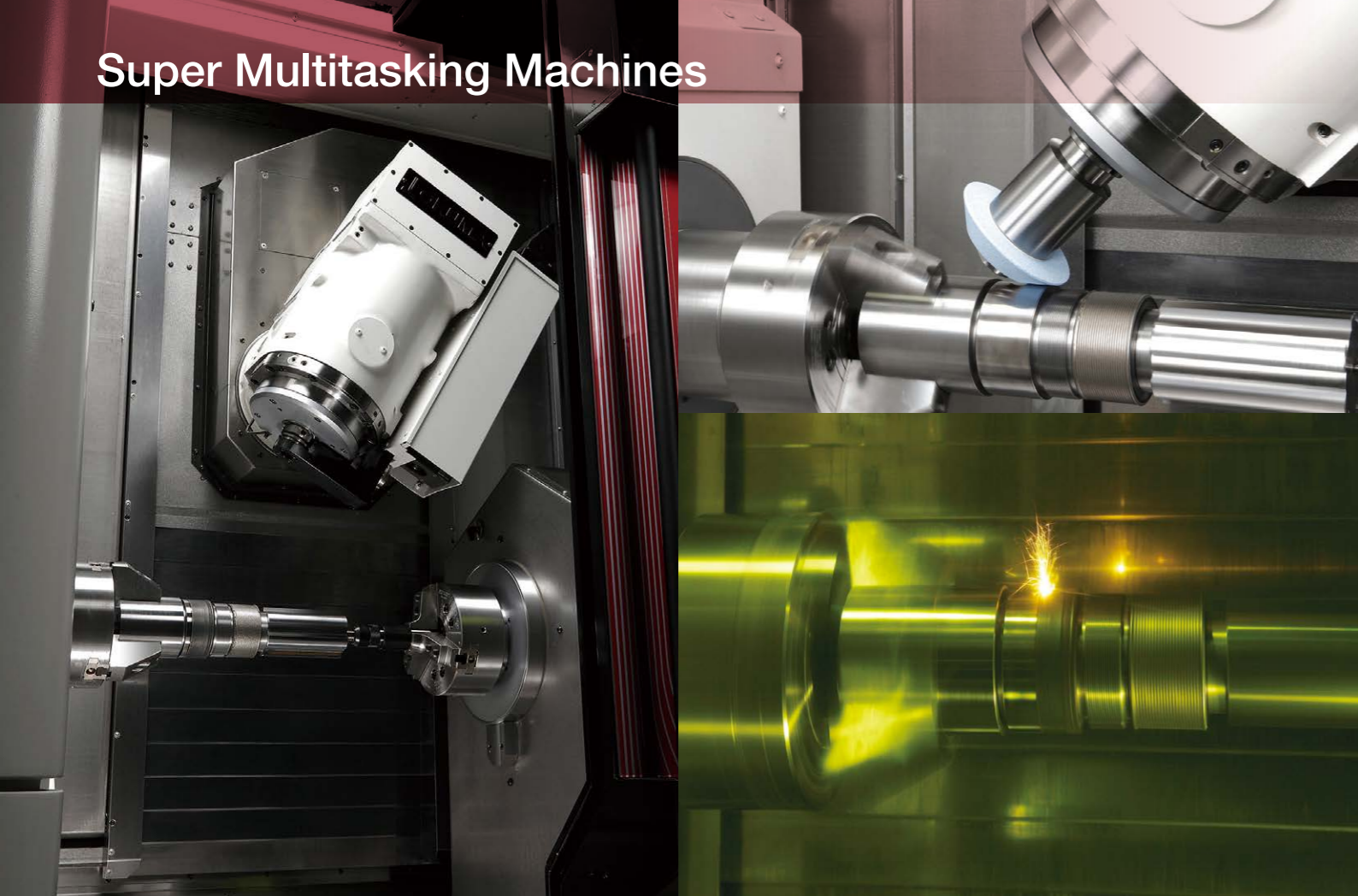
## CNC Internal Grinders

### GI-10NII / GI-20NII



		GI-10NII	GI-20NII
Spindle support capacity mass x length	kg x mm (lb x in)	100 x 150 (220 x 5.91)	150 x 200 (330 x 7.87)
Swing in chuck guard	ømm (in)	350 (13.78)	400 (15.75)
Bore grinding	ømm (in)	3 to 150 (0.12 to 5.91)	5 to 300 (0.20 to 11.81)
Max grinding depth	mm (in)	150 (5.91)	200 (7.87)
Wheel motor	kW (hp)	5.5 (7.5)	7.5 (10)
Machine size (W x D x H)	mm (in)	2,050 x 2,110 x 1,900 (80.71 x 83.07 x 74.80)	2,568 x 2,955 x 1,995 (101.10 x 116.34 x 78.54)

# Super Multitasking Machines



## Super Multitasking Machines

### LASER EX Series

MU-5000V LASER EX / MU-6300V LASER EX / MU-8000V LASER EX  
MULTUS U3000 LASER EX / MULTUS U4000 LASER EX / MULTUS U5000 LASER EX

### Going beyond conventional machine tools, doing the all of metalworking

The laser technology infused in these super multitasking machines (LASER EX Series) combine subtractive and additive manufacturing, hardening, and coating of workpiece blanks to the final product—done on one machine—the ultimate process-intensive machine.



### Handles workpieces of various sizes and shapes

Examples



High-resolution 3D printing



Partial repair



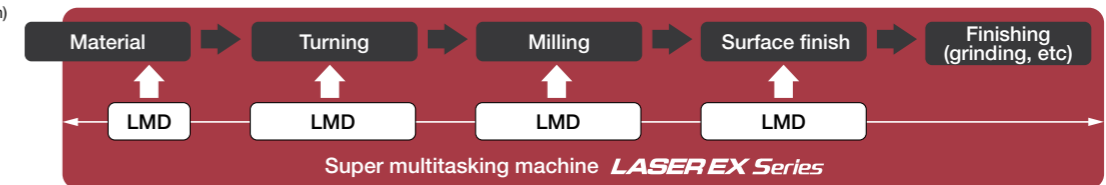
Hard coating



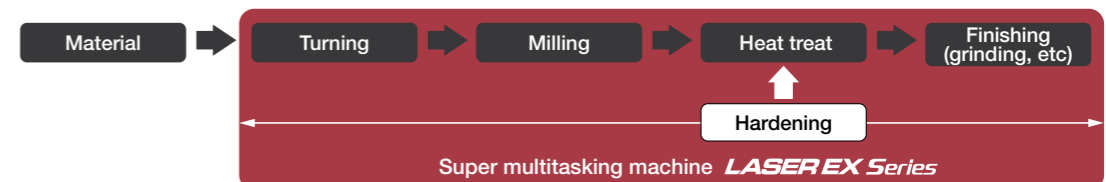
Precision hardening

### 【LASER EX Series produces manufacturing innovations】

LMD (Laser metal deposition)  
& Coating  
Specifications

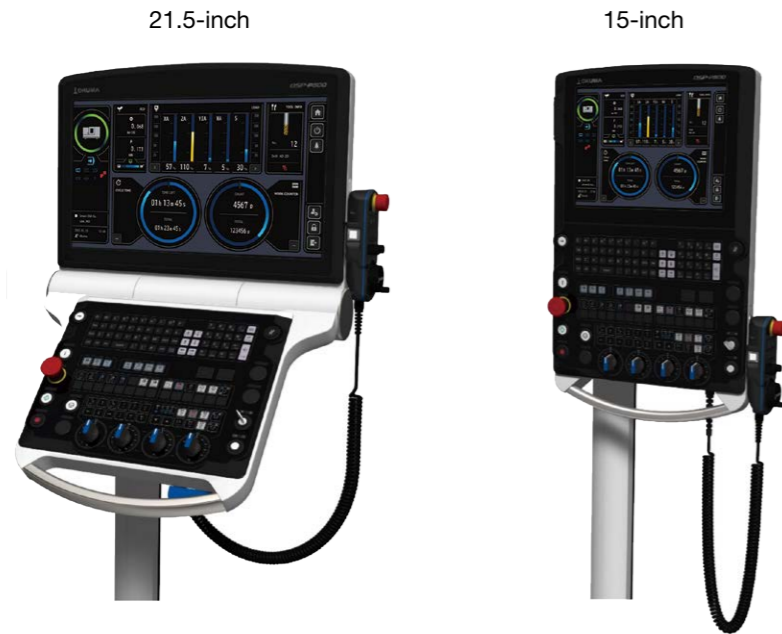


Hardening  
Specifications



# OSP-P500

A next-generation CNC that makes manufacturing DX (digital transformation) a reality



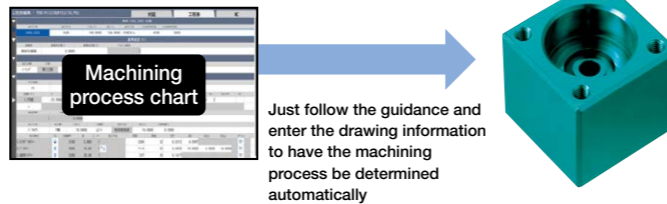
## Novice-friendly smart operation

Smart OSP Operation option

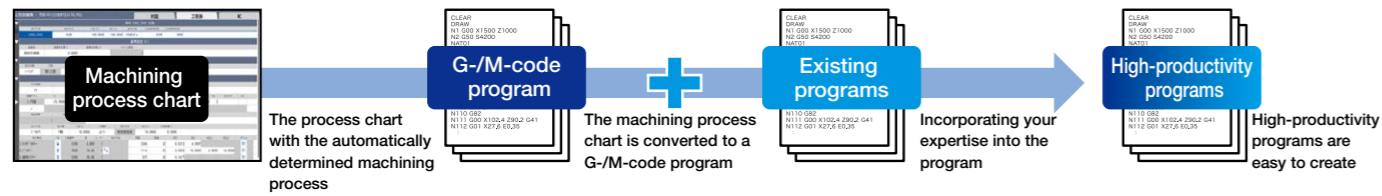
- Operation without reliance on G-/M-codes enables easy, quick machining by anyone

### Innovative operability

Conventionally, machining operations are programmed with G-/M-code based on drawings. With OSP-P500, however, you only have to follow the guidance to enter drawing information. So you can prepare for machining quickly, even if you have no familiarity at all with the NC program language.



- High-productivity programs are easy to create



## CAD/CAM System for Parts Machining ADMAC-Parts

Innovative Direct Machining for production processes

Skilled programmers especially will be able to create part programs even faster from CAD data for reliable CNC machine tool applications.

## 3D Virtual Monitor

How to eliminates test cuts and reduce program verification times to 1/10

Okuma's 3DVM software, based on your tooling, workpiece, fixture setup, and part program, provides accurate 3-dimensional simulations and interference checks (alarms) in a virtual machine on a PC at your desk.

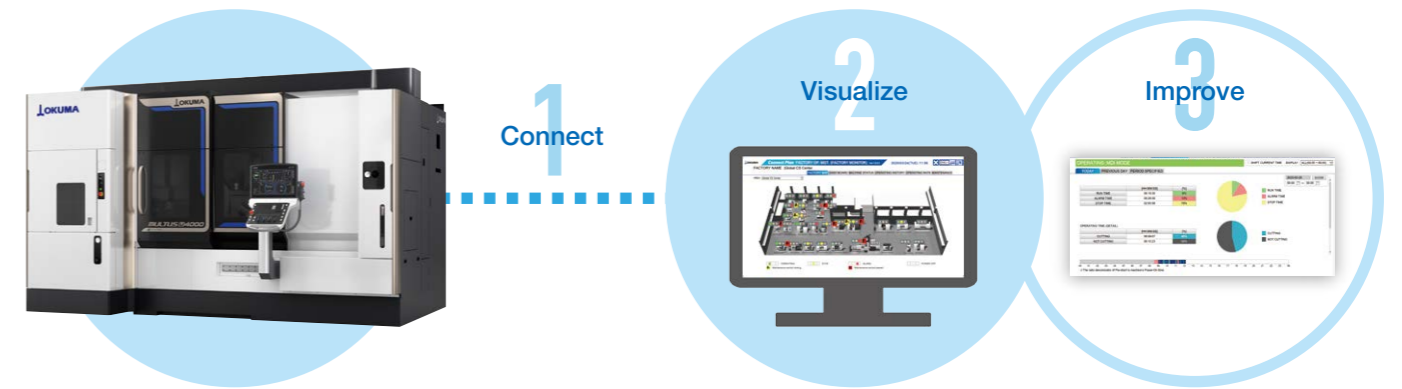
# Connect Plan

Get Connected, Get Started, and Get Innovative with Okuma "Monozukuri"

## Connect, Visualize, Improve

Okuma's Connect Plan is a system that provides analytics for improved utilization by connecting machine tools and visual control of factory operation results and machining records. Simply connect the OSP and a PC and install the Factory Monitor suite on the PC to see the machine operation status from the shop floor, from an office, from anywhere.

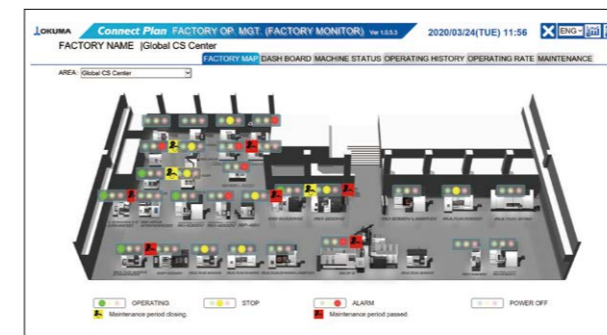
The Connect Plan is an ideal solution for customers trying to raise their machine utilization.



## Analyze your factory present and past, improve the future

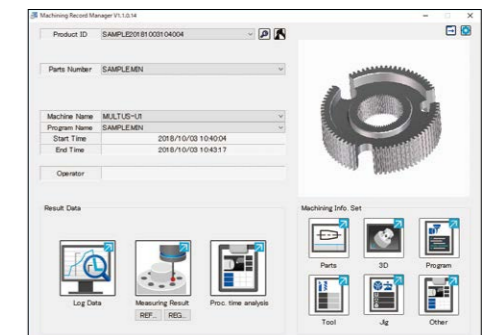
**Factory Operating Management**  
Visualization of past and present operation results

This function reduces machine stop times and raises utilization by visualizing past and present operation results, for analysis and future improvements.



**Machining Record Manager**  
Achieving machining traceability

Machining Record Manager achieves machining traceability by connecting the unique ID of the machined parts with the machining results, process list, and measurement results for each machine.





The products in this catalogue are subject to the Japanese government Foreign Exchange and Foreign Trade Control Act with regard to security controlled items; whereby Okuma Corporation should be notified prior to its shipment to another country.



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