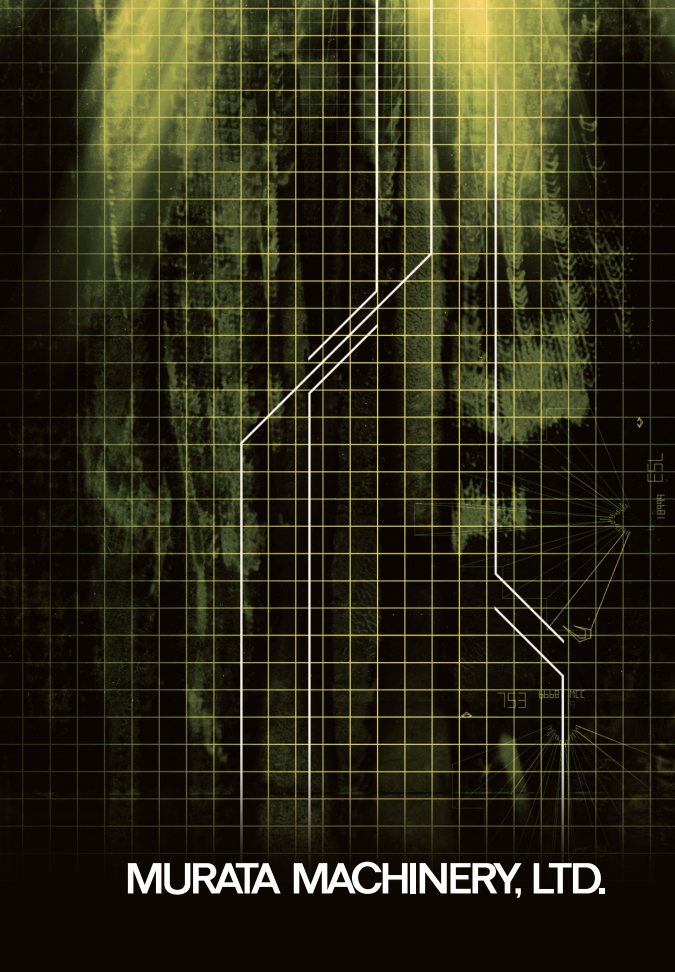
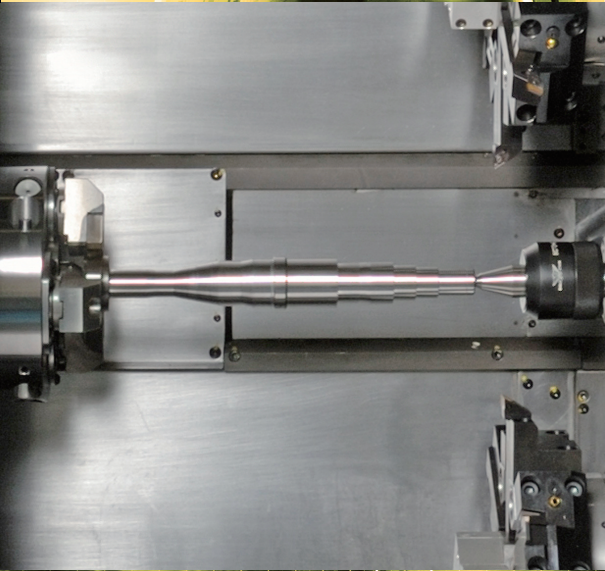
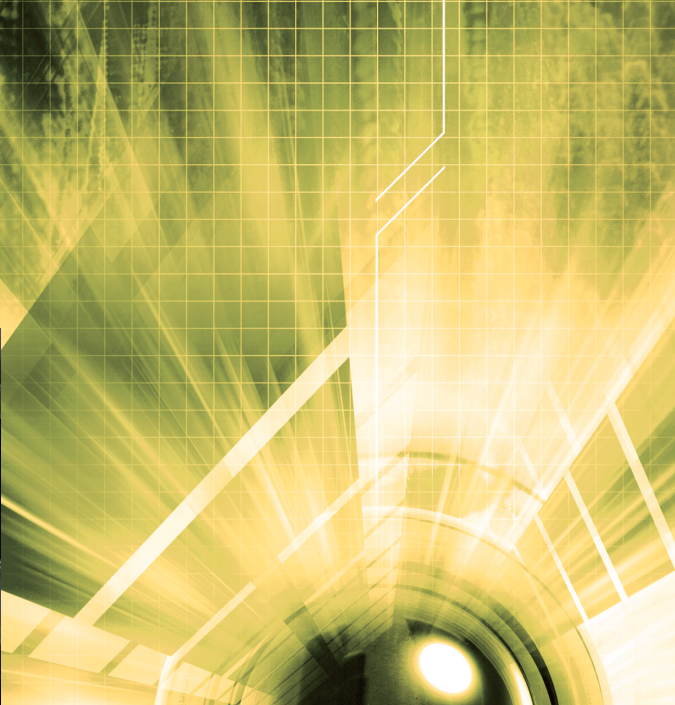
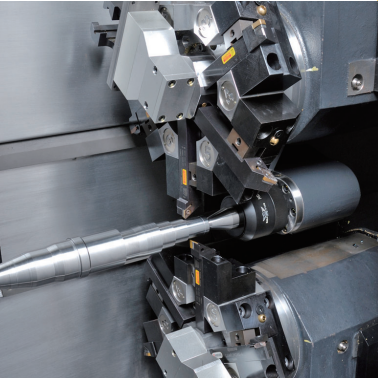


Specifications

Machine standard specifications		ML400 (2 turret type)	ML400 (1 turret type)
Chuck size	Standard	ø165 mm (6 inch)	
	Option	ø210 mm (8 inch)	
Number of turret stations		6	
Specification of cutting axes	X-axis	130 mm, 20 m/min	
	Z-axis	430 mm (600 mm), 32 m/min	
Use tool	OD tool	□20 mm	
	ID tool	ø25 mm	
Spindle AC motor	Standard	11 kW/30 min	7.5 kW/30 min
	Option	15 kW/30 min	11 kW/30 min
Spindle speed	Standard A	45~4,500 rpm	
	Standard B	30~3,000 rpm	
Spindle diameter at front bearing mounting		ø100 mm	
Diameter of spindle bore		ø63 mm	
Spindle nose size		JISA2-6	
Foot print(without loader, feed in/out devices, chip c/v, etc.)		W1,700 mm × D2,070 mm (W2,140 mm x D2,070 mm)	
Total weight(with tools)		4,400 kg (5,500 kg)	
Total weight(with loader and tools)		5,600 kg (6,700 kg)	
Tailstock (Servo drive)	Rolling center	Standard	MT4
		Option	MT5
	Thrust force / Stroke / Rapid traverse rate	Standard	3,700 N / 300 mm (400 mm) / 16 m/min
		Option	4,600 N / 300 mm (400 mm) / 16 m/min
Roller support (Servo drive) (Option)	Cross / Grasp	—	
	Stroke / Rapid traverse rate	—	
		Hydraulic 430 mm (600 mm) / 32 m/min	

() : Long Type specification

Gantry loader specifications		
Maximum part weight		5.0 kg×2
Loader workpiece handling capacity		Lengthwise type ø200 mm×390 mm
		Horizontal row type ø60 mm×390 mm
		ø60 mm×390 mm
Z-axis left/right	Stroke	Varies depending on specs.
	Maximum Speed	120 m/min
X-axis Up/Down	Stroke	Lengthwise type 850 mm Horizontal row type 850 mm
	Maximum Speed	100 m/min
Y-axis Fwd./Rev.	Stroke	Lengthwise type 125 mm Horizontal row type 160 mm
	Maximum Speed	35 m/min
α-axis (Hand index)	Stroke	Lengthwise type 270° Horizontal row type 180°
	Maximum speed	Lengthwise type 3.3 sec/270° Horizontal row type 1.5 sec/180°
Jaw Stroke		Loader, Turn-around unit ø30
Loading time		Lengthwise type 8.8 sec
		Horizontal row type 8.0 sec

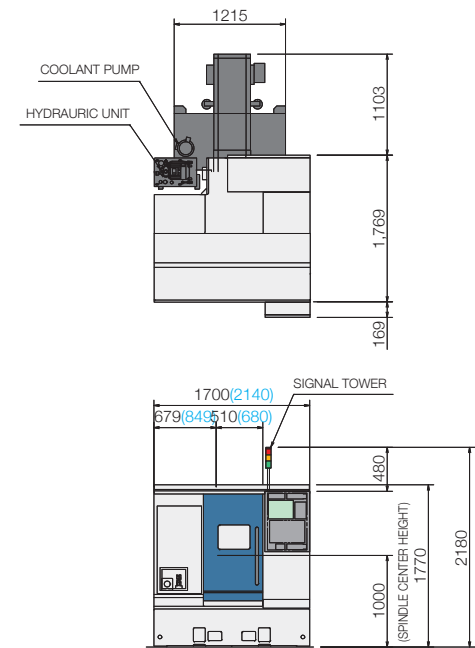


CNC Shaft Turning Machine

ML400

Floor Plan

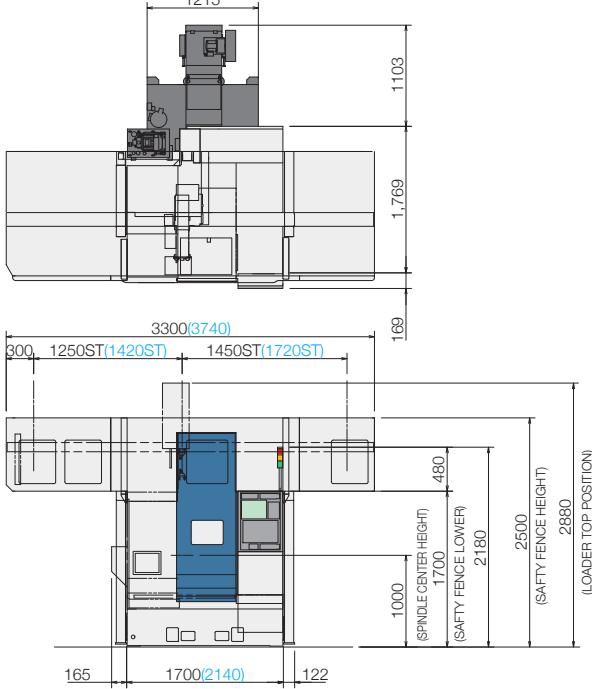
ML400



() : Long Type specification

EXTERNAL COLOR light gray/gray blue
Other colors available on special order.

ML400 (Gantry loader type)



• Safety Specification
For EU countries, machines are built with CE-safety conformity.

* The machines shown in the catalogue include some optional items and may vary in appearance from the actual machines.
* Specifications and designs are subject to change without prior notice.

MURATA MACHINERY, LTD.
MACHINE TOOLS DIVISION



High Speed & High Efficiency with Compact Footprint

Drastic Reduction of “Idle time” and “Cutting time”
by Two Turrets

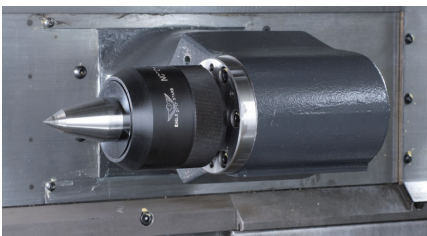
Shaft Turning Machine **ML400** 2 Turret Type



Main Specifications
2 turret type

Target shaft size $\phi 200$ mm x L400 mm (L570 mm)
 (Standard Spec)
Spindle Motor 11 kW/30 min : Standard
 15 kW/30 min : Option
Number of Turret station 6 stations
() : Long Type specification

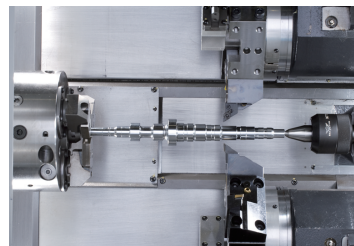
Changeover time "Zero"
Servo-driven tail stock
MT No.4
MT No.5 (Option)



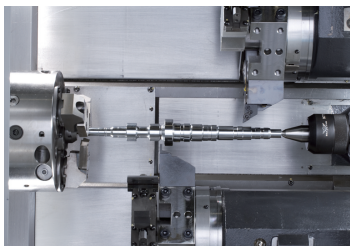
Tail stock stroke, Tail stock speed
Tail stock thrust power
all programmable.
Maximum stroke : 300 mm (400 mm)
() : Long Type specification

Cutting example of saving cycle time with two turrets

Pinch Turning



Tool changeover time is "Zero"



Live Tool Specifications (Option)

The ML400 incorporates live tools on both upper and lower turrets to accommodate various applications.



Number of turret stations	6
Number of live tool stations	3
Live tool drive motor	0.75 kW (3.5 N·m/continuous)
Maximum speed	3,500 rpm
Selectable standard tool diameter	$\phi d = 10$ mm

Cutting Both “O.D” and “I.D” is Possible
in the Same Operation

Shaft Turning Machine **ML400** 1 Turret Type

Main Specifications
1 turret type

Target shaft size $\phi 200$ mm x L400 mm (L570 mm)
 (Standard Spec)
 $\phi 200$ x L250 (L420 mm)
 (I.D. cutting Spec)
Spindle Motor 7.5 kW/30 min : Standard
 11 kW/30 min : Option
Number of Turret station 6 stations
() : Long Type specification

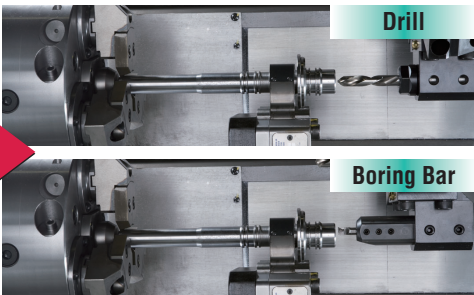
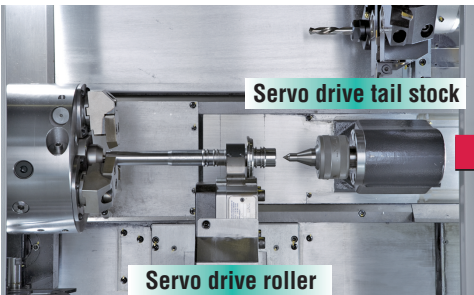
Servo-driven roller support enables
inner diameter processing (Option)
**Z axis movement of roller support is
driven by servo system.**

A workpiece can be supported at any given
position thanks to servo system for axis
movement.
It reduces re-tooling time to almost
zero.
Radial movement and grip are
driven by hydraulic pressure
system.
Z axis maximum stroke : 430 mm
 (600 mm)

() : Long Type specification



Servo-driven Roller Support and Tailstock makes it possible to process inner diameter.



The key is “Automation”

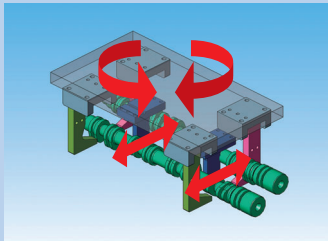
A special 3-axis MURATEC gantry loader and conveyor system
for enhanced automation and labor-saving



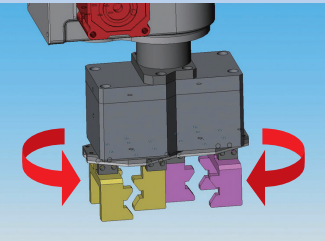
Gantry loader type

Gantry loader type

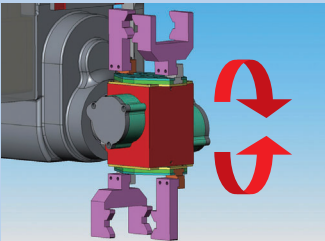
Various types of loader head configurations are available, depending upon workpiece shape and feed-in/out system.
Appearing below are some types of examples.



Horizontal row slide type
Mainly for cam shaft and etc.
180 turn-around function included.
Some limitation in figure and dimension.



Horizontal row turn type
For small-diameter workpieces
(up to $\phi 60$ mm)
180 turn-around function included.



Lengthwise turn type
For large-diameter workpieces (up to $\phi 200$ mm)
Lengthwise turn 270 degree for large-diameter
flanges.