

Specifications

Machine specifications

Chuck size		φ 210 (8")
Maximum Swing		φ 154 (with plain head)
Maximum bar diameter	Standard	φ 51
	Option	φ 65
Number of turret stations	T2	15 (upper) & 12 (lower)
	T3	15 (upper&right) & 12 (lower)
Standard tool	O.D tool	□ 20
	Boring bar	φ 40
Spindle diameter at front bearing mounting	Standard	φ 100
	Option	φ 110
Spindle nose size		JIS A2-6
Spindle speed	φ 100	5,000 rpm
	φ 110	4,000 rpm
Spindle motor capacity		15 kW/30 min (11 kW/cont.)
Stroke (Upper, Lower, Right, Right Spindle)	X-axis	220 mm, 200 mm, 220 mm
	Z-axis	220 mm, 770 mm, 220 mm
	Y-axis	± 40 mm, ± 40 mm, ± 40 mm
	Zs-axis	880 mm
Rapid traverse rate (Upper, Lower, Right, Right Spindle)	X-axis	24 m/min, 24 m/min, 24 m/min
	Z-axis	36 m/min, 36 m/min, 36 m/min
	Y-axis	12 m/min, 12 m/min, 12 m/min
	Zs-axis	36 m/min

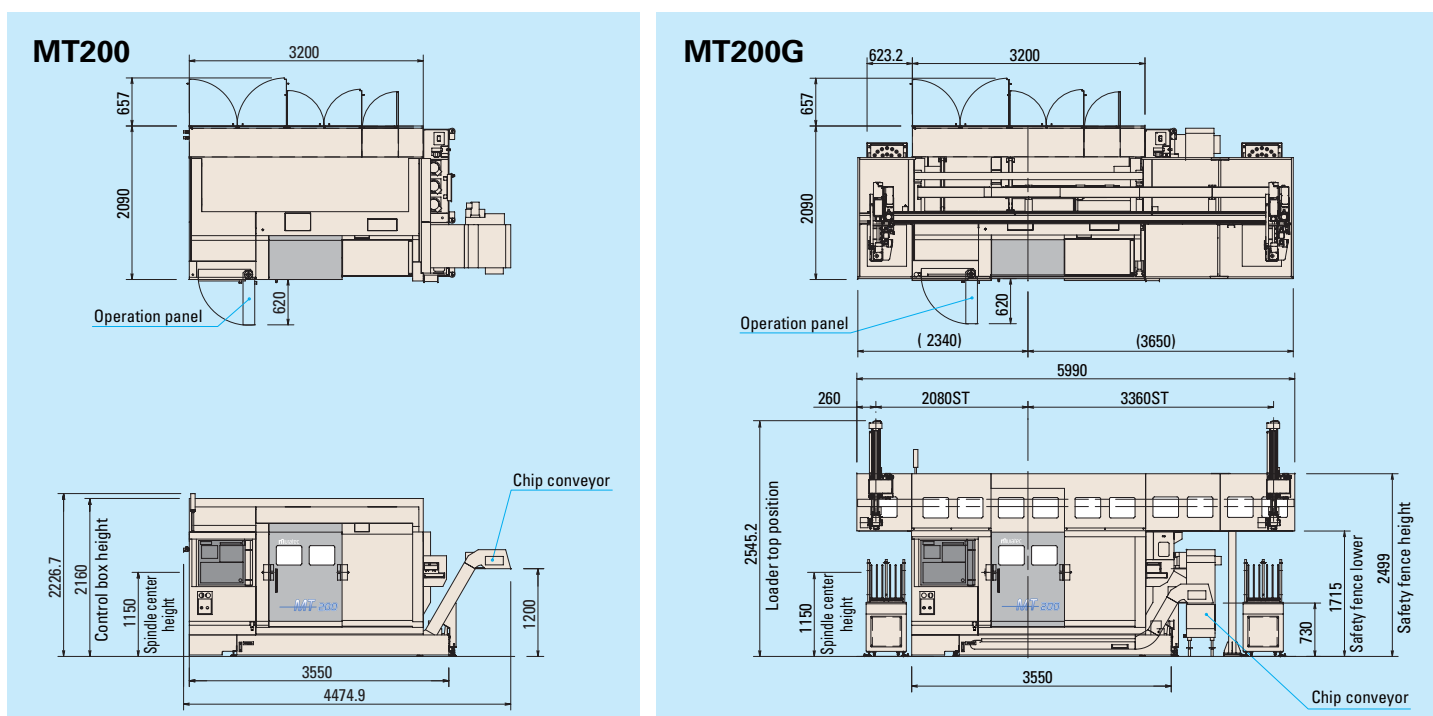
Live tooling specifications

Live tool motor	5.5 kW (Maximum torque 22.5N)
Maximum speed	4500 rpm
Maximum tool shank size	Milling : φ 16, Tap : M16
C-axis positioning accuracy	± 0.015°
C-axis maximum speed	200 rpm
C-axis least move increment	± 0.001°

CNC Gantry loader specifications

Maximum workpiece size & weight	3 Jaws	φ 140 × L105, 5.0 kg
	2 Jaws	φ 65 × L160, 4.0 kg
Stroke	Z-axis	Left : 2,080 mm, Right : 3,360 mm
	Y-axis	Up/Down : 680 mm
Rapid traverse rate	X-axis	Front/Rear : 210 mm
	Z-axis	Left/Right : 160 m/min
	Y-axis	Up/Down : 120 m/min
	X-axis	Front/Rear : 35 m/min

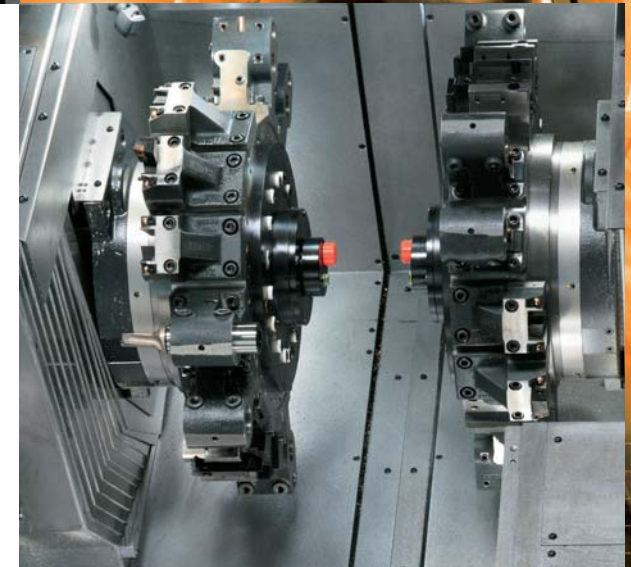
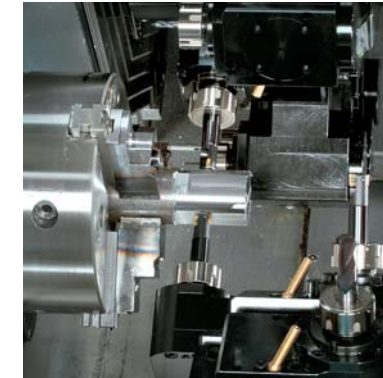
Floor Plan



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

* Machine appearance may differ to that shown in the catalogue pictures.
* All specifications are subject to change without advance notice.

muratec



High Productivity Multi-Tasking Machine

MT200

MURATA MACHINERY, LTD. MACHINE TOOLS DIVISION

International Business Dept.
2, Nakajima, Hashizume, Inuyama-shi, AICHI 484-8502, JAPAN
TEL : +81-(0)568-61-3645 FAX : +81-(0)568-61-6455

Headquarters
136, Takeda-Mukaishiro-cho, Fushimi-ku, KYOTO 612-8686, JAPAN
TEL : +81-(0)75-672-8138 FAX : +81-(0)75-672-8691

http://www.muratec.co.jp
e-mail info@muratec.co.jp



MURATA MACHINERY USA, INC

2120 Queen City Drive, P.O.Box 667609,
Charlotte, N.C. 28208, U.S.A.
TEL : +1-704-875-9280 FAX : +1-704-392-6541
http://www.muratec-usa.com

MURATA MACHINERY EUROPE GmbH

Hanns-Martin-Schleyer-Straße 3, D-47877, Willich, GERMANY
TEL : +49-(0)2154-914-250 FAX : +49-(0)2154-914-283

MURATA DO BRASIL COMERCIO E REPRESENTACAO DE MAQUINAS LTDA.

Estrada de Santa Izabel, 3383-KM 38,5
Itaquaquecetuba-SP-CEP 08599-000 BRAZIL
TEL : +55-(0)11-4648-6222 FAX : +55-(0)11-4648-6737

MURATA MACHINERY (SHANGHAI) CO.,LTD

[Registry Add]
135 Fu Te Xi Yi Rd., Wai Gao Qiao Free Trade Zone,
Pudong, Shanghai, CHINA

[Contact Add]
150 Xin Gao Rd., Qingpu Industrial Zone,
Shanghai, 201700, CHINA
TEL:+86-(0)21-6921-2300 FAX:+86-(0)21-6921-2330

High Productivity Multi-Tasking Machine

MT200

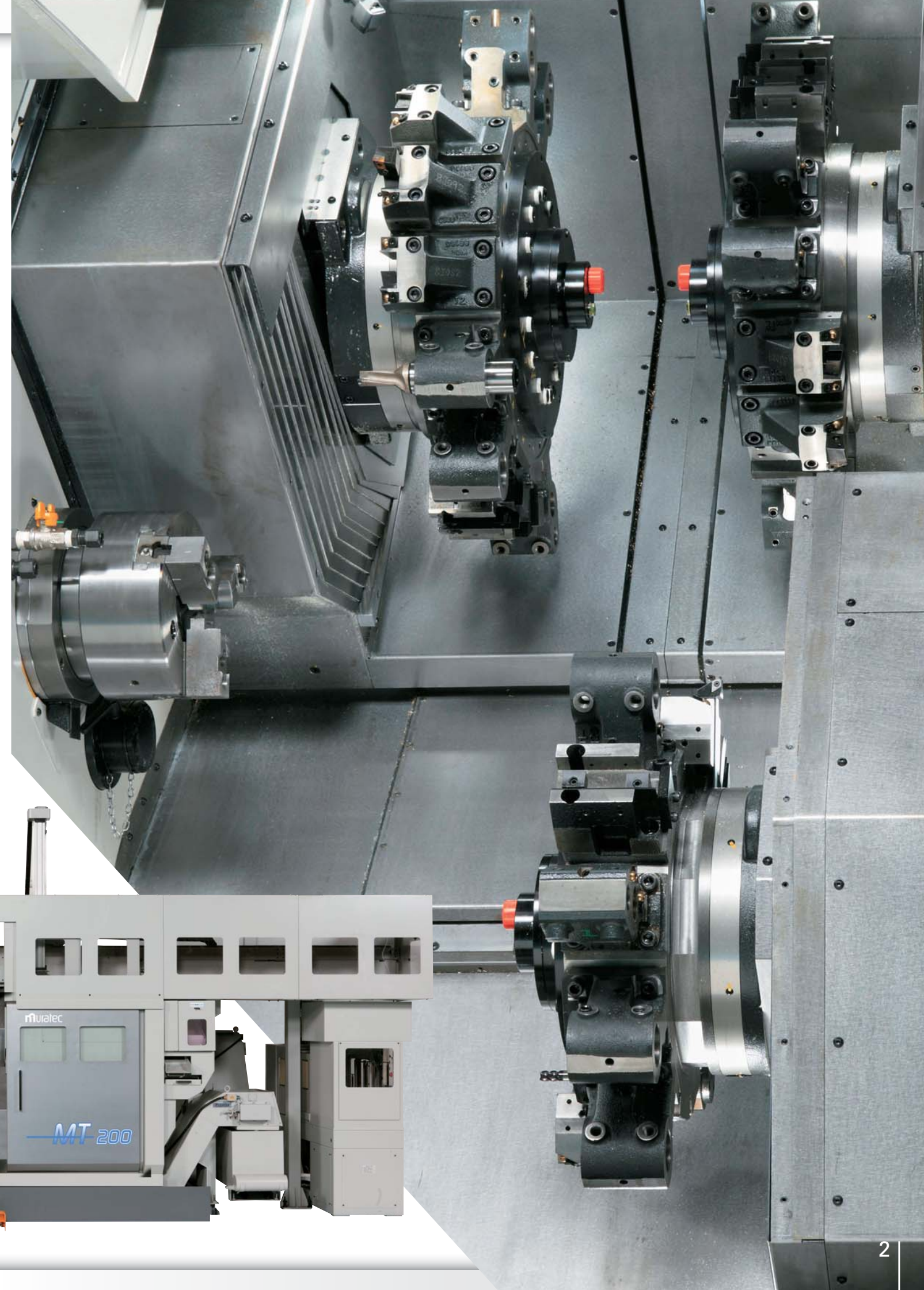
Multiple Operations by Multiple Turrets

Flexibility : Bar and Chuck work

All-In-One Solution with Flexible automation

High Performance and Compact Design

- 51 mm Dia. Bar size on both spindles (65 mm Dia. Option)
- 15 kW Spindle Motor (Both Spindles)
- Y-axis 80 mm stroke on All Turrets
- 5.5 kW Live Tool Motor on All Turret Positions
- High Speed 3-Axis CNC Gantry Loader
- Compact Floor Space 3.2 m x 2.1 m (W x D)



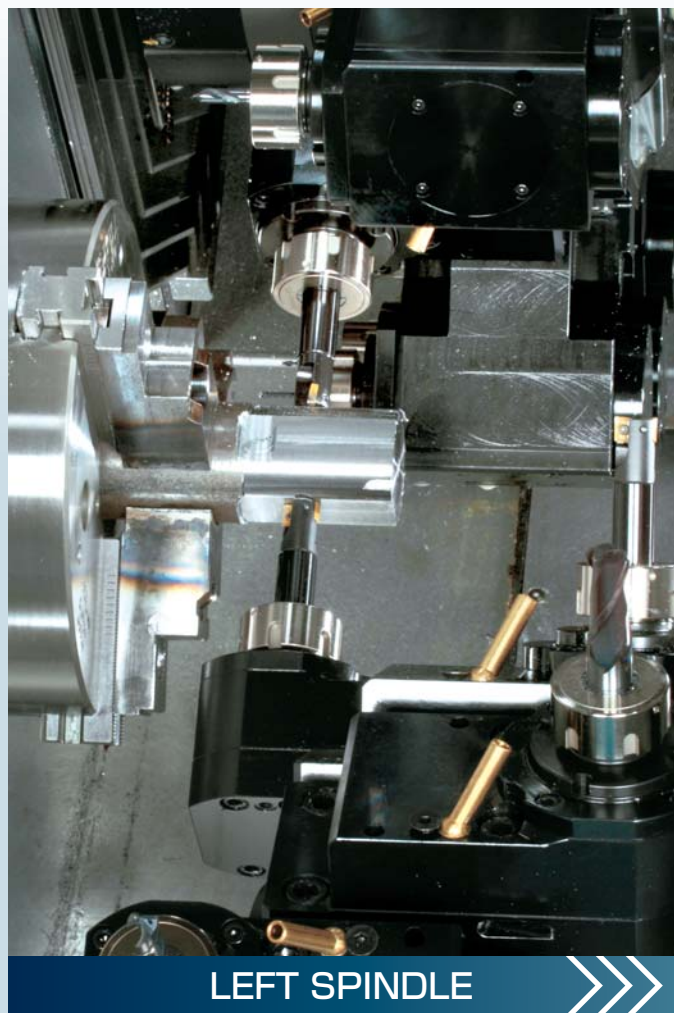
High Productivity Multi-Tasking Machine

MT200



Specification

Target parts size : ϕ 51 bar material (ϕ 65 Option)
 maximum ϕ 210 Chuck work
 Spindle motor : 15kW/30min (Left/Right)
 Turret : 2 turrets (3 turrets : Option)
 Upper turret-15 station,
 Lower turret-12 station
 Live tool & Y-axis function on all turrets
 Live tool motor : 5.5kW/30min
 (On All Turret Positions)



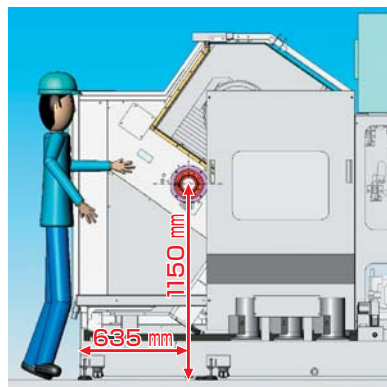
LEFT SPINDLE



RIGHT SPINDLE

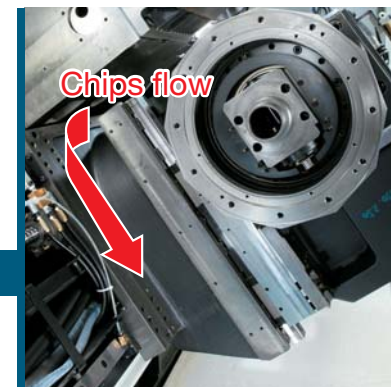
Y-axis movement is available on both the upper and lower turrets. Simultaneous live tool machining is possible utilizing both the upper and lower turrets for each spindle. This allows for the manufacture of complex part geometries in an efficient manner.

Workability and Maintainability



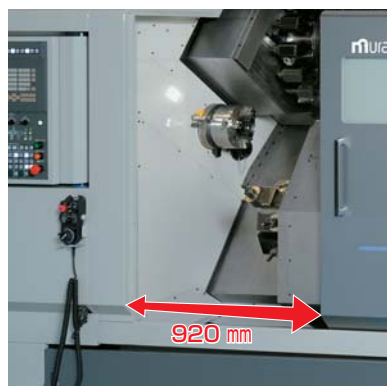
Easy access to spindle

The MT200 design ensures easy access to the main spindles by reducing the distance between the machine front and the spindle center.



Lower Turret Chip Flow

The lower turret is designed with appropriate space for chips to fall so that accumulation does not occur.



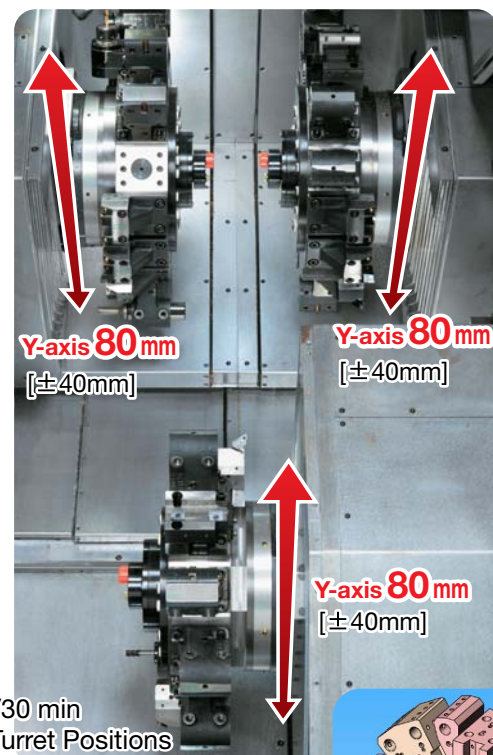
Wide door Opening

Since the door opening area has been widened, workholding replacement, tool changeover, and maintenance work is easily performed.

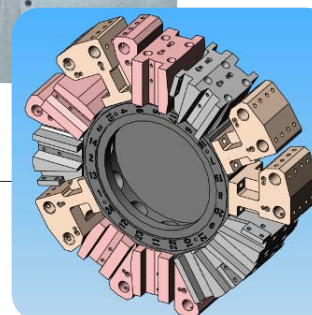


Operation panel

The buttons and layout of the operation panel have been designed in a manner that allows for easy operation of the Three Turrets.



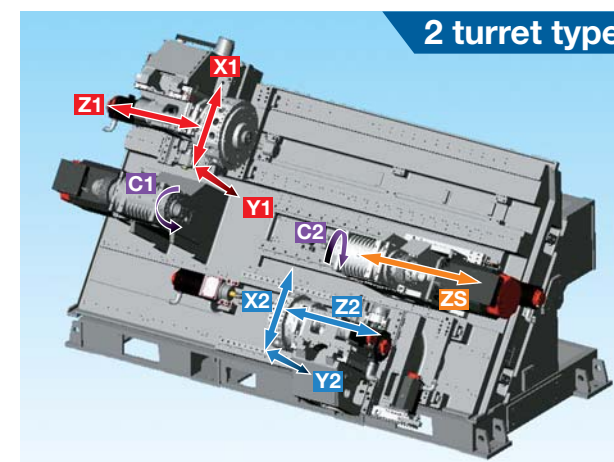
Live tool
 5.5 kW/30 min
 On All Turret Positions



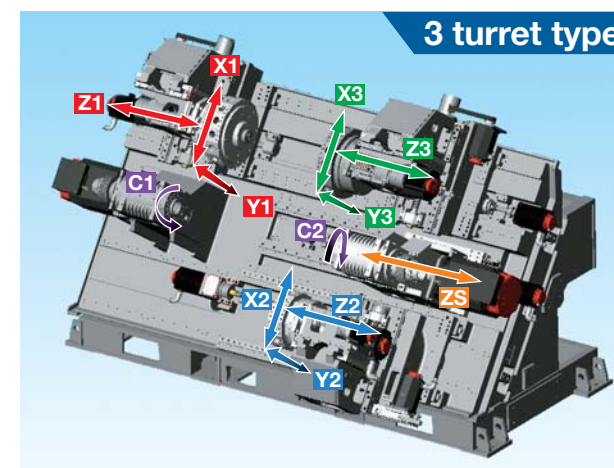
SPECIAL LOWER TURRET (Option)

With special tooling blocks, it is possible to utilize 24 stations on the lower turret (Non-Live Tool Specification). This feature provides reduction in changeover time which in turn increases productivity.

Axis configuration



2 turret type



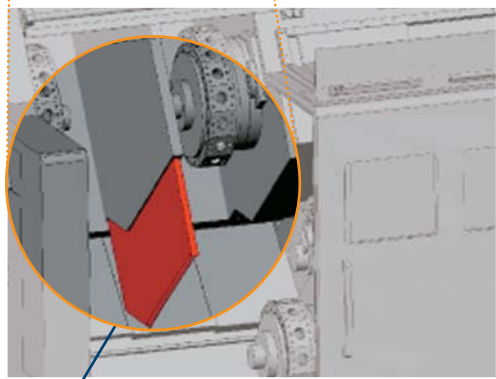
3 turret type

Gantry Loader specifications

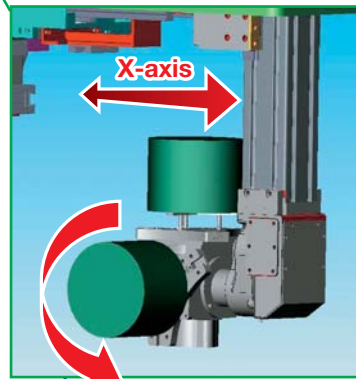


High Speed 3-Axis CNC Gantry Loader

With the addition of the center partition to the machine, one spindle is isolated from the other spindle. This feature significantly reduces the negative affects of chips or coolant on the gantry loader. The gantry loader is isolated from the machining side during operation.



Center partition



270° turn wrist

Advanced user-friendly function and display

TOOL COUNTER									
[TOOL]	[CUTTING COUNT]	[CUTTING TIME]	[OFFSET/WEAR]	[SET]					
SET	REST	PRE.	SET	REST	PRE.	No.	X	Z	GROUP
1	999	0	4	0	0	1	-0.001	-0.230	1
2	1000	200	0	0	0	2	-0.002	-0.222	1
3	1000	2	67	67	0	3	-0.003	-0.033	1
4	1000	300	0	4	4	4	-0.004	-0.044	1
5	1000	100	0	4	4	5	-0.005	-0.055	2
6	1000	1	0	0	0	6	-0.006	-0.066	2
7	1000	45	0	0	0	7	-0.007	-0.077	2
8	1000	32	0	4	4	8	-0.008	-0.088	2
9	1000	10	0	0	0	9	-0.009	-0.099	3
10	1000	10	0	0	0	10	-0.010	-0.100	3
11	1000	10	0	0	0	11	-0.011	-0.111	3
12	1000	10	0	0	0	12	-0.012	-0.222	3
13	1000	1000	0	0	0	13	-0.013	-0.333	4
14	1000	10	0	0	0	14	-0.014	-0.444	4
15	1000	1000	0	0	0	15	-0.015	-0.555	4

CURRENT TOOL : 0 CUTTING LOAD X: 0.0% Z: 0.0%
CHANGE RECOM. : 25 MINUTES 2009/08/27 09:31 TOOL 00 UP FIRST

SCREEN COPY MIN<> [COUNT] [TIME] [GAUGE] [GROUP]
SEC CONV. CONV. OFF PRESET PRESET

Tool Counter Function

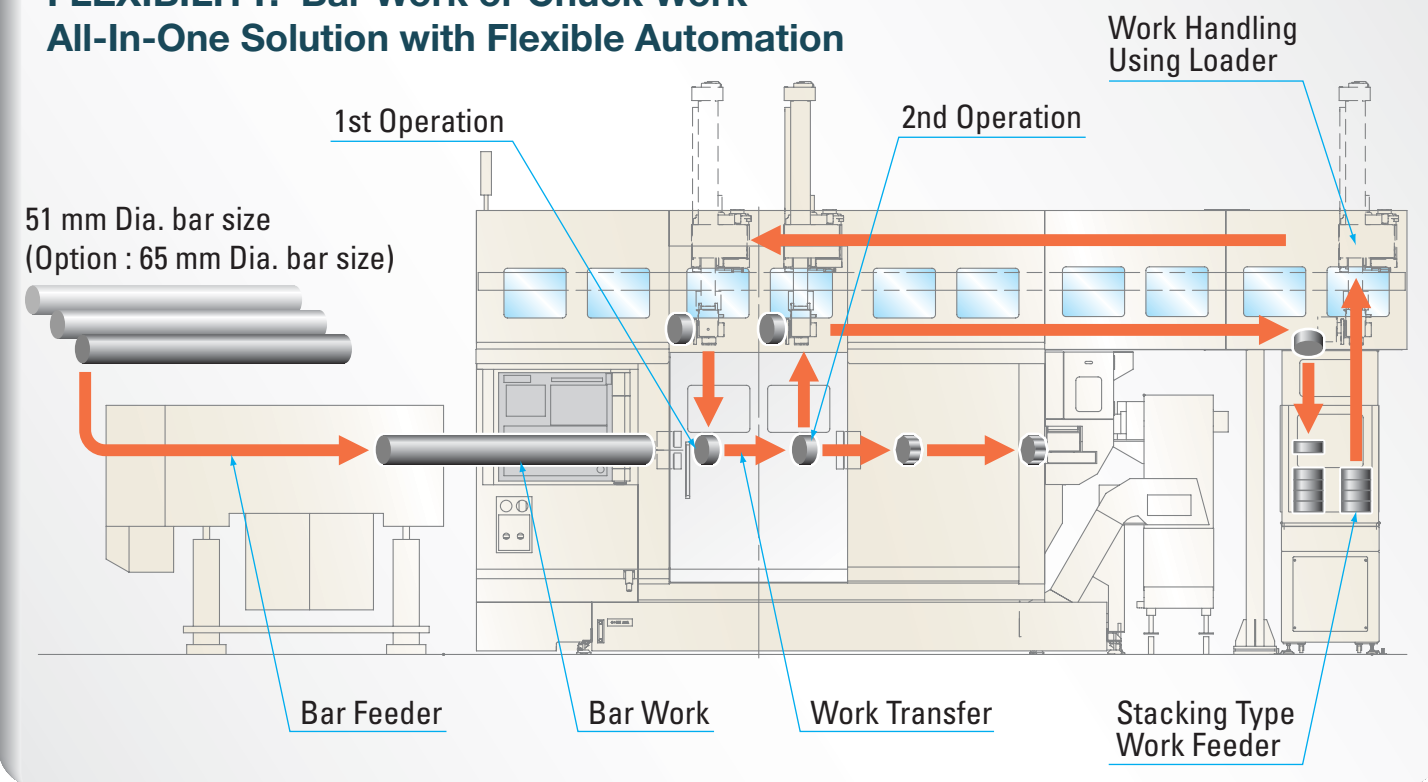
The MT200 includes the Muratec integrated tool counter display and CNC tool offset display. Wear offsets can be made from this same display combining tool counter information.

TOOL MONITOR									
UPPER									
<PROGRAM NUM.> 00000									
<AXIS> X <PRE. LOAD> []									
MONITOR DATA					LOAD DATA				
[PATH]	[TOOL]	[MODE]	[PEAK]	[AVERAGE]	[BASE]	[ACTION]	PEAK	MAX	AVE. MAX
ALM WARN ALM WARN									
MONITOR PATH [0]					MONITOR PATH [0]				
% 0-----50-----100					% 0-----50-----100				
X >>	[0]	X >>	[0]						
L Z >>	[0]	R Z >>	[0]						
S >>	[0]	S >>	[0]						
[LEVEL MONITR]	[LEVEL SET]	[SYSTEM SET]	[GRAPH +10]	[GRAPH -10]	[S/Y -AXIS]	[Z-AXIS]	[X-AXIS]		

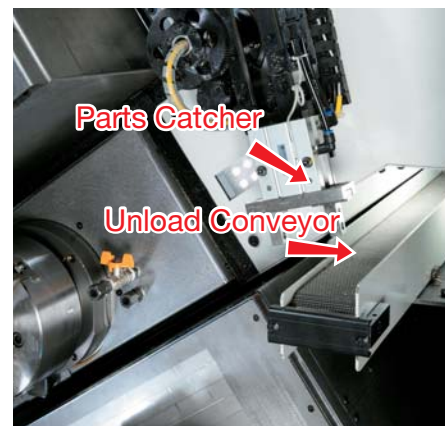
Tool Monitor Function (Option)

The MT200 prepares the MURATEC made "Tool Monitor Function" to check abnormal load, warning load and low level cutting loads. This function helps to detect tool/drill breakage during the cutting process.

FLEXIBILITY: Bar Work or Chuck Work All-In-One Solution with Flexible Automation



Application



Parts Catcher

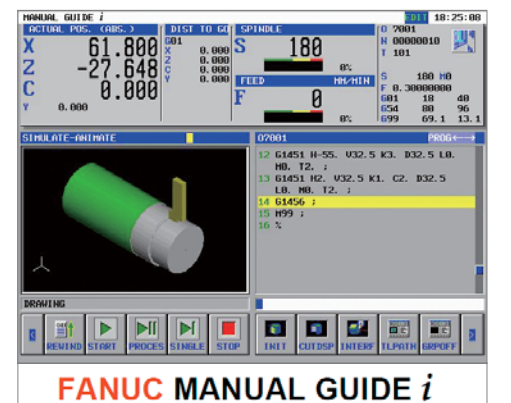
A finished work piece of maximum size 65 x 160 can be unloaded from the right spindle automatically using the integrated 'Parts Catcher'. A combination of both the 'Parts Catcher' and a 'Bar Feeder' allows for unattended operation of both Bar and Chuck work.



Manual Tool Setter

Tool changeover time can be significantly reduced by utilizing the available Tool Setter. The Tool Setter is manually installed and is used to check the tool gauge lengths for both the upper and lower turrets. The Tool Setter can be manually mounted on both the left and right spindles and is manually removed from the machine during operation.

Programming support software



FANUC MANUAL GUIDE i

Integrated Operation & Programming Guidance with extremely simplified operations



3D-CAM Software