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Safenet Certified



RISE TO WIN

ML-SERIES LATHE





YIDA PRECISION MACHINERY CO., LTD.

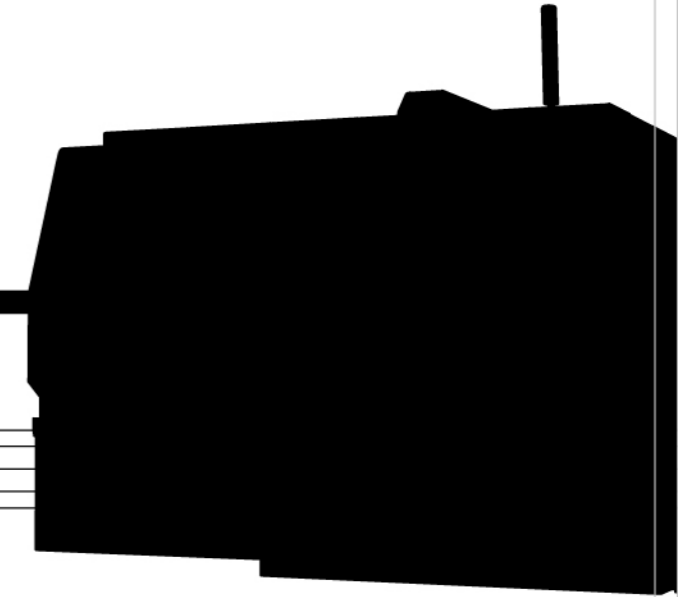
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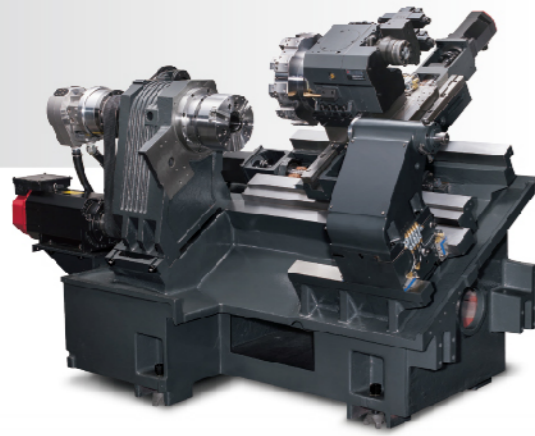
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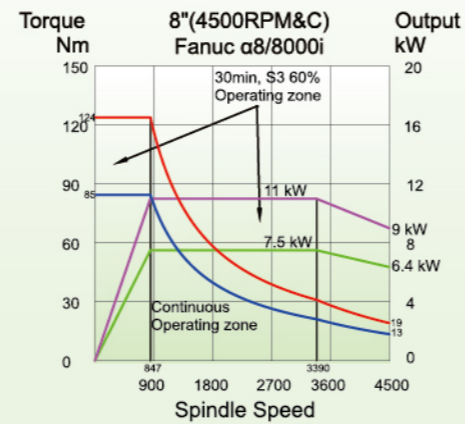
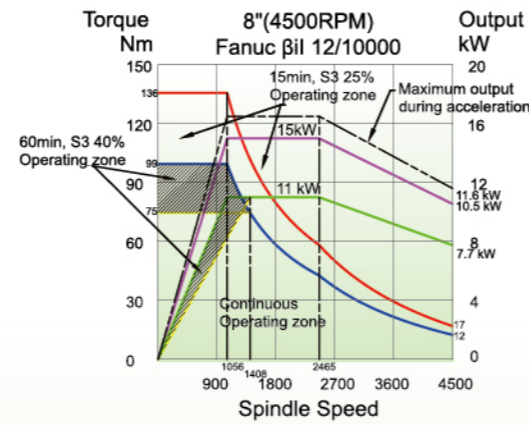


ML-560S

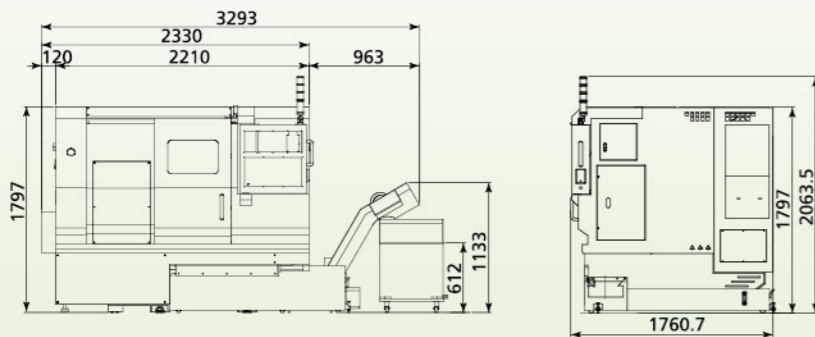
Linear Guide Way Lathe



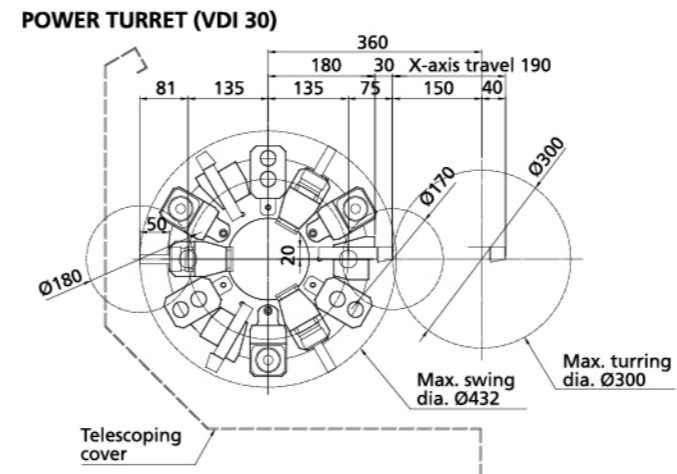
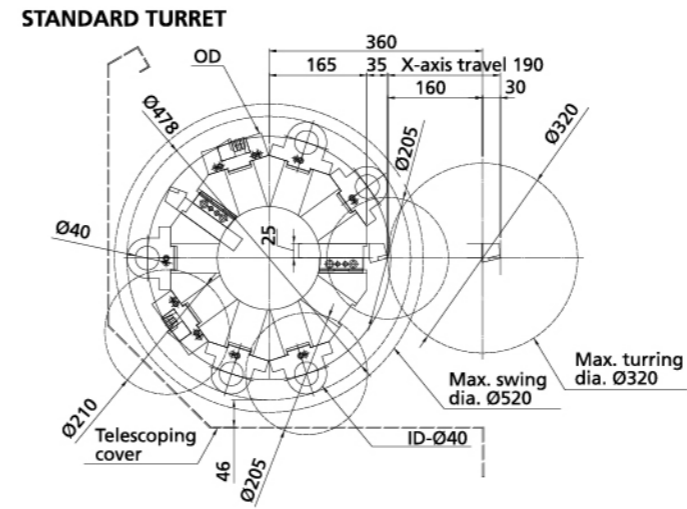
Spindle Power and Torque Diagram



Dimensional Drawings

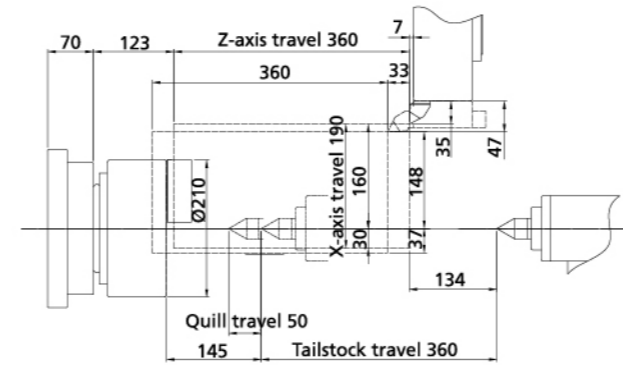


Tool Interference Diagram

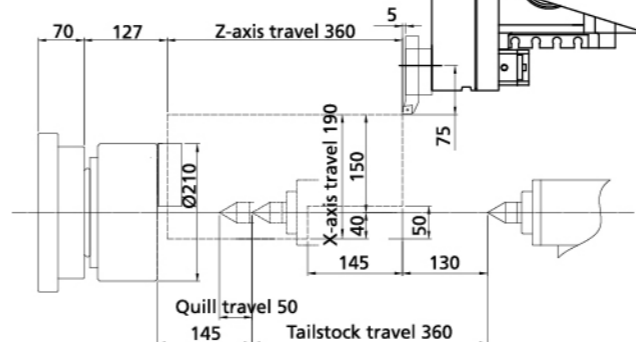


Work Envelope

O.D TOOL HOLDER



I.D TOOL HOLDER



Machine Specifications

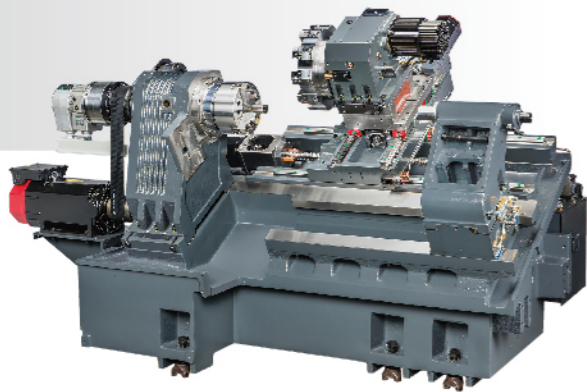
Unit: mm

ITEM	ML-560S	
	Standard	C axis
CAPACITY	Swing over bed (mm)	Ø560
	Swing over saddle (mm)	Ø420
	Distance between center (mm)	537
	Max. machining dia. (mm)	Ø320 / Ø300
	Max. machining length (mm)	320
TRAVEL	X-axis (mm)	190 (160+30) / 190 (150+40)
	Z-axis (mm)	360
	C-axis (mm)	360° (0.001°)
SPINDLE	Spindle speeds (rpm)	STD: 4500 (A2-6); OPT: 6000 (A2-5)
	Spindle nose	STD: A2-6; OPT: A2-5
	Spindle bore dia. (mm)	STD: Ø62; OPT: Ø79
	Front bearing inner dia. (mm)	Ø100
	Draw Bar Dia. (mm)	STD: Ø52; OPT: Ø45
Chuck	Chuck diameter	STD: Ø8"; OPT: Ø6"
	Type	STD: Servo; OPT: Hydraulic, VDI Live-tooling; LS-160SP
TURRET	Stations	STD: 10; OPT: 8 / 12
	Model	YDPM YT-200
	Square tool shank	25 x 25 / 20 x 20
	Boring bar shank diameter	Ø40
LIVE-TOOL FEEDRATE	Indexing time for 180° (including locking) (sec)	1.7 / 0.85
	Spindle speeds (rpm)	- / 5000
TAILSTOCK	Rapid traverse (M/min)	X: 30, Z: 30
	Type	Automatic
	Quill diameter (mm)	Ø65
MOTORS	Quill bore taper	MT-4
	Quill travel (mm)	50
	Main spindle (kW)	STD: β 12; OPT: α 8 7.5/11
	Live-tool (kW)	- / α 2/10000
ACCURACY	X/Z-axis servo motor (kW)	X: β 12 1.8; Z: β 1.8 12; OPT: α 8 1.6
	Hydraulic oil pump (kW)	0.745
	Chip conveyor (kW)	0.2
	Coolant pump (kW)	0.96
POWER	Positioning (mm)	±0.003
	Repeatability (mm)	±0.002
MACHINE SIZE	Fanuc (KVA)	380-415/220V 15KVA
	Height (cm)	179
	Floor space (W x D) (cm)	231 x 175
MACHINE SIZE	Packing (w/conveyor) (cm)	387 x 228 x 218
	Net weight (w/conveyor) (kgs)	3380
	Gross weight (w/conveyor) (kgs)	3670

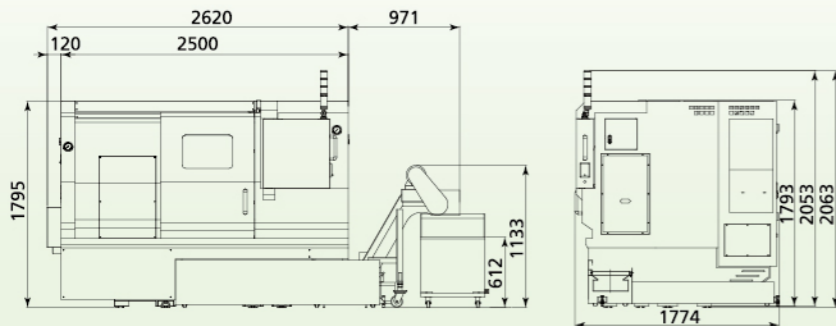
Note: Specifications are subject to change without further notice.

ML-560M

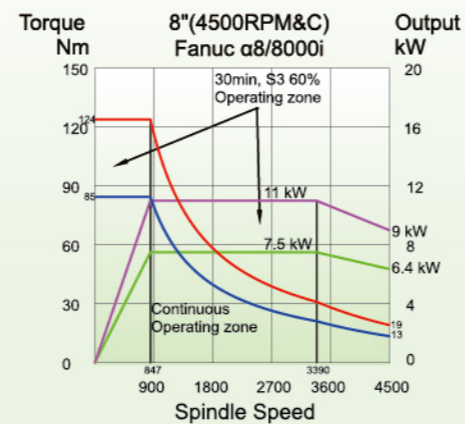
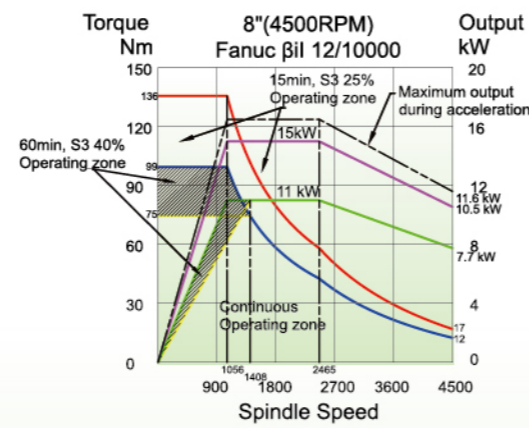
Linear Guide Way Lathe



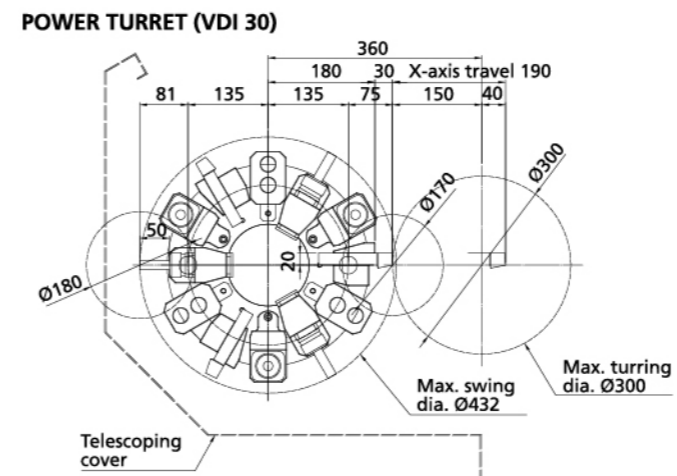
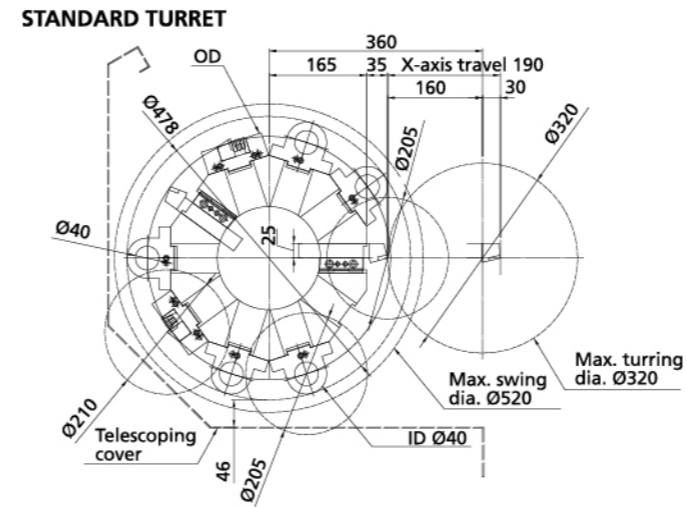
Dimensional Drawings



Spindle Power and Torque Diagram

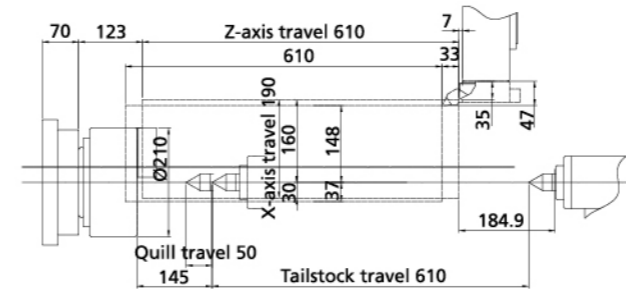


Tool Interference Diagram

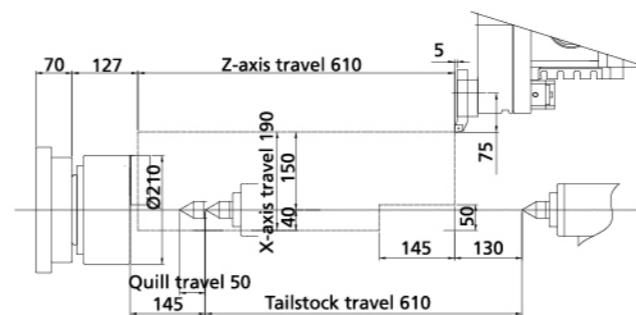


Work Envelope

O.D TOOL HOLDER



I.D TOOL HOLDER



Machine Specifications

Unit: mm

ITEM	ML-560M	
	Standard	C axis
CAPACITY	Swing over bed (mm)	Ø560
	Swing over saddle (mm)	Ø420
	Distance between center (mm)	787
	Max. machining dia. (mm)	Ø320 Ø300
	Max. machining length (mm)	570
TRAVEL	X-axis (mm)	190 (160+30)
	Z-axis (mm)	610
SPINDLE	C-axis (mm)	360° (0.001°)
	Spindle speeds (rpm)	STD: 4500 (A2-6); OPT: 6000(A2-5)
CHUCK	Spindle nose	STD: A2-6; OPT: A2-5
	Spindle bore dia. (mm)	STD: Ø62; OPT: Ø79
	Front bearing inner dia. (mm)	Ø100
	Draw Bar Dia. (mm)	STD: Ø52; OPT: Ø45
TURRET	Chuck diameter	STD: 8"; OPT: 6"
	Type	STD: Servo; OPT: Hydraulic, VDI Live-tooling; LS-160SP
LIVE-TOOL FEEDRATE	Stations	STD: 10; OPT: 8 12
	Model	YDPM YT-200
	Square tool shank	25 x 25 20 x 20
TAILSTOCK	Boring bar shank diameter	Ø40
	Indexing time for 180° (including locking) (sec)	1.7 0.85
MOTORS	Spindle speeds (rpm)	- 5000
	Rapid traverse (M/min)	X: 30, Z: 30
ACCURACY	Type	Automatic
	Quill diameter (mm)	Ø65
	Quill bore taper	MT-4
	Quill travel (mm)	50
POWER	Main spindle (kW)	STD: β 12; OPT: α 8 7.5/11
	Live-tool (kW)	- α 2/10000
	X/Z-axis servo motor (kW)	X: β 12 1.8; Z: β 12 1.8; OPT: α 8 1.6
	Hydraulic oil pump (kW)	0.745
	Chip conveyor (kW)	0.2
MACHINE SIZE	Coolant pump (kW)	0.96
	Positioning (mm)	±0.004
MACHINE SIZE	Repeatability (mm)	±0.003
	Fanuc (KVA)	380-415/220V 15KVA
MACHINE SIZE	Height (cm)	179
	Floor space (W x D) (cm)	262 x 175
	Packing (w/conveyor) (cm)	404 x 228 x 218
	Net weight (w/conveyor) (kgs)	3720
MACHINE SIZE	Gross weight (w/conveyor) (kgs)	4070

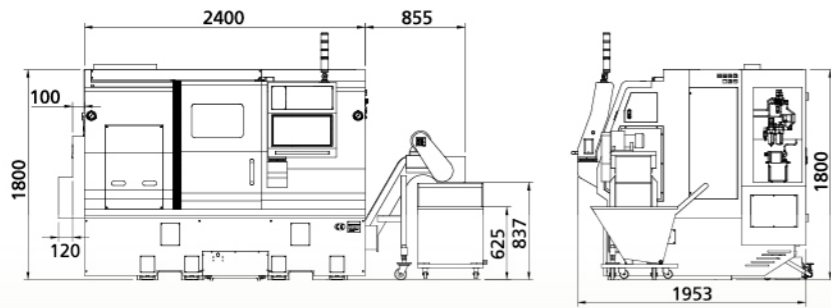
Note: Specifications are subject to change without further notice.

ML-360

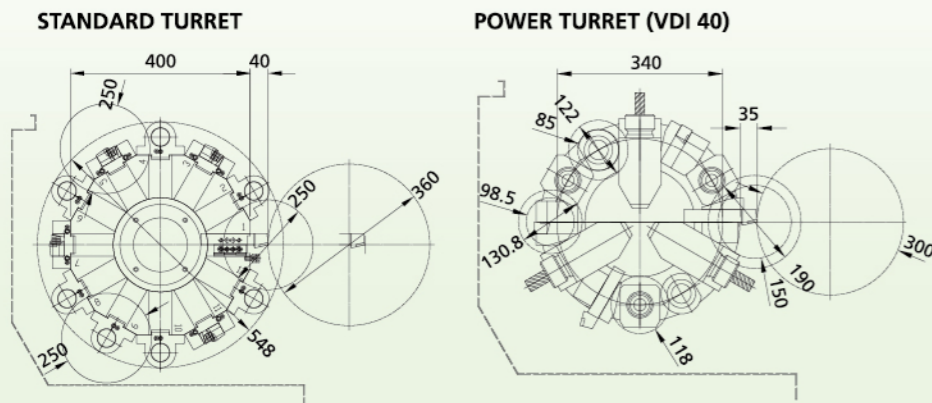
Linear Guide Way Lathe



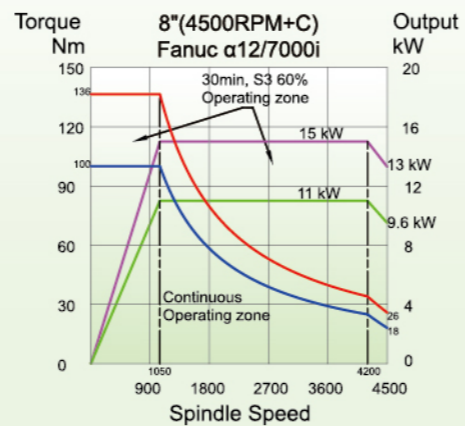
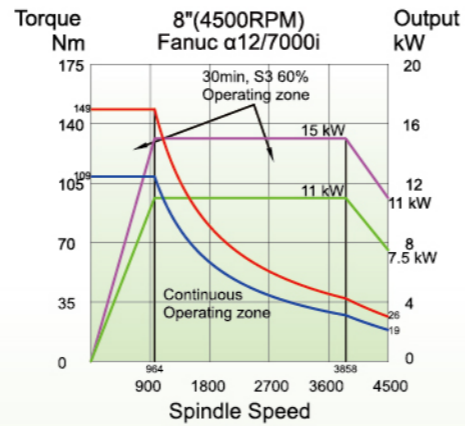
Dimensional Drawings



Tool Interference Diagram

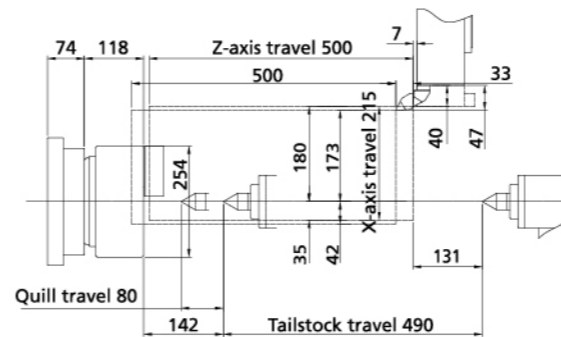
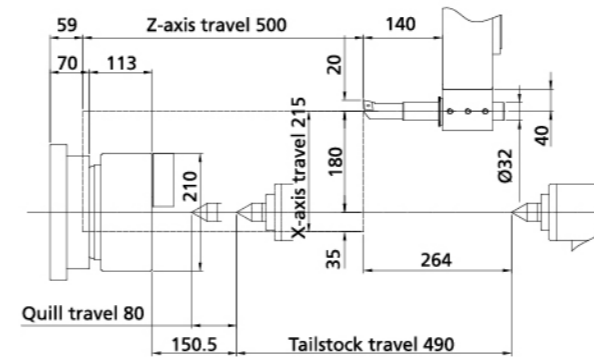


Spindle Power and Torque Diagram

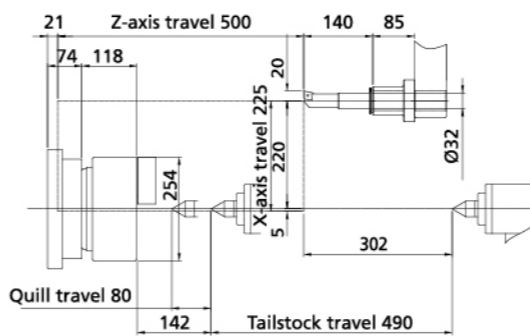
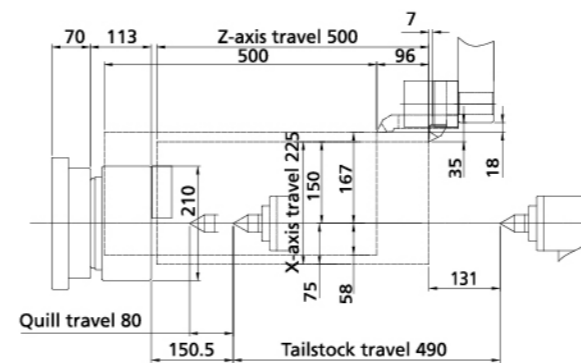


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STANDARD TURRET



POWER TURRET



Machine Specifications

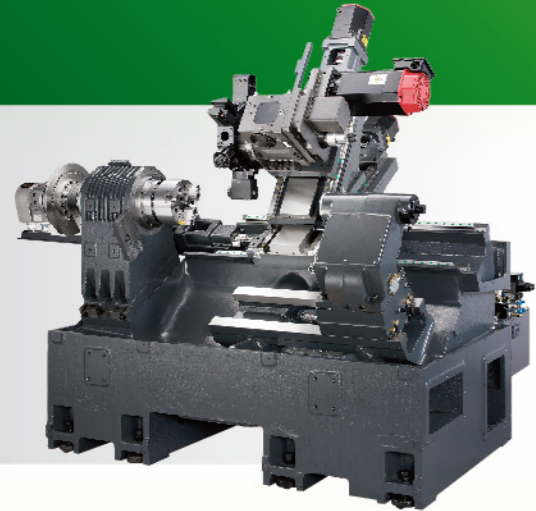
Unit: mm

ITEM	ML-360	
	Standard	C axis
CAPACITY	Swing over bed (mm)	Ø600
	Swing over saddle (mm)	Ø400
	Distance between center (mm)	STD: 640 (A2-6); OPT: 595 (A2-8)
	Max. machining dia. (mm)	STD: Ø360; OPT: Ø300
	Max. machining length (mm)	STD: 470 (A2-6); OPT: 455 (A2-8)
TRAVEL RANGE	X-axis (mm)	215 (180+35)
	Z-axis (mm)	8": 500 / 10": 500
	C-axis (mm)	360° (0.001")
SPINDLE	Spindle speeds (rpm)	STD: 50-4500 (A2-6); OPT: 50-3500 (A2-8)
	Spindle nose	STD: A2-6; OPT: A2-8
	Spindle bore dia. (mm)	STD: Ø62 (A2-6); OPT: Ø86 (A2-8)
	Front bearing inner dia. (mm)	STD: Ø100 (A2-6); OPT: Ø120 (A2-8)
	Draw Bar Dia. (mm)	STD: Ø52; OPT: Ø75
Chuck	Chuck diameter	STD: Ø8"; OPT: Ø10"
	Type	STD: Servo OPT: Hydraulic, VDI Live-tooling
TURRET	Stations	STD: 12; OPT: 10
	Model	STD: LS-200SV; OPT: LS-200
	Square tool shank	25 x 25
LIVE-TOOL FEEDRATE	Boring bar shank diameter	Ø40
	Indexing time for 180° (including locking) (sec)	1.7 / 0.73
TAILSTOCK	Spindle speeds (rpm)	50-4000
	Rapid traverse (M/min)	X: 36, Z: 36
	Type	Automatic
MOTORS	Quill diameter (mm)	Ø85
	Quill bore taper	MT-4
	Quill travel (mm)	80
ACCURACY	Main spindle (kW)	STD: α 12/7000i 11/15; OPT: α 15/7000i 15/18.5
	Live-tool (kW)	- α 3 (3.7/5.5)
	X/Z-axis servo motor (kW)	X: α 12 3.0; Z: α 12 3.0
	Hydraulic oil pump (kW)	1.5
	Chip conveyor (kW)	0.2
POWER	Coolant pump (kW)	0.8
	Positioning (mm)	±0.004
MACHINE SIZE	Repeatability (mm)	±0.003
	Fanuc (KVA)	380-415/220V 21KVA
MACHINE SIZE	Height (cm)	180
	Floor space (W x D) (cm)	240 x 195
	Packing (w/conveyor) (cm)	370 x 227 x 214
	Net weight (w/conveyor) (kgs)	4870
MACHINE SIZE	Gross weight (w/conveyor) (kgs)	5120

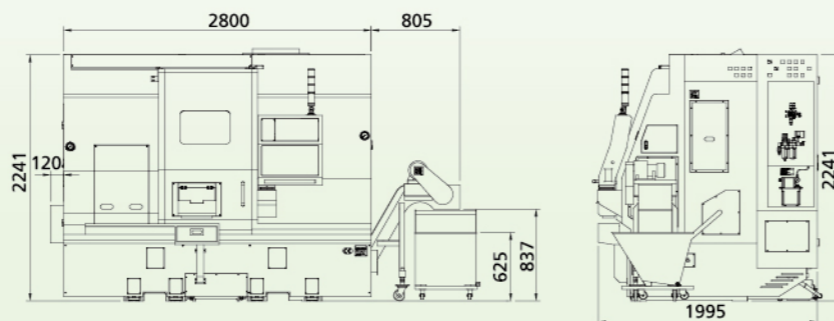
Note: Specifications are subject to change without further notice.

ML-360Y

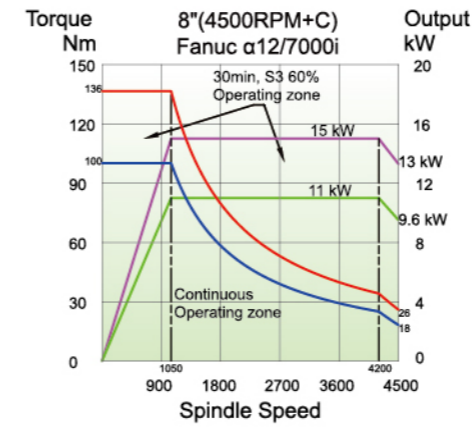
Mill Turn Lathe



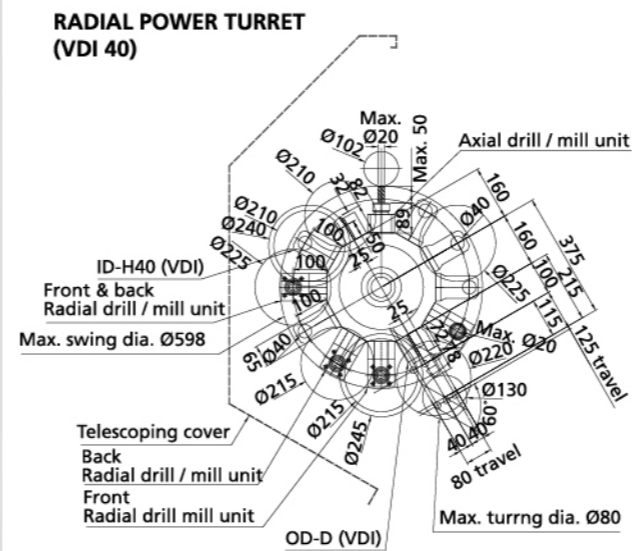
Dimensional Drawings



Spindle Power and Torque Diagram

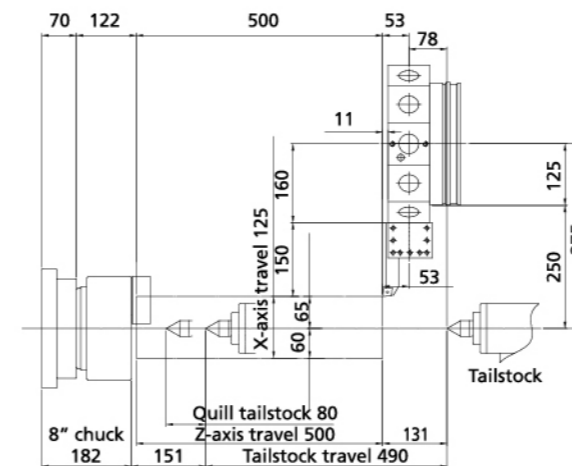


Tool Interference Diagram



Work Envelope

O.D TOOL HOLDER



Machine Specifications

Unit: mm

ITEM	ML-360Y	
CAPACITY	Swing over bed (mm)	Ø600
	Swing over saddle (mm)	Ø420
	Distance between center (mm)	STD: 640 (A2-6); OPT: 595 (A2-8)
	Max. machining dia. (mm)	Ø130
	Max. machining length (mm)	STD: 470 (A2-6); OPT: 430 (A2-8)
	Slant angle of bed	60° (30°+30°)
TRAVEL RAGNE	X-axis (mm)	125 (65+60)
	Y-axis (mm)	±40
	Z-axis (mm)	8": 500; 10": 465
C-axis (mm)		360° (0.001°)
	Spindle speeds (rpm)	STD: 50-4900 (A2-6); OPT: 50-3500 (A2-8)
SPINDLE	Spindle nose	STD: A2-6; OPT: A2-8
	Spindle bore dia. (mm)	STD: Ø62 (A2-6); OPT: Ø86 (A2-8)
	Front bearing inner dia. (mm)	STD: Ø100 (A2-6); OPT: Ø120 (A2-8)
	Draw Bar Dia. (mm)	STD: Ø52; OPT: Ø75
Chuck	Chuck diameter	STD: Ø8"; OPT: Ø10"
	Type	Live-tooling
TURRET	Stations	STD: 12
	Model	TBMR200/12DX(short)
	Square tool shank	25 x 25
LIVE-TOOL FEEDRATE	Boring bar shank diameter	Ø40
	Indexing time for 180° (including locking) (sec)	0.73
	Spindle speeds (rpm)	50-4000
TAILSTOCK	Rapid traverse (M/min)	X: 36, Z: 36, Y: 36; C: 200min ⁻¹
	Type	Automatic
MOTORS	Quill diameter (mm)	Ø65
	Quill bore taper	MT-4
	Quill travel (mm)	80
ACCURACY	Main spindle (kW)	STD: α 12/7000i 11/15; OPT: α 15/7000i 15/18.5
	Live-tool (kW)	α 3 (3.7/5.5)
	X/Z-axis servo motor (kW)	X: α 12 3.0; Y: α 12 3.0; Z: α 12 3.0
	Hydraulic oil pump (kW)	1.5
	Chip conveyor (kW)	0.2
POWER	Coolant pump (kW)	0.8
	Positioning (mm)	±0.004
MACHINE SIZE	Repeatability (mm)	±0.003
	Fanuc (KVA)	380-415/220V 26KVA
MACHINE SIZE	Height (cm)	224
	Floor space (W x D) (cm)	280 x 200
	Packing (w/conveyor) (cm)	387 x 228 x 255
	Net weight (w/conveyor) (kgs)	5790
	Gross weight (w/conveyor) (kgs)	606

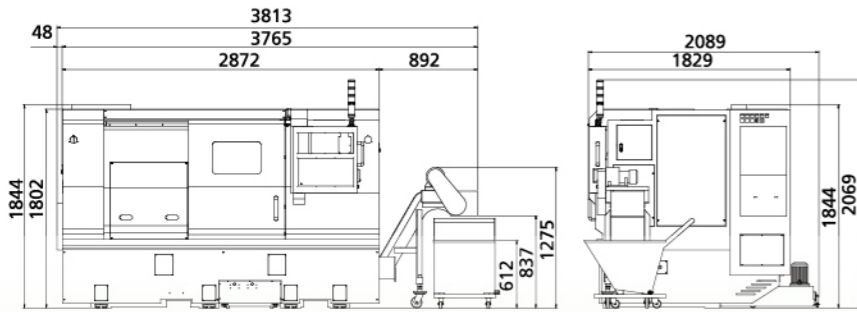
Note: Specifications are subject to change without further notice.

ML-600S

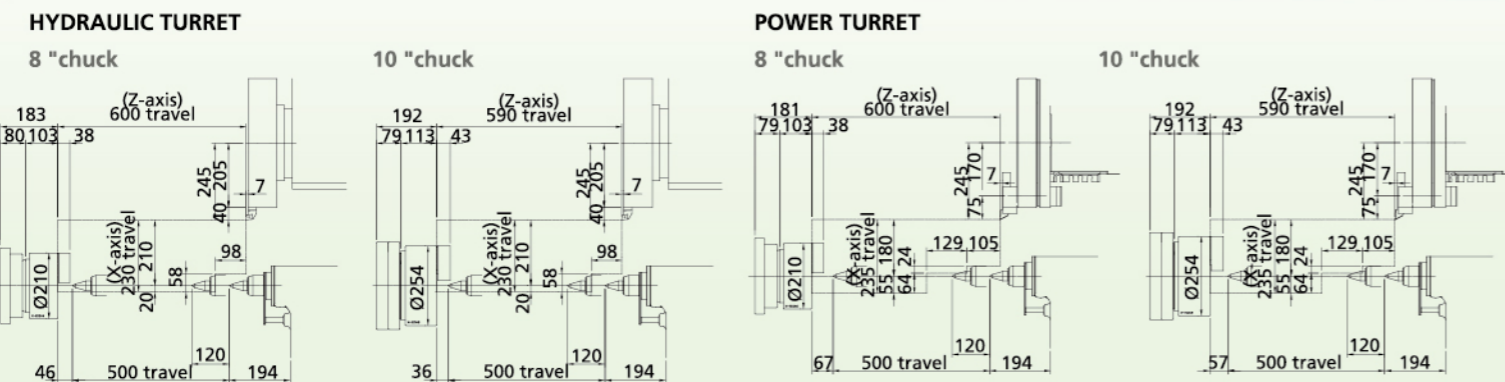
Linear Guide Way Lathe



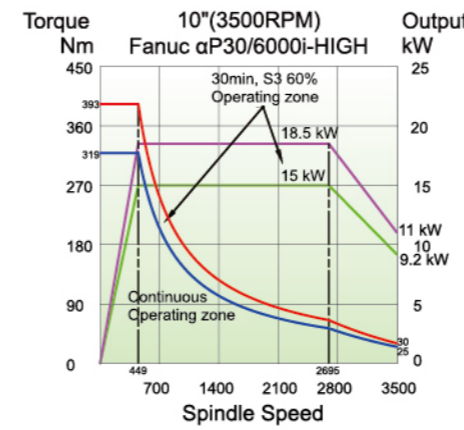
Dimensional Drawings



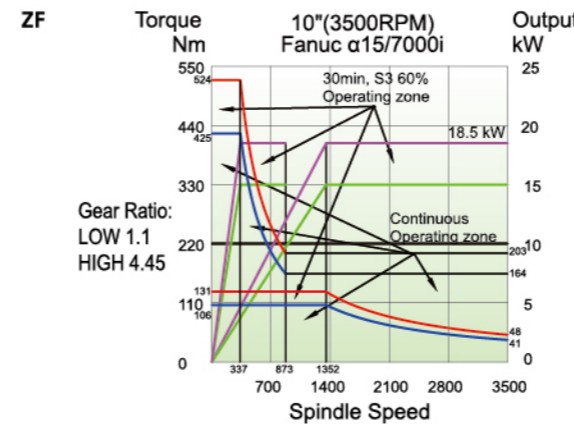
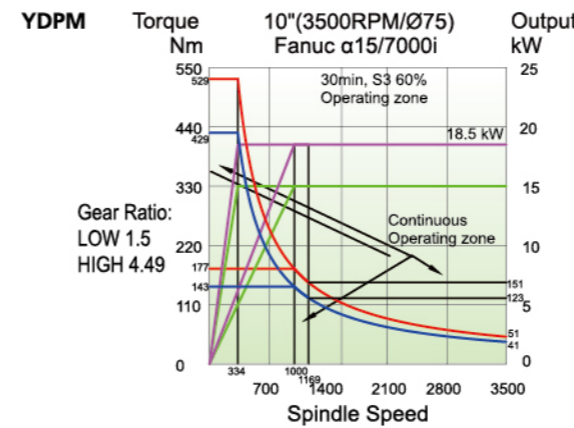
Work Envelope



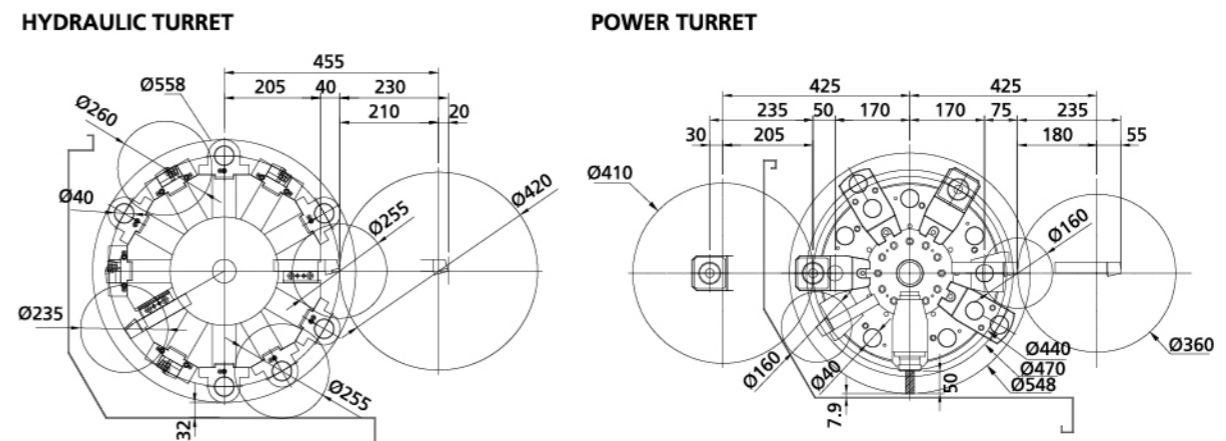
Spindle Power and Torque Diagram



Spindle Power and Torque Diagram (Gearbox)



Tool Interference Diagram



Machine Specifications

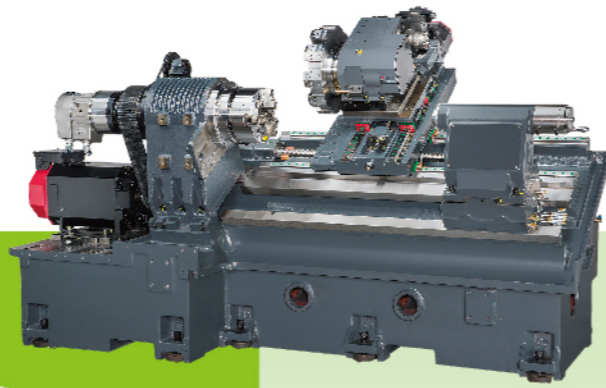
Unit: mm

ITEM	ML-600S	
	Standard	C axis
CAPACITY	Swing over bed (mm)	Ø600
	Swing over saddle (mm)	Ø450
	Distance between center (mm)	STD: 536 (A2-8); OPT: 546 (A2-6)
	Max. machining dia. (mm)	STD: Ø420 OPT: Ø360
	Max. machining length (mm)	STD: 540 (10"); OPT: 560 (8")
TRAVEL RANGE	X-axis (mm)	230 (210+20) 235 (180+55)
	Z-axis (mm)	8": 600; 10": 590
	C-axis (mm)	- 360° (0.001")
SPINDLE	Spindle speeds (rpm)	STD: 50-3500 (A2-8)
	Spindle nose	STD: A2-8; OPT: A2-6
	Spindle bore dia. (mm)	STD: Ø86 (A2-8); OPT: Ø62 (A2-6)
	Front bearing inner dia. (mm)	STD: Ø120 (A2-8); OPT: Ø100 (A2-6)
	Draw Bar Dia. (mm)	STD: Ø75; OPT: Ø52
Chuck	Chuck diameter	STD: Ø10"; OPT: Ø8"
	Type	STD: Servo; OPT: Hydraulic, VDI Live-tooling
TURRET	Stations	STD: 10; OPT: 12
	Model	STD: YDPM YT-240; OPT: LS-240 TBMA200
	Square tool shank	25 25
	Boring bar shank diameter	Ø40 Ø40
	Indexing time for 180° (including locking) (sec)	1.8 0.73
LIVE-TOOL	Spindle speeds (rpm)	- 50-4000
FEEDRATE	Rapid traverse (M/min)	X: 30, Z: 30
	Type	Automatic
TAILSTOCK	Quill diameter (mm)	Ø85
	Quill bore taper	MT-5
	Quill travel (mm)	120
MOTORS	Main spindle (kW)	STD: α30ip 15/18.5
	Live-tool (kW)	- α3 3.7/5.5
	X/Z-axis servo motor (kW)	X: α 12 3.0; Z: α 12 3.0
	Hydraulic oil pump (kW)	1.5
	Chip conveyor (kW)	0.2
ACCURACY	Positioning (mm)	±0.004
	Repeatability (mm)	±0.003
POWER	Fanuc (KVA)	380-415/220V 26KVA
	Height (cm)	185
MACHINE SIZE	Floor space (W x D) (cm)	287 x 183
	Packing (w/conveyor) (cm)	383 x 212 x 212
	Net weight (w/conveyor) (kgs)	5430
	Gross weight (w/conveyor) (kgs)	5730

Note: Specifications are subject to change without further notice.

ML-600M

Linear Guide Way Lathe



Machine Specifications

Unit: mm

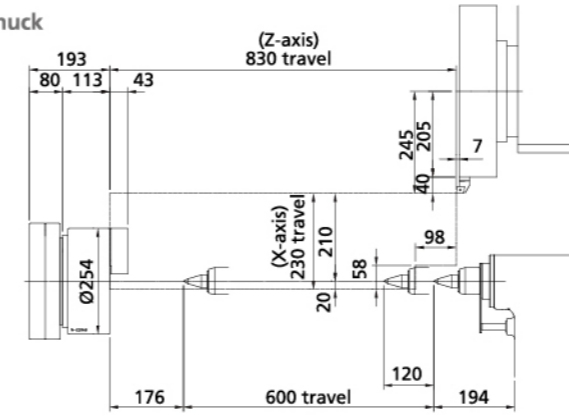
ITEM	ML-600M	
	Standard	C axis
CAPACITY	Swing over bed (mm)	Ø600
	Swing over saddle (mm)	Ø450
	Distance between center (mm)	STD: 776 (10"); OPT: 766 (12")
	Max. machining dia. (mm)	STD: Ø420; OPT: Ø360
	Max. machining length (mm)	STD: 780 (10"); OPT: 760 (12")
TRAVEL	X-axis (mm)	230 (210+20)
	Z-axis (mm)	10": 830; 12": 820
	C-axis (mm)	360' (0.001")
SPINDLE	Spindle speeds (rpm)	STD: 50~3500 (A2-8 75 mm, 10")
	Spindle nose	STD: A2-8
	Spindle bore dia. (mm)	STD: Ø86 (10"); OPT: Ø91 (10"), Ø105 (12")
	Front bearing inner dia. (mm)	STD: Ø120 (10"); OPT: Ø130 (10", 12")
Chuck	Draw Bar Dia. (mm)	STD: Ø75; OPT: Ø78 (10"), Ø91 (12")
	Chuck diameter	STD: Ø10"; OPT: Ø12"
TURRET	Type	STD: Servo; OPT: Hydraulic, VDI
	Stations	STD: 10; OPT: 12
	Model	STD: YDPM YT-240; OPT: LS-240
	Square tool shank	25 x 25
LIVE-TOOL	Boring bar shank diameter	Ø40
	Indexing time for 180° (including locking) (sec)	1.8
FEEDRATE	Spindle speeds (rpm)	50~4000
	Rapid traverse (M/min)	X: 30, Z: 30
TAILSTOCK	Type	Automatic
	Quill diameter (mm)	Ø85
	Quill bore taper	MT-5
MOTORS	Quill travel (mm)	120
	Main spindle (kW)	STD: α30ip 15/18.5
	Live-tool (kW)	α3 3.7/5.5
	X/Z-axis servo motor (kW)	X: α12 3.0, Z: α12 3.0
ACCURACY	Hydraulic oil pump (kW)	1.5
	Chip conveyor (kW)	0.2
	Coolant pump (kW)	0.8
POWER	Positioning (mm)	±0.004
	Repeatability (mm)	±0.003
MACHINE SIZE	Fanuc (KVA)	380-415/220V 26KVA
	Height (cm)	185
	Floor space (W x D) (cm)	318 x 188
	Packing (w/conveyor) (cm)	432 x 230 x 221
MACHINE SIZE	Net weight (w/conveyor) (kgs)	6050
	Gross weight (w/conveyor) (kgs)	6470

Note: Specifications are subject to change without further notice.

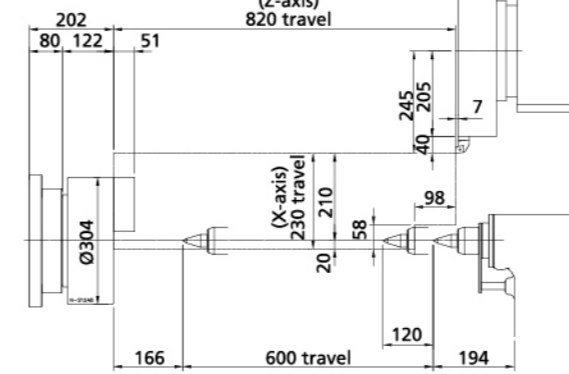
Work Envelope

HYDRAULIC TURRET

10 "chuck

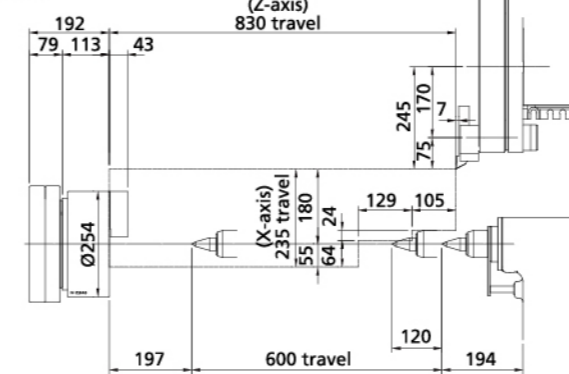


12 "chuck

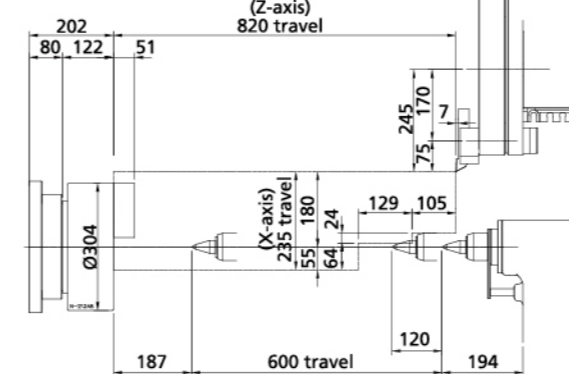


POWER TURRET

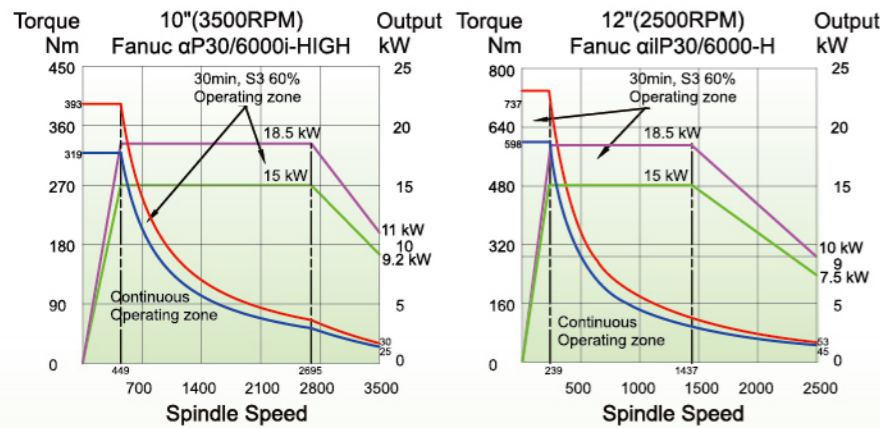
10 "chuck



12 "chuck

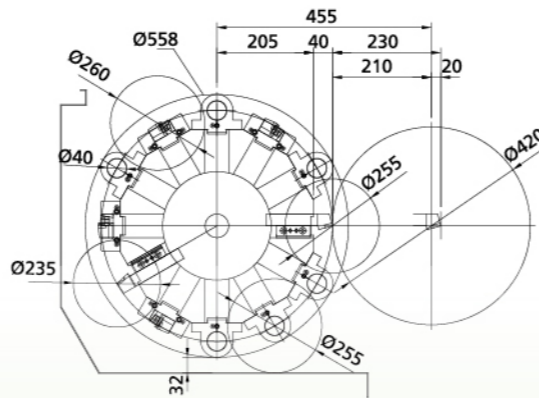


Spindle Power and Torque Diagram

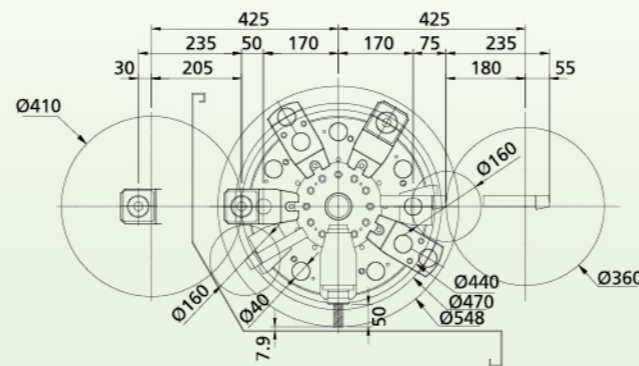


Tool Interference Diagram

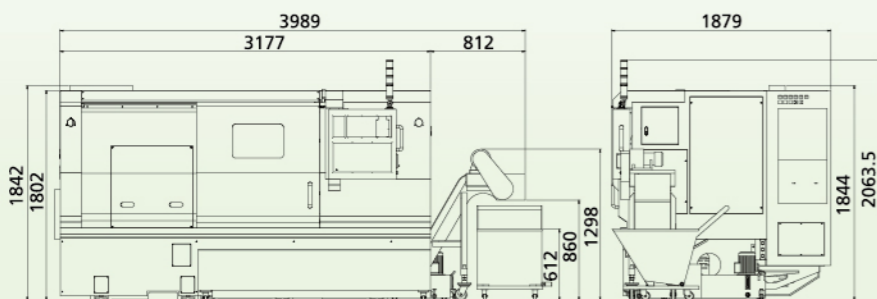
HYDRAULIC TURRET



POWER TURRET

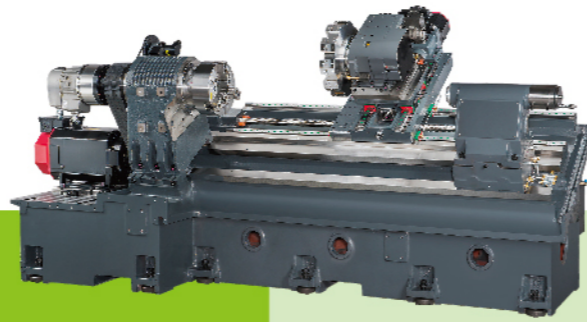


Dimensional Drawings



ML-600L

Linear Guide Way Lathe



Machine Specifications

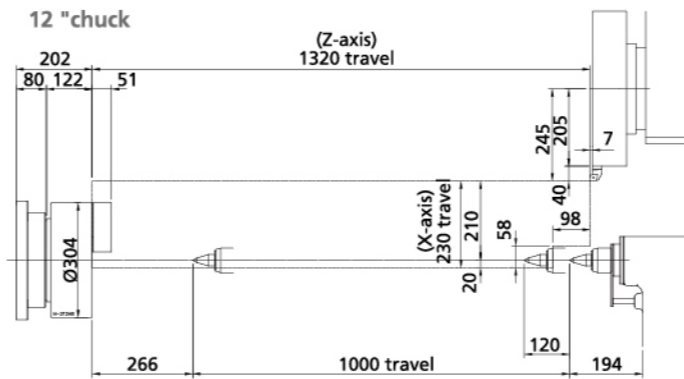
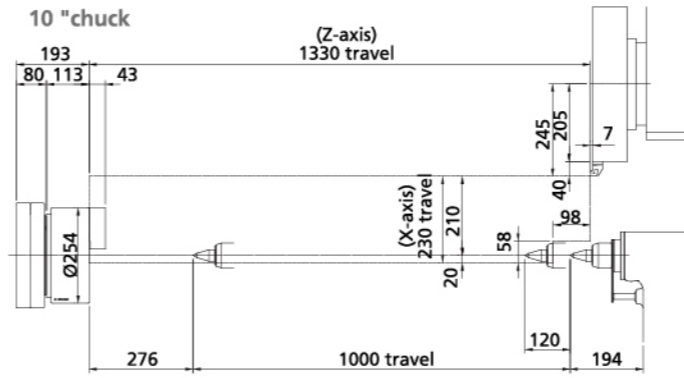
Unit: mm

ITEM	ML-600L	
	Standard	C axis
CAPACITY	Swing over bed (mm)	Ø600
	Swing over saddle (mm)	Ø450
	Distance between center (mm)	STD: 1260 (10"); OPT: 1266 (12")
	Max. machining dia. (mm)	STD: Ø420; OPT: Ø360
	Max. machining length (mm)	STD: 1280 (10"); OPT: 1260 (12")
	Slant angle of bed	30°
TRAVEL RAGNE	X-axis (mm)	230 (210+20) 235 (180+55)
	Z-axis (mm)	10": 1330; 12": 1320
	C-axis (mm)	- 360' (0.001")
SPINDLE	Spindle speeds (rpm)	STD: 50~3500 (A2-8 75 mm, 10")
	Spindle nose	STD: A2-8
	Spindle bore dia. (mm)	STD: Ø86 (10"); OPT: Ø91 (10"), Ø105 (12")
	Front bearing inner dia. (mm)	STD: Ø120 (10"); OPT: Ø130 (10"), 12")
Chuck	Draw Bar Dia. (mm)	STD: Ø75; OPT: Ø78 (10"), Ø91 (12")
	Chuck diameter	STD: Ø10"; OPT: Ø12"
TURRET	Type	STD: Servo; OPT: Hydraulic, VDI Live-tooling
	Stations	STD: 10; OPT: 12
	Model	STD: YDPM YT-240; OPT: LS-240 TBMA200
	Square tool shank	25 x 25 25 x 25
LIVE-TOOL FEEDRATE	Boring bar shank diameter	Ø40 Ø40
	Indexing time for 180° (including locking) (sec)	1.8 0.73
MOTORS	Spindle speeds (rpm)	- 50~4000
	Rapid traverse (M/min)	X: 30, Z: 30
TAILSTOCK	Type	Automatic
	Quill diameter (mm)	Ø85
	Quill bore taper	MT-5
	Quill travel (mm)	120
MOTORS	Main spindle (kW)	STD: α30ip 15/18.5
	Live-tool (kW)	- α3 3.7/5.5
	X/Z-axis servo motor (kW)	X: α12 3.0, Z: α12 3.0
	Hydraulic oil pump (kW)	1.5
ACCURACY	Chip conveyer (kW)	0.2
	Coolant pump (kW)	0.8
POWER	Positioning (mm)	±0.005
	Repeatability (mm)	±0.004
MACHINE SIZE	Power (KVA)	380-415/220V 26KVA
	Height (cm)	190
	Floor space (W x D) (cm)	376 x 210
	Packing (w/conveyor) (cm)	472 x 229 x 221
	Net weight (w/conveyor) (kgs)	7000
	Gross weight (w/conveyor) (kgs)	7450

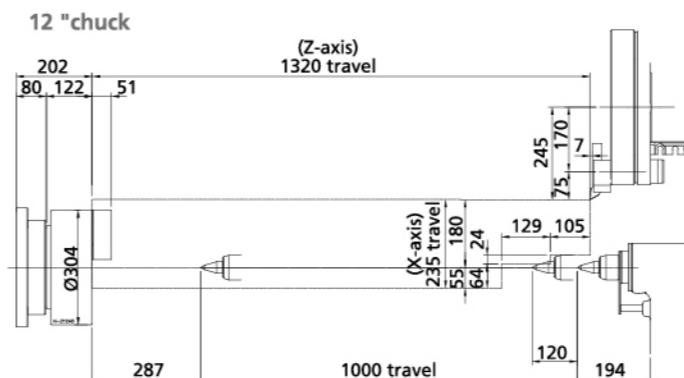
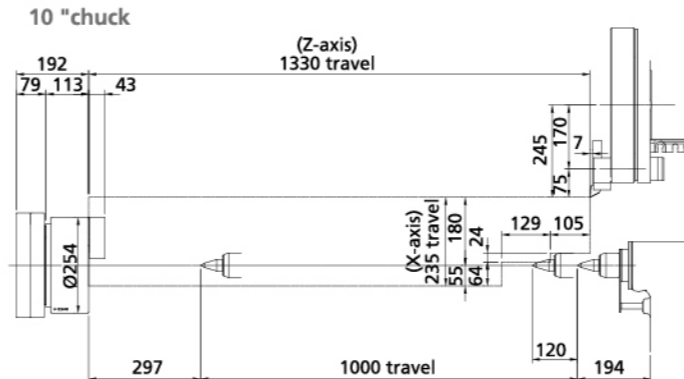
Note: Specifications are subject to change without further notice.

Work Envelope

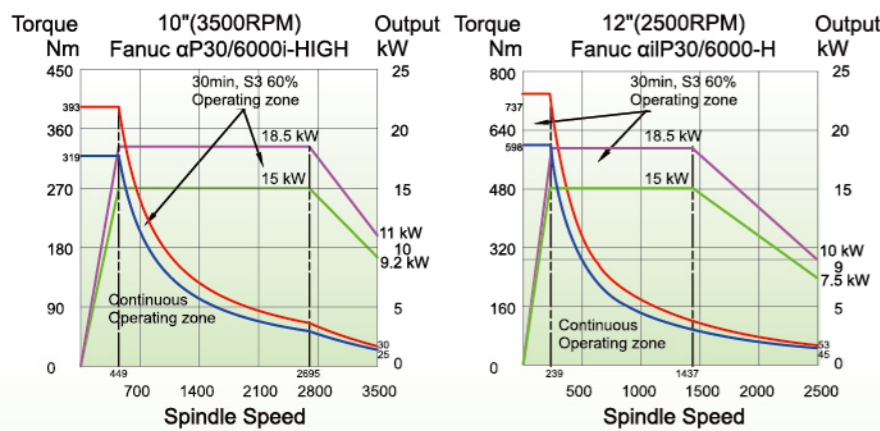
HYDRAULIC TURRET



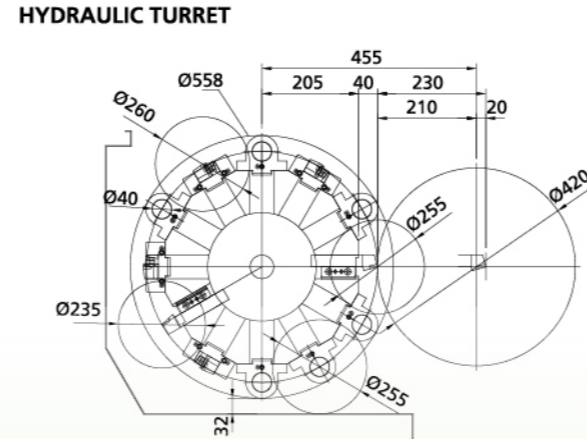
POWER TURRET



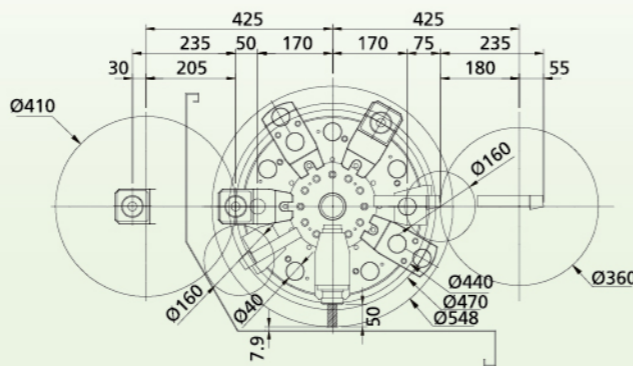
Spindle Power and Torque Diagram



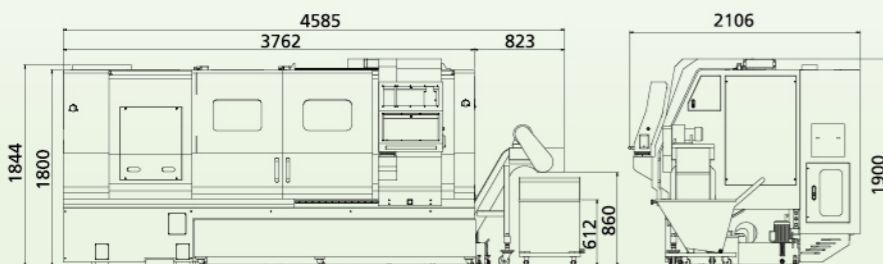
Tool Interference Diagram



POWER TURRET



Dimensional Drawings

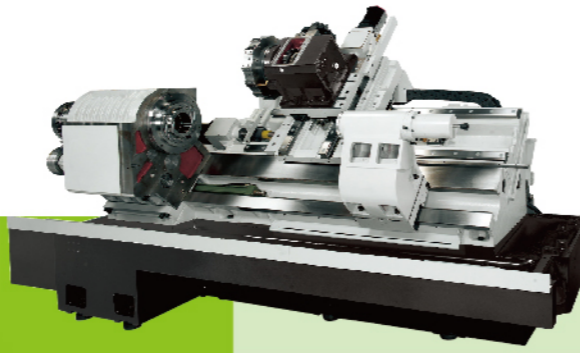
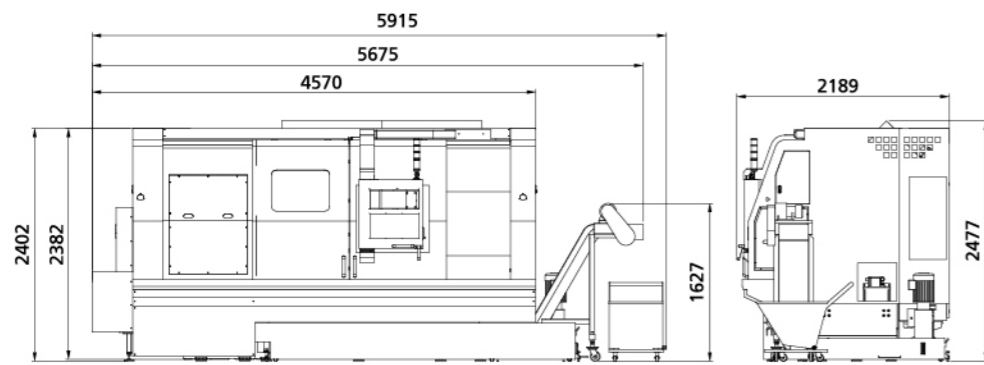


ML-850

Linear Guide Way Lathe



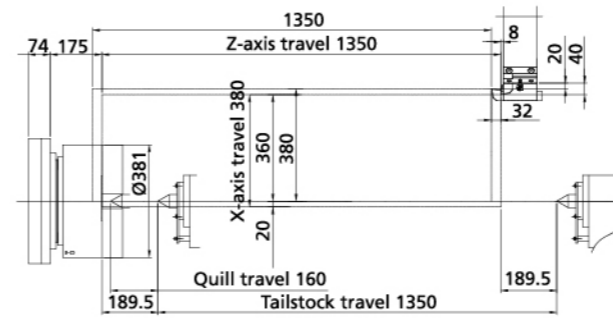
Dimensional Drawings



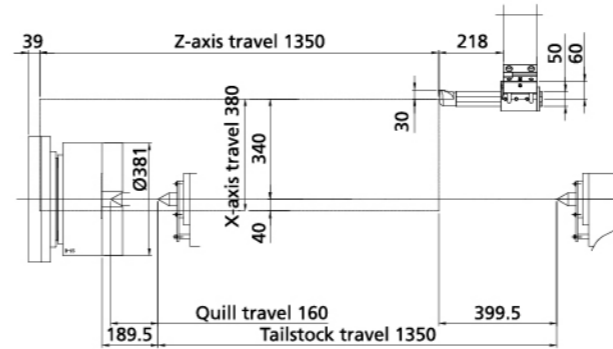
Work Envelope

HYDRAULIC TURRET

O.D TOOL HOLDER

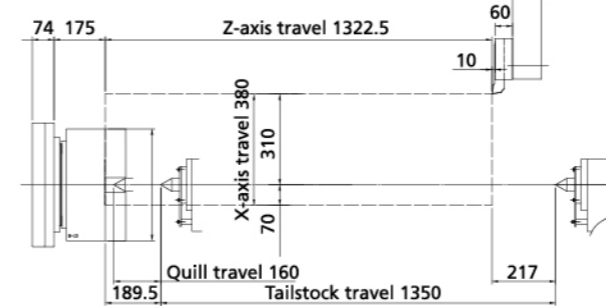


I.D TOOL HOLDER



POWER TURRET

O.D TOOL HOLDER



Machine Specifications

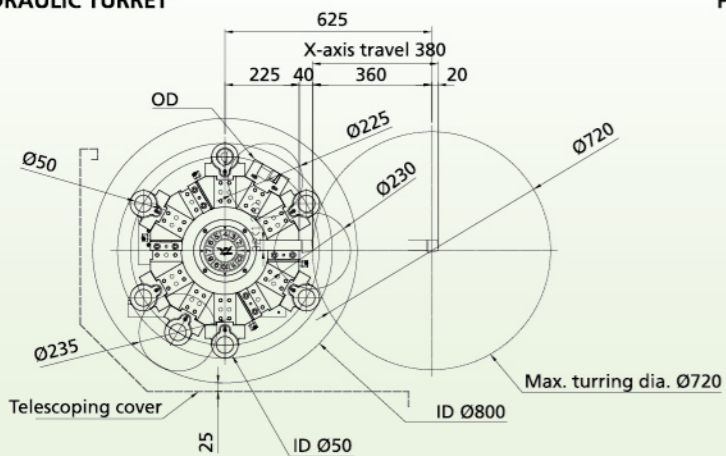
Unit: mm

ITEM	ML-850	
	Standard	C axis
CAPACITY	Swing over bed (mm)	Ø850
	Swing over saddle (mm)	Ø600
	Distance between center (mm)	STD: 1520 (A2-11)
	Max. machining dia. (mm)	Ø720 / Ø600 Ø620 / Ø600
	Max. machining length (mm)	Ø720 x 150 + Ø600 x 1270 Ø620 x 185 + Ø600 x 1250
TRAVEL RAGNE	X-axis (mm)	380 (360+20)
	Z-axis (mm)	1350
	C-axis (mm)	-
	Slant angle of bed	45°
SPINDLE	Spindle speeds (rpm)	40~2000 (4-step gearbox)
	Spindle nose	STD: A2-11
	Spindle bore dia. (mm)	STD: Ø134 (A2-11)
	Front bearing inner dia. (mm)	STD: Ø180 (A2-11)
	Draw Bar Dia. (mm)	STD: Ø120
Chuck	Chuck diameter	STD: Ø15"; OPT: Ø18" (Manual)
	Type	STD: Servo; OPT: Hydraulic, VDI Live-tooling
TURRET	Stations	STD: 8; OPT: 12 STD: 12
	Model	YDPM Hydraulic turret BSDT-320-460/12, ODT-N32
	Square tool shank	32 x 32
	Boring bar shank diameter	Ø50
	Indexing time for 180° (including locking) (sec)	3.2 2.71
LIVE-TOOL FEEDRATE	Spindle speeds (rpm)	- 50~3500
TAILSTOCK	Type	Automatic
	Quill diameter (mm)	Ø125
	Quill bore taper	MT-5
MOTORS	Quill travel (mm)	160
	Main spindle (kW)	STD: α22/7000i 22/26; OPT: α30/6000i 30/37
	Live-tool (kW)	- α12 (11/15)
	X/Z-axis servo motor (kW)	X: α22 4.0; Z: α22 4.0
	Hydraulic oil pump (kW)	2.25
ACCURACY	Chip conveyor (kW)	0.2
	Coolant pump (kW)	0.8
	Positioning (mm)	±0.005
POWER	Repeatability (mm)	±0.004
	Fanuc (KVA)	380-415/220V STD: 30KVA; OPT: 40KVA
MACHINE SIZE	Height (cm)	248
	Floor space (W x D) (cm)	457 x 219
	Packing (w/conveyor) (cm)	607 x 229 x 256
	Net weight (w/conveyor) (kgs)	11820
Gross weight (w/conveyor) (kgs)	12600	

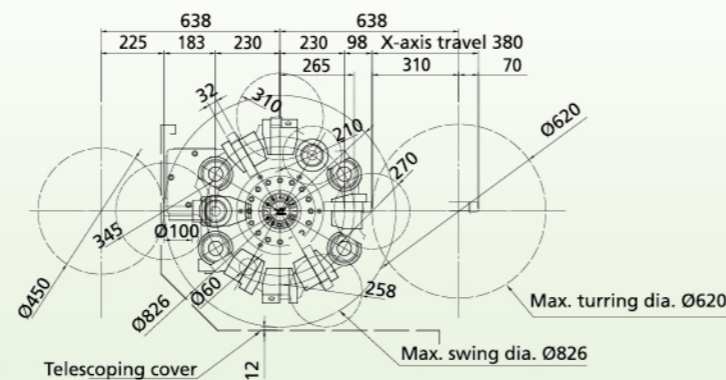
Note: Specifications are subject to change without further notice.

Tool Interference Diagram

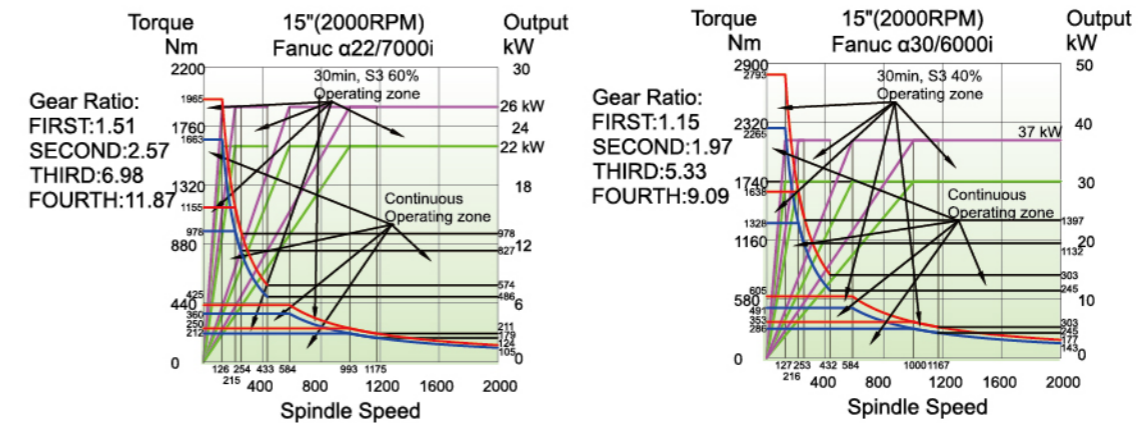
HYDRAULIC TURRET



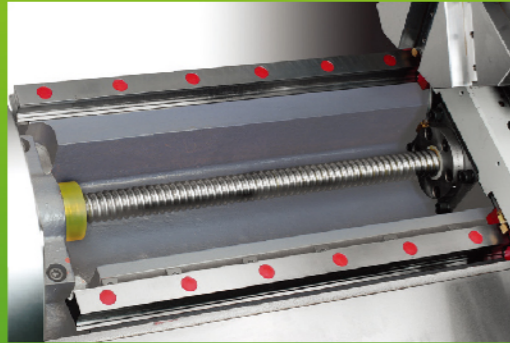
POWER TURRET



Spindle Power and Torque Diagram



STANDARD



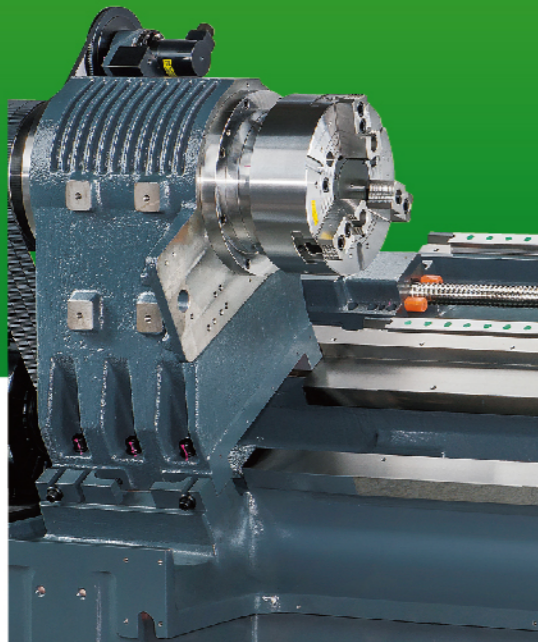
▲ Superior Precision and High Speed Ballscrews

Pre-pull dual nut assembly eradicates movement gaps, providing superior precision mating to the lead screw, the pre-pull assembly controls any rise in temperature during high speed machining.



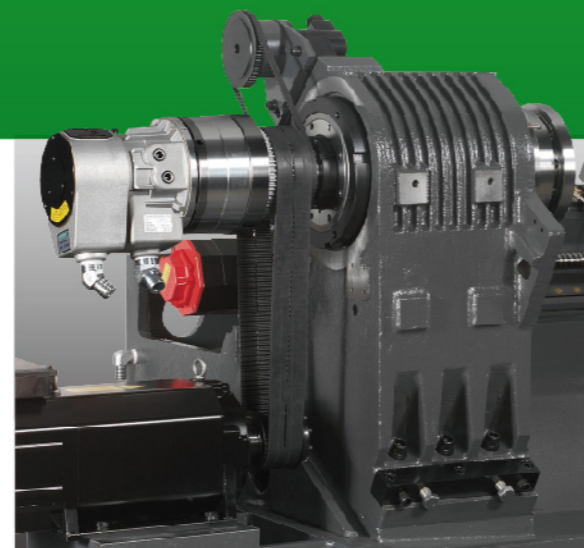
▲ X and Z-Axis Linear Guideways

Class C2 ball screws provide high-speed rapid traverse rates, rugged machining yet precise positioning.



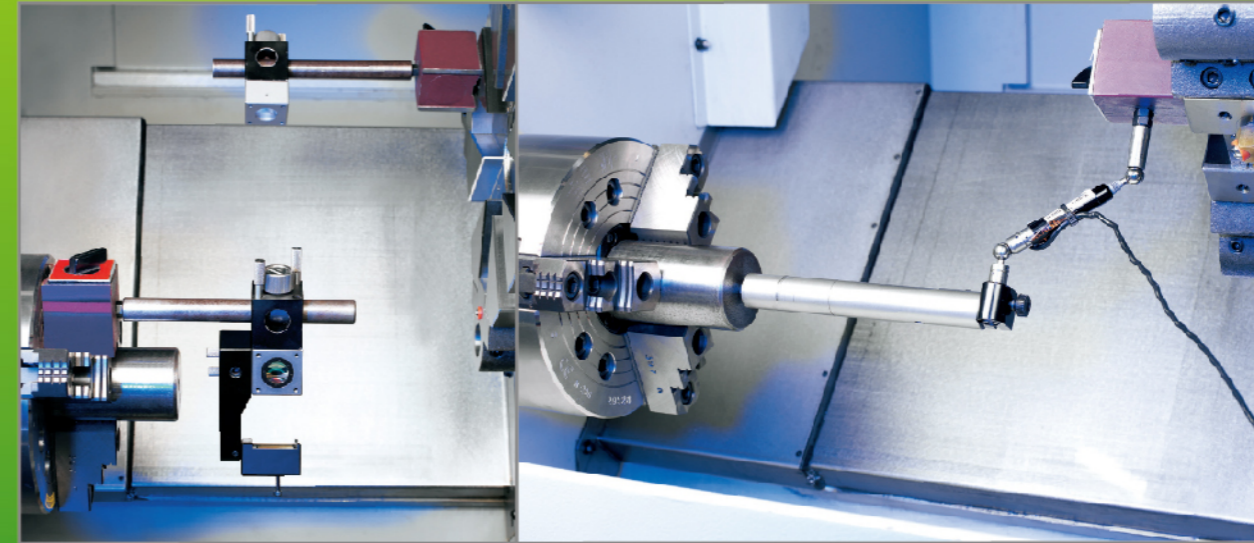
▲ Optimum Chip Outlet

The large chip area, combined with the slant bed design and fully enclosed splashguards, optimizes coolant circulation, chip disposal and overall safety.



▲ Headstock Triangular Design

Engineered triangular headstock with wide base lowers machine center of gravity and creates increased rigidity.

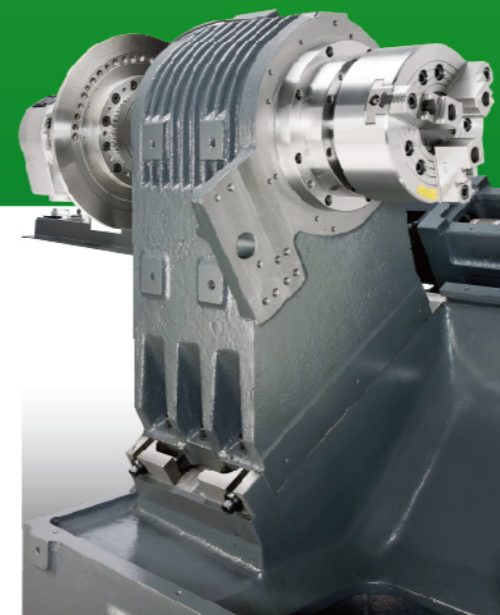
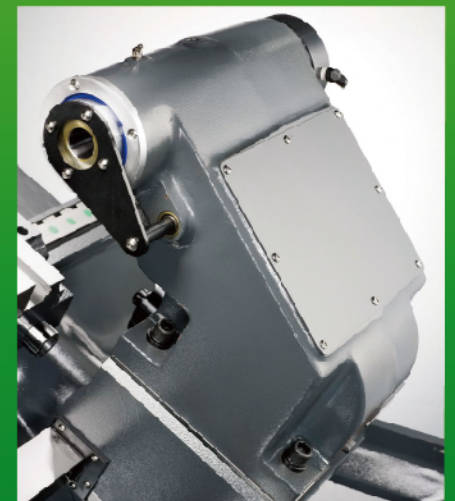


▲ Quality Assurance

Each machine has been inspected before shipping to ensure the operation performance. Ball bar circularity inspection and laser calibration system for dynamic positioning accuracy are imperative inspections.

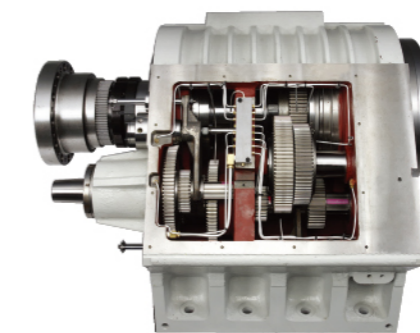
Automatic Tailstock

The saddle drives the tailstock via a lock pin on the tailstock.



▲ High Capacity Cartridge

The N-N bearing spindle design and advanced cooling system not only improves cooling but also decreases thermal deformation while with standing high axial and twisting forces.



ML-850

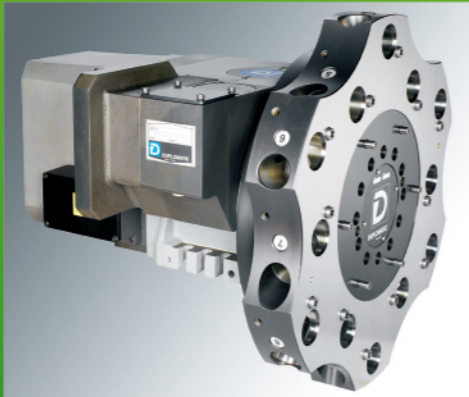
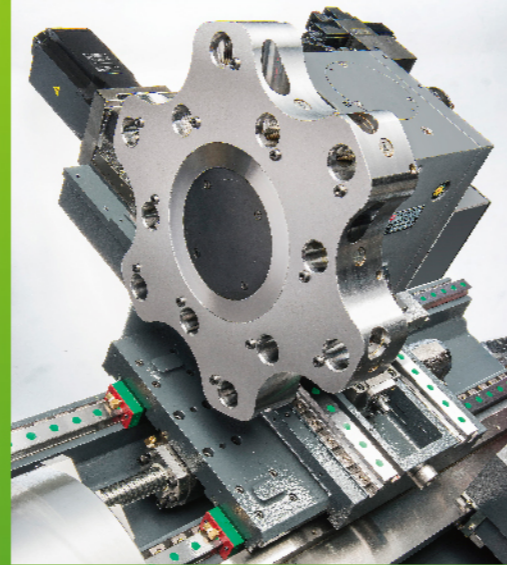
◀ Headstock

Spindle speeds range from 40RPM to 2000RPM with the four speed gear box allowing for high precision heavy duty cutting. Rigid spindle support is provided by one piece box-like construction. An oil cooling system is contained inside the box which is coupled with a heat conduction device mounted outside the box.

OPTIONAL

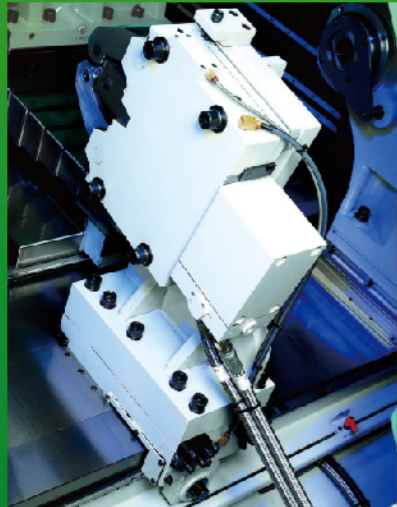


▲ Bar Feeder



Quick Hydraulic / Servo Turret / Live Tooling & C-axis

The parallel twin-cam Geneva indexing design, coupled with the hydraulic motor, base gear and coupling achieve reliable rigid fast tool changes, the result is a tool-to-tool change time of 0.3 seconds and repeatability of 0.003 mm. Coolant through the tool holder improves tool performance, accuracy and surface finish by delivering coolant to the proper point. Servo-driven, live tooling function, powered tool for drilling milling, tapping and boring. It provides various tool capacities and fast tool positioning.

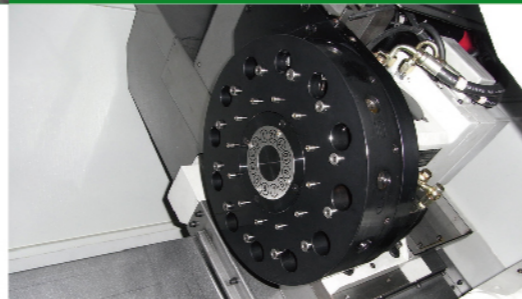


ERM magnetic Encoder

C axis for Lathe application is usually for machining bar material. The precision and repeatability of ERM Magnetic encoder can improve milling performance on C axis application.

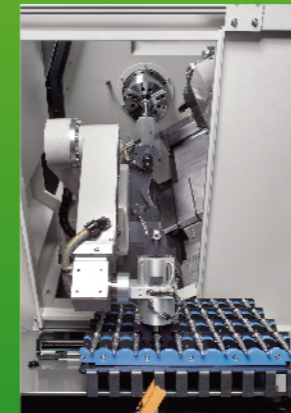
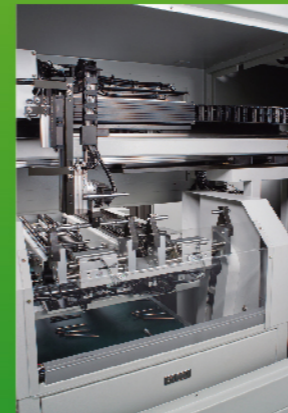
▲ Steady Rest

ML-600L, ML-850

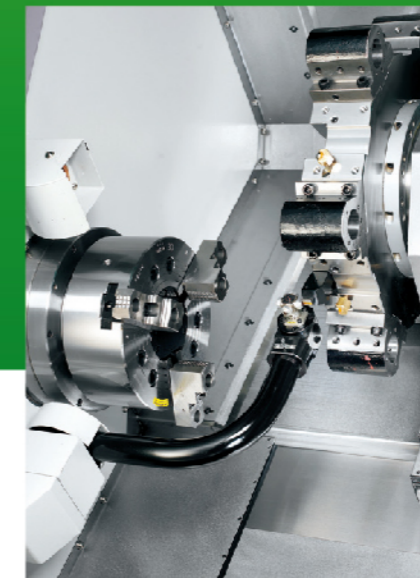


▲ Living Turret & C-axis Function

▼ Robot Automation



▲ PC-base Controller



▲ Parts Catcher

▼ Tool Measurement

The tool is program controlled and automatically (or manually) touches the measuring probe to accomplish the setup process. It sufficiently reduces the setup time and automatically compensates the wear on tools.

Standard Accessories

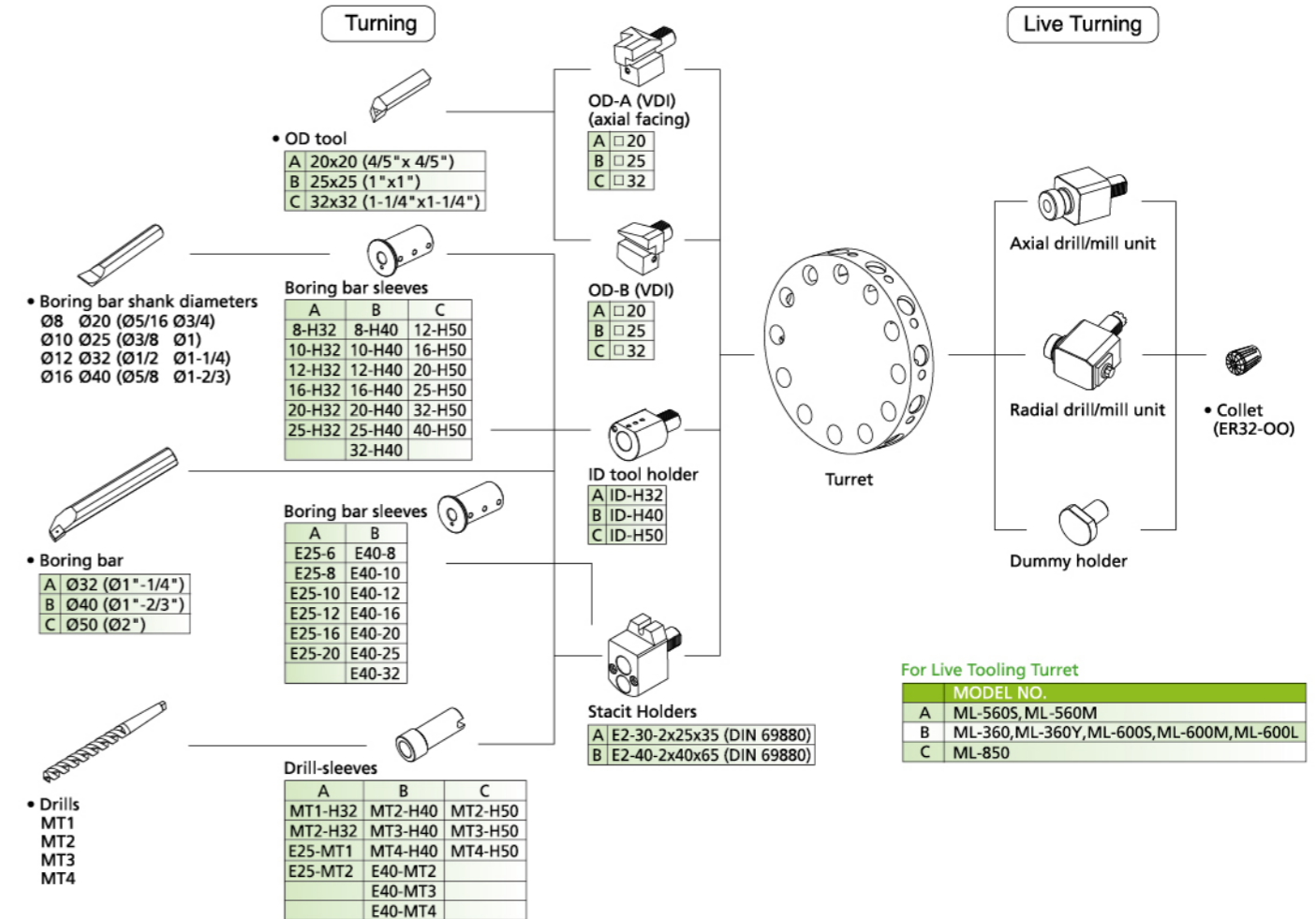
- FANUC Oi-TF controller (Oi-TF3) for ML-560S/M)
- Spindle Motor
- Hydraulic Chuck
- YDPM servo Turret (ML-560S/M, ML-600S/M/L)
Hydraulic Turret (ML-360, ML-850)
- O.D. Turning Tools
- I.D. Boring Bar Holders
Ø8, 10, 12, 16, 20, 25, 32 x O.D. 40 (ML-560S/M, ML-600S/M/L, ML-360, ML-360Y)
Ø12, 16, 20, 25, 32, 40 x O.D. 50 (ML-850)
- Taper Sleeves
MT No. 2, 3, 4 x O.D. 40 (ML-560S/M, ML-600S/M/L, ML-360, ML-360Y)
MT No. 3, 4 x O.D. 50 (ML-850)
- Tailstock Quill
MT 4 (ML-560S/M, ML-360, ML-360Y)
MT 5 (ML-600S/M/L, ML-850)
- Coolant System
- Automatic Tailstock
- Coolant Tank
- Chip Conveyor + Chip Bucket
- Leveling Bolts and Pads
- Auto. Lubrication System
- Work Lamp
- Food Pedal for Chuck
- Tool Kit
- End of Program Light
- YDPM 4-step Gearbox (ML-850)

Options Accessories

- FANUC 31i
- MITSUBISHI Controller
- SIEMENS Controller
- Collet Chuck (Excl: ML-850)
- Bar Feeder
- Bar Feeder Interface
- VDI Turret (10 or 12 Tool)
- Live Tooling (C-axis) (ML-560S/M, ML-600S/M/L, ML-360, ML-850)
- Parts Catcher
- Oil and Coolant Separator
- Oil Mist collector
- Automatic Door
- YDPM Manual Tool Setter
- Automatic Tool Setter
- Transformer
- CE
- ZF or YDPM 2-step Gearbox
- Sling Frame
- Stabilizer
- Cooler for Coolant Tank
- Air Conditioner for Power Cabinet
- SMW Steady Rest (ML-600L, ML-850)
- Servo Turret.

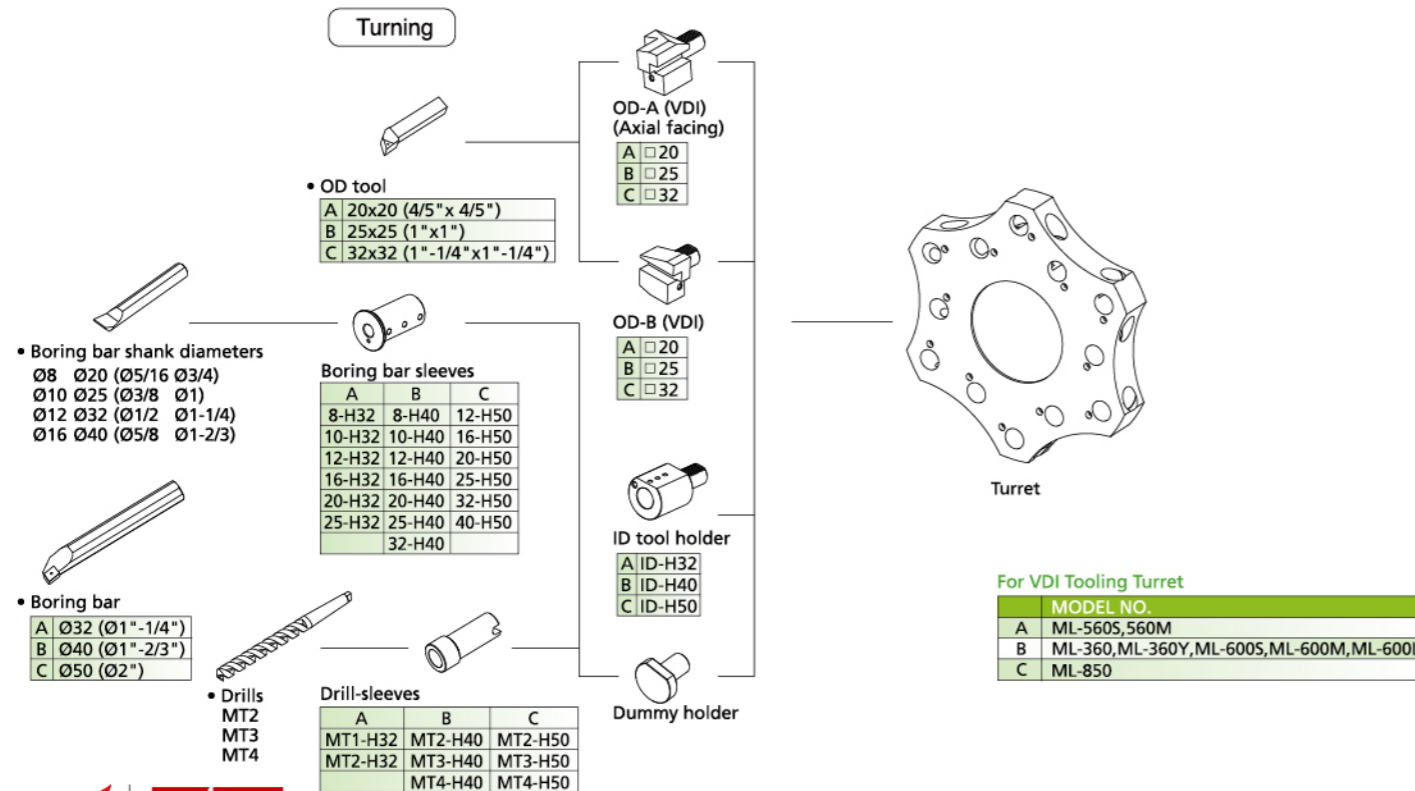
Live Tooling Turret

Unit: mm • Commercial parts



VDI Tooling Turret

Unit: mm • Commercial parts



Hydraulic Tooling Turret

Unit: mm • Commercial parts

