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NC Specifications

ITEM	SPECIFICATIONS	FANUC-0i Mate TD	FANUC-0i TD	FANUC-31i - A
CONTROL AXIS				
Control axis		X,Z,C		X,Z,Y,B,C,A
FUNCTION				
Feedrate override	0-200%(10% unll)	○		○
Reference position return	G27,G28,G30	○		○
Rapid traverse override	-	F0/25/100%		F0,F5,F25/F50,F100%
SPINDLE FUNCTION				
Cs control		○		○
AXIS CONTROL FUNCTION				
Simultaneously control axis expansion (Total)	Max,4axes	○		Max. 6 axis
Increment system 1/10	0.0001mm/0.00001"	○		○
Polar coordinate interpolation	G21.1,G31.1	○		○
TOOL FUNCTION				
Tool number command	T4-digit	○		○
Tool nose radius compensation	G40~G42	64		64
Number of tool offsets		○		○
Tool life management		○		○
Auto tool offset		○		○
PROGRAM EDIT FUNCTION				
Multi repetitive canned cycle	G70~G76	○		○
Circular interpolation	G01,G03	4		○
Sub program call	Nested holds	○		○
Work coordinate system selection	G52~G59	○		○
Maximum command dimension	+-99999.999mm/(+-9999.9999inch)	○		○
Continuous thread cutting		○		○
Programmable data input	G10	○		○
TAPE FUNCTION				
I/O interface	RS-232C	○		○
Part program storage length		512K	1280m	2560m
No. of Registered programs		400EA		500EA
MDI/DISPLAY unit		8.4" LCD		10.4" Color LCD
OTHER FUNCTION				
Running time / parts number display	Auto running time & Parts No. display	○		○
Optional block skip		○		○
Ethernet function	Embedded ethernet function	-	○	○

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※ Design and specifications are subject to change without prior notice.
※ We do not take responsibility for the difference between the information in catalogues and the actual machine.

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TURNING CENTER

DL B SERIES

DMC
MACHINE TOOLS

DL B SERIES

DL B SERIES

DL 22 A / B / LA / LB / MA / MB / LMA / LMB

High speed, Hi precision, High productivity

High accuracy and powerful turning center equipped with box guideways.

High-speed, High-accuracy, High-productivity

High-rigidity structure

AC servo motors of each axis (X / Z) connected to ball screws to ensure " zero" backlash and " zero" vibration.
In addition, The double-anchored large - pretension ball screw minimizes heat distortion.
Sturdy and solid slant bed design reduces vibration in heavy duty cutting.
Easy chip clean-up and high-accuracy precision machining add up to greater productivity.

Stroke (X/Z axis)

Model	X	Z
DL 22 A / B	210	430
DL 22 LA / LB	210	580
DL 22 MA / MB	200	410
DL 22 LMA / LMB	200	530

Guideway & Operation panel

Guideway

Bed with 6-face arresting Box way sliding structure prevents distortion and ensure the best perfor mance.

Rapid traverse

X / Z-axis 24 / 24 m/min

Maximum stroke

X / Z-axis 200 / 530 mm
(DL 22 LA)

Ergonomic design for control panel

The centralized.
Swivel operation panel can turn to 90 degree, providing operators with easy access to the control panel while working on the machine.

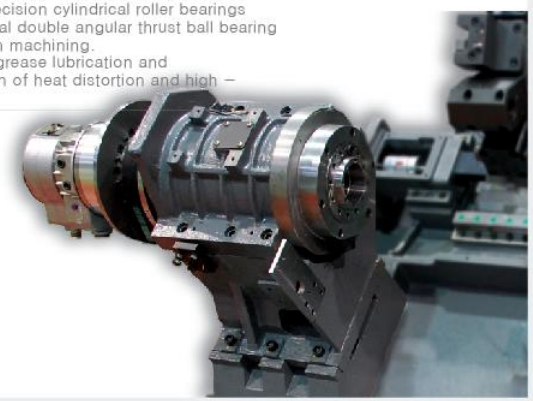
DL B series

CNC TURNING CENTER

High-speed, High-accuracy, High-productivity

High-rigidity headstock

Special grease lubrication system and heat radiating rib are integrated by Meehanite casting which will minimize its thermal distortion of spindle.
The headstock is supported by 2 high−precision cylindrical roller bearings at both front / back sides with an additional double angular thrust ball bearing insrted between for the optional stability in machining.
This meehanite cast comes with custom grease lubrication and heat − radiating fan, realizing minimization of heat distortion and high − precision machining.



Spindle motor

11/15 kw

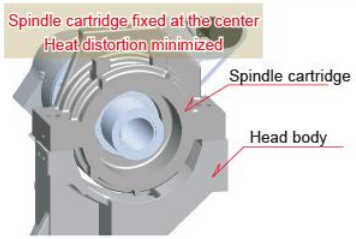
Servo motor

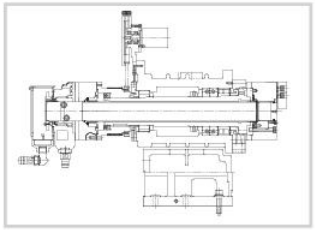
X / Z-axis 3 / 3 Kw

Spindle speed

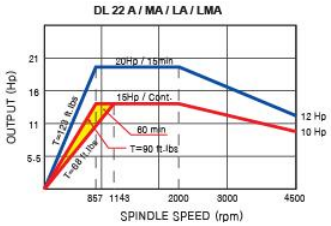
4,000 rpm (22 A)
3,500 rpm (22 B)

Main spindle view





Main spindle power & Torque diagram



Turret

Tool quantity

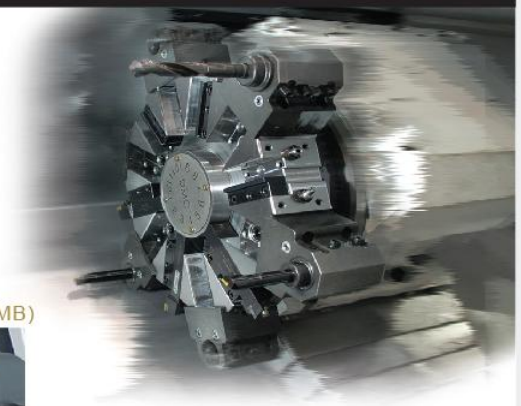
12EA

Turret index

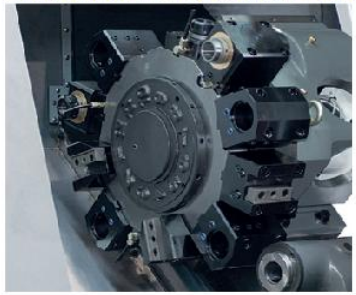
SERVO

Tool size

O.D : □25
I.D : Φ40



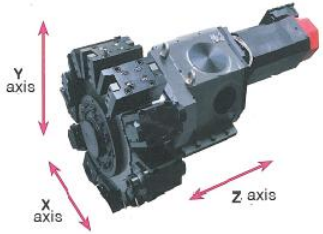
Mill turret (turn mill) (22MA / 22MB)



The 12 - position turret enables various combinations of O.D./I.D. tool holders in all positions, FANUC servo motor index and 3 - pieces curvic coupling proride rapid and reliable tool change.

Integrated BMT55(Mill Turret)

High performance Y- axis



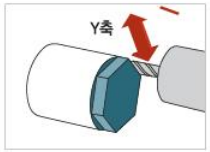
With live tools C-axis, Y-axis capability, andlor subspindle comeplex machining operations can be done in just one set-up, reducing unnecessary set-up time and significantly improving machining accuracy and productivity.

Y−axis stroke
80mm

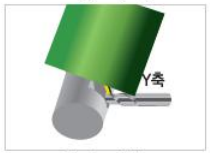
Y−rapid travers
10m/min

Simultaneous X, Y, Z axis feed control and C axis funtion and X/Y axis circular interpolation function can make available for complex shape workpice easy machining at high accuracy.

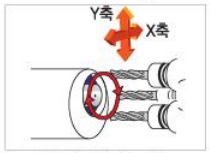
Home finishing cutting using Y-axis



Multi face machining



Off centered milling



Y&X axis circular interpolation

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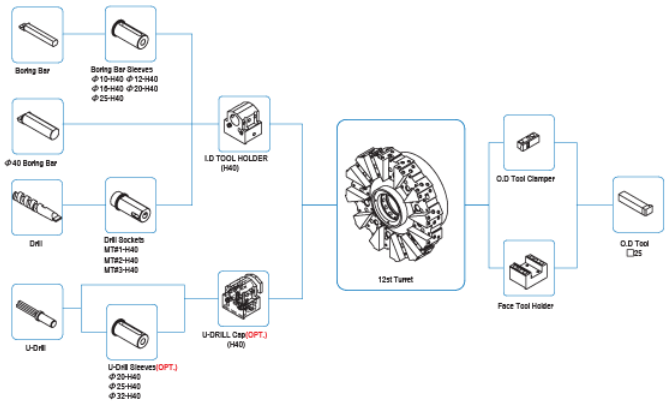
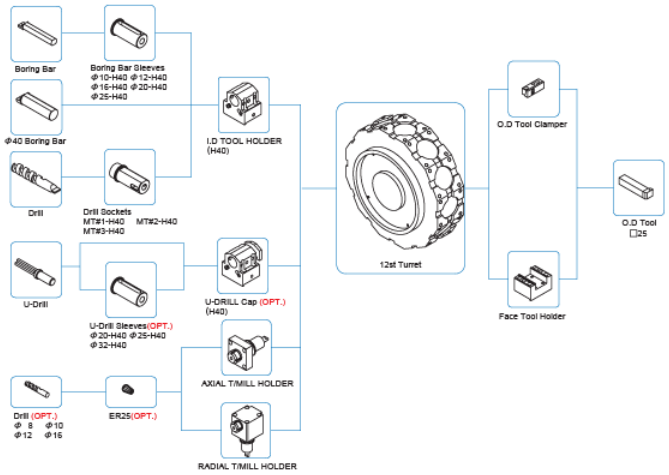
Tooling diagram

DL 22 A / B / LA / LB

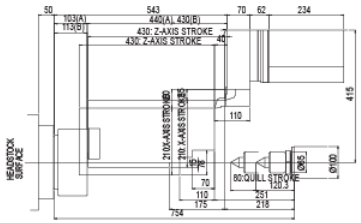


DL 22 MA / MB / LMA / LMB

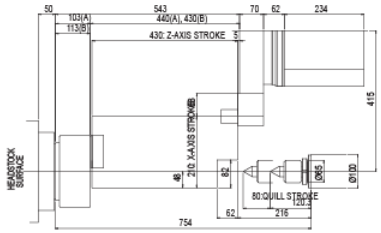


Working range

DL 22 A / B

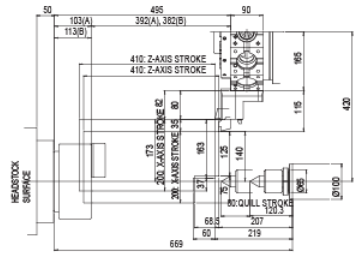


▶ O.D tool

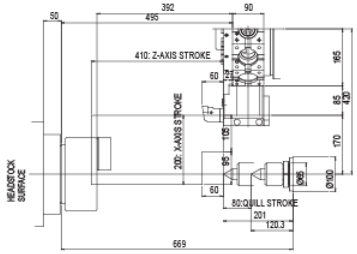


▶ I.D tool

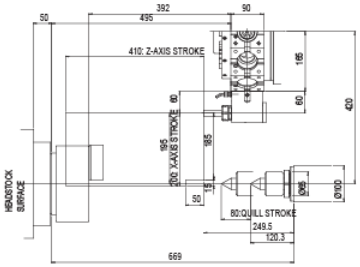
DL 22 MA / MB



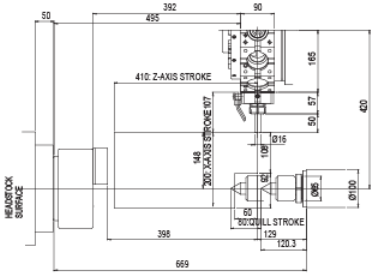
▶ O.D tool



▶ I.D tool



▶ Radial tool



▶ Axial tool

DL B series

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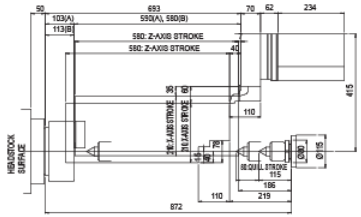
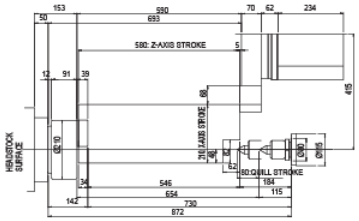
Working range

DL 22 LA / LB

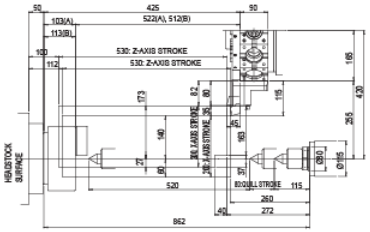


▶ O.D tool

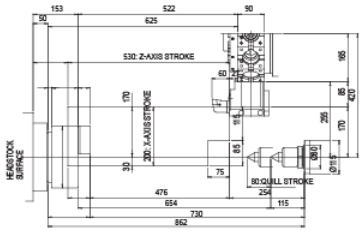


▶ I.D tool

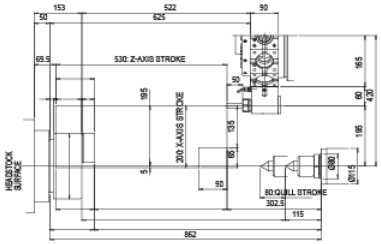
DL 22 LMA / LMB



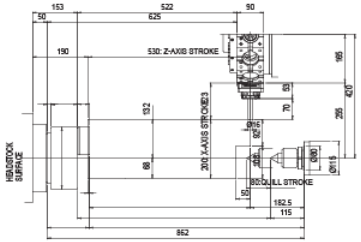
▶ O.D tool



▶ I.D tool



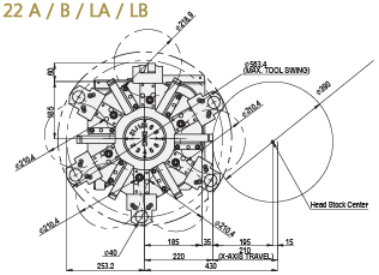
▶ Radial tool



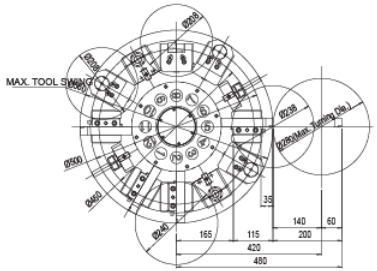
▶ Axial tool

Tool interface diagram

DL 22 A / B / LA / LB

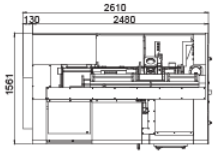


DL 22 MA / MB / LMA / LMB

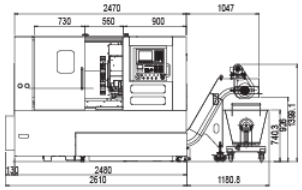


Machine lay-out

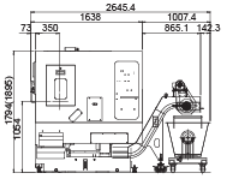
DL 22 A / B / MA() / MB()



▶ Top view

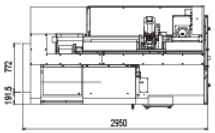


▶ Front view

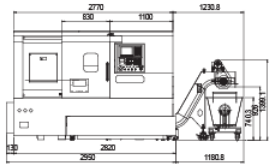


▶ Side view

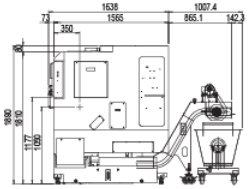
DL 22 LA / LB / LMA / LMB



▶ Top view



▶ Front view



▶ Side view

DL B series

CNC Turning Center

High-speed, High-accuracy, High-productivity

Machine major specifications

ITEM			UNIT	DL 22A	DL 22B	DL 22LA	DL 22LB	DL 22MA	DL 22MB	DL 22LMA	DL 22LMB	DL 22LMSY	
CAPACITY	Swing over bed		mm	Φ550			Φ550					Φ550	
	Swing over cattiage		mm	Φ360			Φ360					Φ360	
	Max. cutting diamter		mm	Φ350			Φ280					Φ280	
	Max. cutting length		mm	410	390	550	530	340	340	510	490	500	480
	Bar capacity		mm	65	75	65	75	65	74	65	74	65	74
SPINDLE	Chuck size		inch	8"(BIG)	10"	8"(BIG)	10"	8"(BIG)	10"	8"(BIG)	10"	8"	10"
	Max. spindle speed		rpm	4,000	3,500	4,000	3,500	4,000	3,500	4,000	3,500	4,000	3,500
	Spindle nose		-	A2-6	A2-8	A2-6	A2-8	A2-6	A2-8	A2-6	A2-8	A2-6	A2-8
	Bearing diameter(Front)		mm	Φ110	Φ130	Φ110	Φ130	Φ110	Φ130	Φ110	Φ130	Φ110	Φ130
	Spindle bore diameter		mm	Φ76	Φ86	Φ76	Φ86	Φ76	Φ86	Φ76	Φ86	Φ76	Φ86
	C-Axis spindle index angle		kgf-m	0.001								0.001	
	Driving way		-	BELT								BELT	
SERVO MOTOR	Servo chuck size			-								6"	
	Servo spindle speed			-								6,000	
TRAVEL	Axis stroke	X-axis	mm	200								200	
		Z-axis	mm	430		580		410		530		550	
		Y/b-axis	mm	-								80(±40) / 550	
	Rapid traverse rate	X-axis	m/min	24								24	
		Z-axis	m/min	24								24	
		Y/b-axis	m/min	-								10 / 24	
	Slide way(X/Z)		-	Box guide								Box guide	
TURRET	Turret index		-	SERVO								Servo	
	No. of tools		ea	12 / BMT55								12 / BMT55	
	Tool size	O.D	mm	□25								□25	
		I.D	mm	Φ40								Φ40	
	Turret clamp		kgf	4,453								4,453	
	Turret indexing time(1st swivel)		sec	0.2								0.2	
	Rotating tool speed			5,000								5,000	
TAIL STOCK	Tail stock quill dia. X traverse		mm	Φ80x80								–	
	Tail stock quill taper		MT	MT#4								–	
	Tail stock body traverse	Cont/30min	mm	400		520		400		520		–	
MOTOR	Spindle motor		kw	11/15 [15 / 18.5]								11/15 [15 / 18.5]	
	Servo motor		kw	-								5.5 / 7.5	
		X-axis	kw	3								3	
		Z-axis	kw	3								3	
	Rotating tool motor		kw	-				2.2/3.7				2.2 / 3.7	
MACHINE	Power capacity		kVA	30								40	
	Machine height		mm	1,880								1,880	
	Floor space		mm	2,650		2,950		2,650		2,950		3,150	
	Machine weight	Length	mm	1,650								1,650	
		Width	kgf	4,000	4,050	4,400	4,450	4,050	4,150	4,500	4,550	4,600	4,650
	CNC Controller			F 0i - TD								F 31i - A	

[ ] OPT

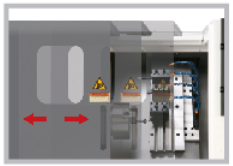
Standard / optional accessories

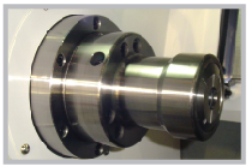
Standard accessories

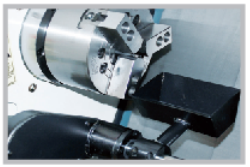
- Hydraulic chuck
- Soft jaw
- Tool & tool box
- Hydraulic unit
- Door interlock
- Coolant supply equipment
- Worklight
- Levelling bolt & plate
- Foot switch

Optionnal accessories

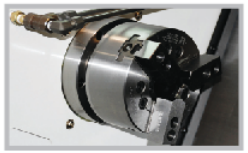
- Auto door
- Collet chuck
- Parts catcher
- Tool presetter
- Chuck air blow
- C-axis
- Chip conveyor (side)
- Chip bucket
- Barfeeder interface
- Transformer
- Oil Skimmer
- Automatic power turn-off fuction
- Special chuck
- Tool counter
- Additional tool holder & sleve
- Air gun
- Switch to detect quill position of the tailstock
- Oil mist collector


Auto Door


Collet Chuck


Parts Catcher

Tool Pre-setter


Chuck Air Blow

C-Axis

Chip conveyor (side)

Coolant gun

Oil cooler