



LR SERIES



 HORIZONTAL TURNING & TURNMILL CENTERS

LR30 C



LR30T L7



LR30T L12



LR40T L15 1.5 METER TURNING CENTER



LR SERIES

- Max. Turning dia upto 600mm
- Max. Turning Length upto 1500mm
- Rigid Integral Bed structure design
- Heavy duty Box Guideways & ball screws
- Larger Size steady rest option to accommodate shaft components
- High Powerup series spindle for heavy depth of cuts
- Powerful Spindle motor for higher torque

LR SERIES

Computerised numerically controlled 2-axes Lathe, complete with hydraulic turret, coolant unit, hydraulic unit and other standard accessories suitable for operation on 415V +10%, 3 phase, 50 cycle AC supply and capable of performing a variety of machining operations such as straight turning, drilling, boring, contouring with linear and circular interpolation, internal & external threading etc.

The machine base is of rigid, sufficient wide torsion-free box type construction.

Bed, saddle and all major casting is of high grade FG 300 grey cast iron, duly stress relieved. The machine bed is at a 45 degree slant, to avoid chip accumulation at the front side.

The saddle and headstock are mounted on the same plane to minimize effect of thermal distortions on the component accuracies.

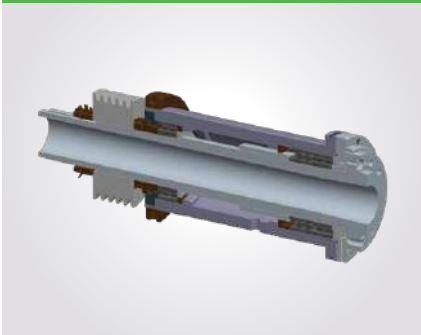
Hardened and ground box guideways are used for movement of both the axes. The guideways and ball screw is properly lubricated by centralised unit.

SPINDLE

The high precision main spindle is manufactured in a temperature controlled room.

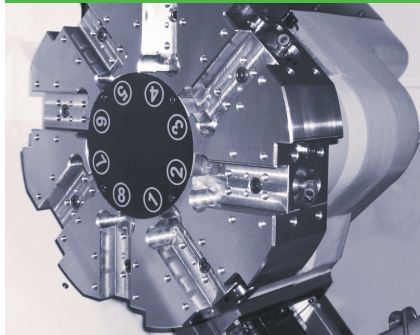
Preloading requirement of each set of spindle bearing is measured accurately.

The spindle is housed in a robust headstock (Cartridge type spindle).



TURRET

The turret is hydraulically operated, 8 position shortest path bi-directional indexing type. The turret has provision through tool coolant for use of carbide U drills.



TAILSTOCK

The tailstock is guided and clamped on the integral bed guideways. The base movement is manual and the tailstock is with a built-in center.



SPECIFICATIONS

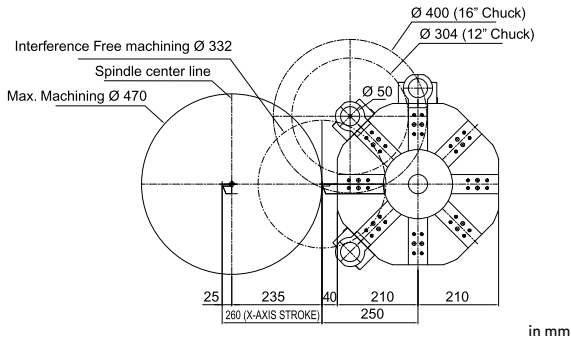
Title	Description	Unit	LR30 C	LR30T L7	LR30T L12	LR40T L15
Capacity	Swing over bed	mm	680		680	760
	Chuck dia. Max	mm	304		304	381
	Max. Turning dia	mm	470		470	600
	Max. Turning Length*	mm	400	700	1200	1500
	Admit between centres	mm	-	820	1462	1640
Spindle	Spindle nose	type	A2-8		A2-8	A2-11
	Hole through spindle	mm	77		77	113
	Spindle speed	rpm	3500		3500	1900
	Spindle motor power (Cont./30 min)	kW	15/18.5		15/18.5	18.5/22
Feed System	Cross travel X-axis	mm	260		262	330
	Longitudinal travel Z-axis	mm	500	760	1260	1620
	Rapid traverse rate X/Z axes	m/min	20 / 24		20 / 24	20 / 24
Turret	No. of stations	nos.	8		8	8
	Tool shank size	mm	25 x 25		25 x 25	32 x 32
	Max. Boring bar dia.	mm	50		50	60
	Turret indexing	type	Bi-Directional			
Tailstock	Quill dia	mm	NA	85	85	120
	Quill stroke	mm		80	120	120
	Quill taper	-		MT-3	MT-4	MT-6
CNC System	Controller	-	Fanuc			
Power Supply	Power Requirement	kVA	32	32	30	39
Machine Size	Front x Side x height	mm	3015 x 1615 x 2240		4405 x 2100 x 2498	4950 x 2475 x 2500
	Weight (Approx.)	kg	5000	5200	7500	11000

Note: *May vary depending upon make / model of chuck.

TURRET INTERFERENCE

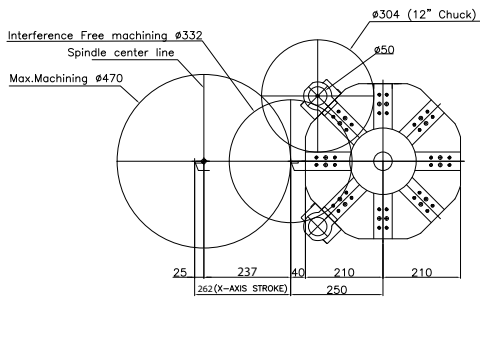
LR30 C

8 STATION



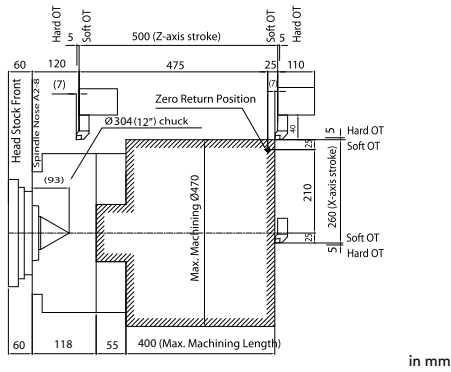
LR30T L12

8 STATION

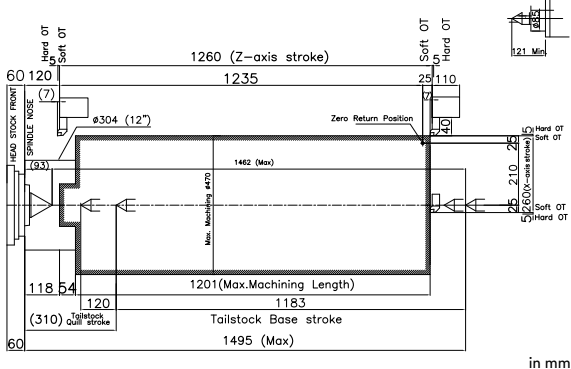


MOVING RANGE

LR30 C

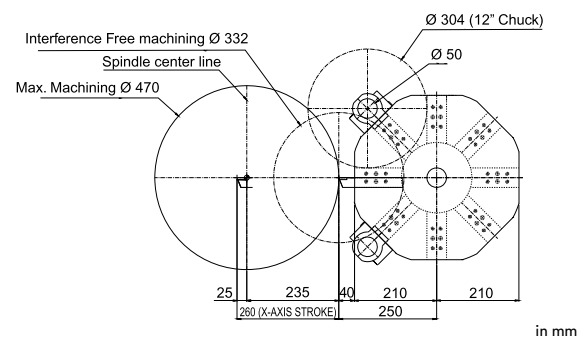


LR30T L12



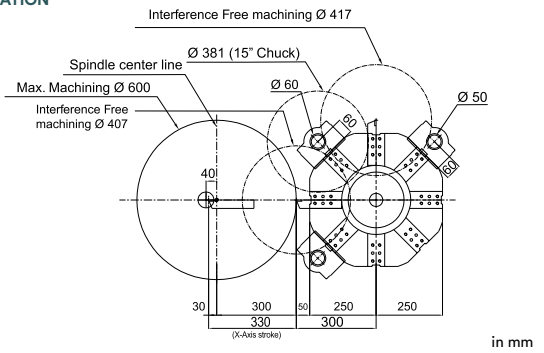
LR30T L7

8 STATION

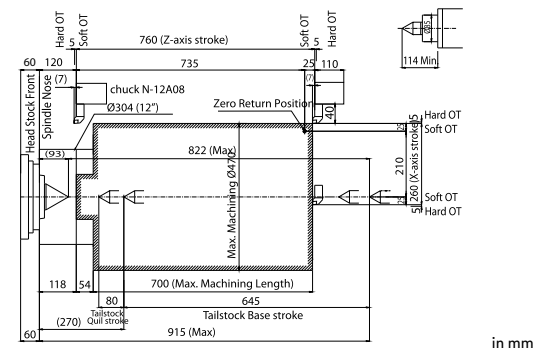


LR40T L15

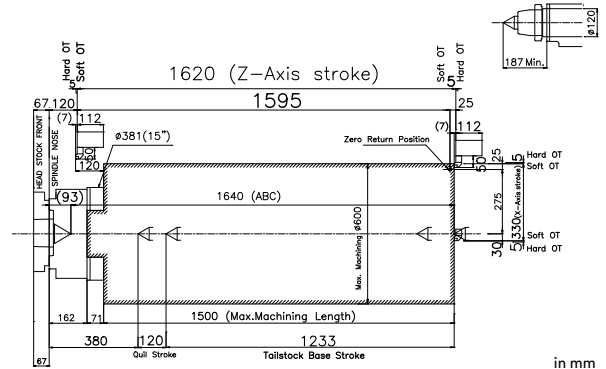
8 STATION



LR30T L7

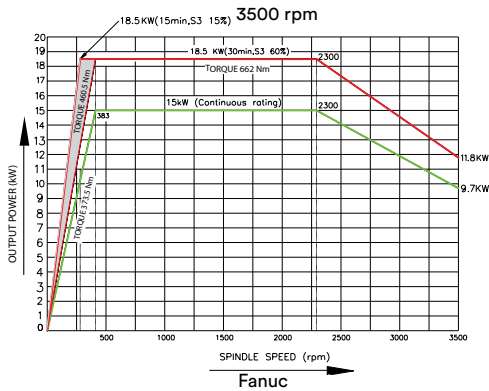


LR40T L15

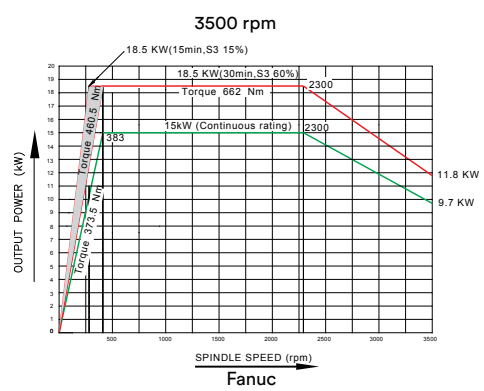


SPEED POWER CURVE

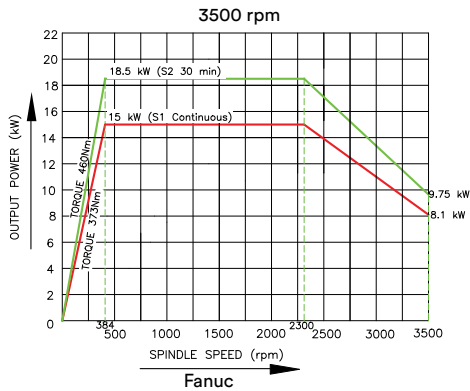
LR30 C



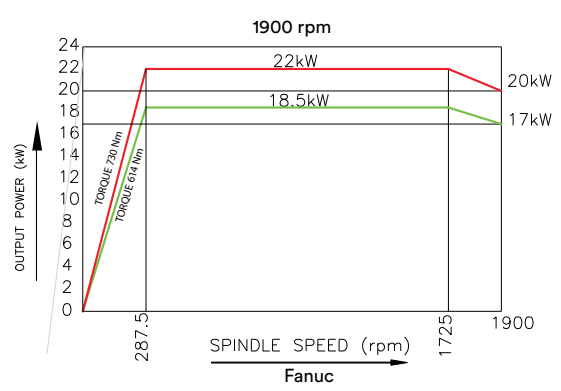
LR30T L7



LR30T L12



LR40T L15 (WITHOUT GEAR BOX)



MATERIAL REMOVAL RATE (MRR)

STEEL EN8

TURNING TEST

Description	Unit	LR30T L7 / LR30 C
Diameter	mm	151
Cutting Speed	m/min	200
Spindle Speed	rpm	422
DOC	mm	6
Feed	mm/rev	0.32
Capacity	cc/min	384
Spindle Load	%	95

DRILLING TEST

Description	Unit	LR SERIES
Diameter	mm	60
Cutting Speed	m/min	175
Spindle Speed	rpm	930
Feed	mm/rev	0.13
Spindle Load	%	106



Note : Values shown are in test conditions, may vary depending on tools, materials and cutting parameters / conditions.

LR SERIES

BASIC INFORMATION

SPECIFICATIONS

DIAGRAMS

APPLICATIONS

HIGHLY RIGID TURNMILL CENTER

LR30TM L7



LR40TM L15



HIGHLIGHTS

- Torsion Free Box Construction
- Hard & Ground Guides
- BMT 65 Turret
- 12 Station Drive Tools

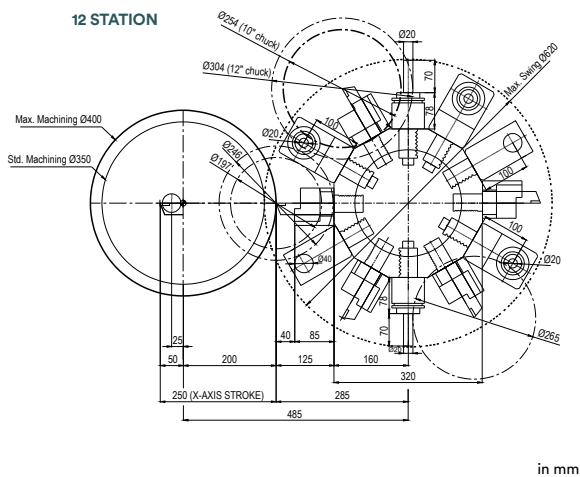
SPECIFICATION

Title	Description	Unit	LR30TM L7	LR40TM L15
Capacity	Swing over bed	mm	680	760
	Chuck dia. Max	mm	304	381
	Max. Turning dia	mm	400	570
	Max. Turning Length*	mm	630	1400
	Admit between Centres	mm	820	1600
Spindle	Spindle nose	type	A2-8	A2-11
	Hole through spindle	mm	77	113
	Spindle speed	rpm	3500	1900
	Spindle motor power(Cont./30min)	kW	15/18.5	18.5/22
Feed System	Cross travel X-axis	mm	250	330
	Longitudinal travel Z-axis	mm	710	1550
	Rapid traverse rate X/Z axes	m/min	20 / 24	
Live tool Turret (BMT 65)	No. of stations	nos.	12	
	Tool shank size	mm	25 × 25	
	Max. Boring bar dia.	mm	40	
	Turret indexing	type	Servo	
	Turret indexing time	sec	0.65	1.5
	Driven motor power	kW	4.5	
	Rotary tool speed	rpm	5000	
Tailstock	Quill dia	mm	85	120
	Quill stroke	mm	80	120
	Quill taper	-	MT-3	MT-6
CNC System	Controller	-	Fanuc	
Power Supply	Power Requirement	kVA	35	39
Machine Size	Front x Side x height	mm	3015 × 1615 × 2240	4950 × 2475 × 2500
	Weight (Approx.)	kg	5200	11000

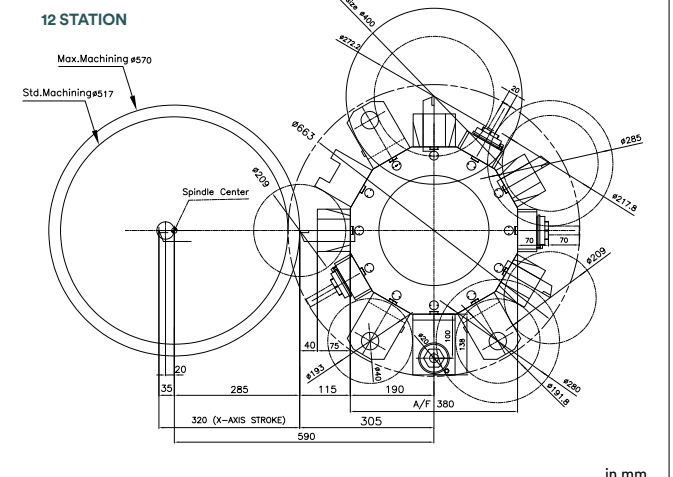
Note: *May vary depending upon make / model of chuck.

TURRET INTERFERENCE

LR30TM L7

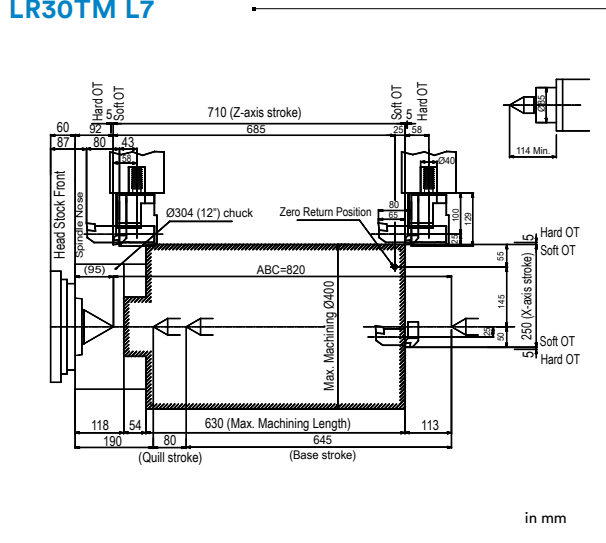


LR40TM L15

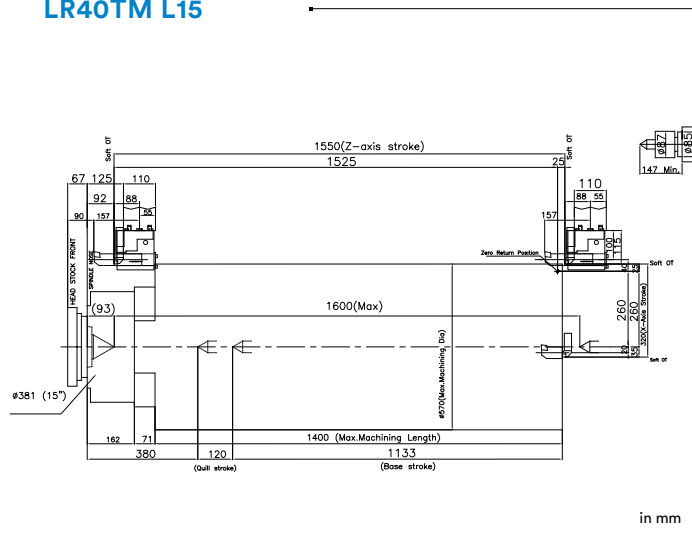


MOVING RANGE DIAGRAM

LR30™ L7

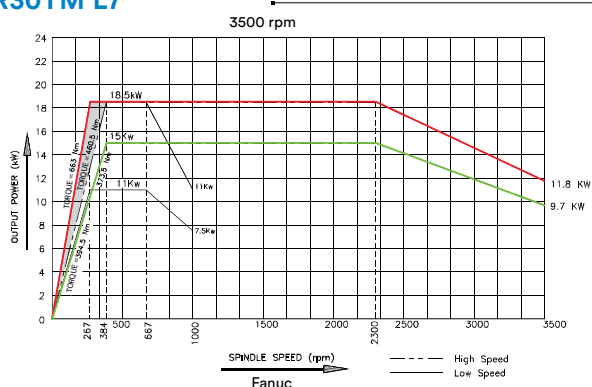


LR40™ L15

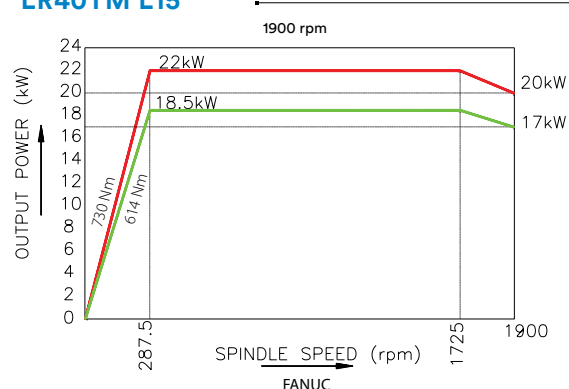


SPEED POWER CURVE

LR30™ L7



LR40™ L15



COMPONENTS



Ring Gear



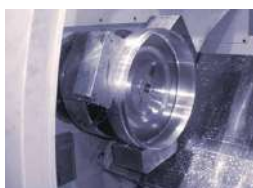
Calliper Housing



Pump Casing (ID)



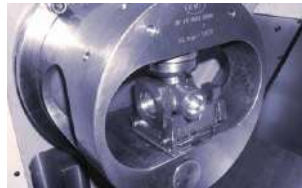
Impeller



Fan Cover



Axle Arm



Valve Body



Differential Case

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