



“Exceeding Your Expectation”

“Leading Into A Greater Future”

LEADWELL
LEADWELL CNC MACHINES MFG., CORP.



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※ All performance are based on 220V/3PH/60HZ. Specification are subject to change without notice.

LTC Series
High Rigidity
Horizontal Turning Center

LTC-35C/CL/CXL/CXXL/CLV
LTC-35M/LM/XLM/XXLM/LVM
LTC-35Y/LY/XLY/XXLY/LVY

Innovative design

All machines with exceptional high rigidity and stability are certified by Meehanite casting production. With a high-power spindle motor, the machine is capable of highly efficient turning ability with 4006mm maximum turning length. With an optional power turret, the machine can control workpiece processing precision affectively through turning, milling, and drilling processing models.

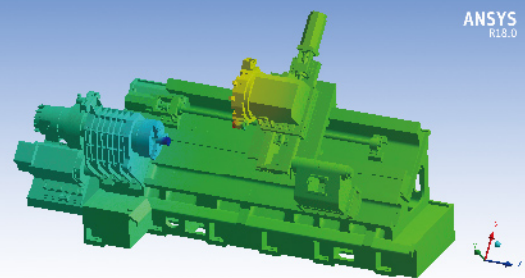
SPINDLE

- In-house manufactured spindle with latest labyrinth waterproof design ensure the parts life.
- One-piece-formed spindle sleeve with angular contact ball bearings provide the best accuracy and running without deflection function.
- Heavy spindle head, high rigidity spindle, and superior bearing design are all conducive to heavy cutting, high speed, and high precision machining.

Z-axis travel
1100-4100mm

Max. workpiece weight
2000kg

Max. turning length
1030-4006mm



• FEA analysis

CHIP CONVEYOR(CHAIN TYPE)

The slant bed design provides large space for chips directly falling into the chip tank, and the chain-type chip conveyor can improve chip removal ability, maintaining a clean environment for simple, convenient, safe, and labor-saving purposes.

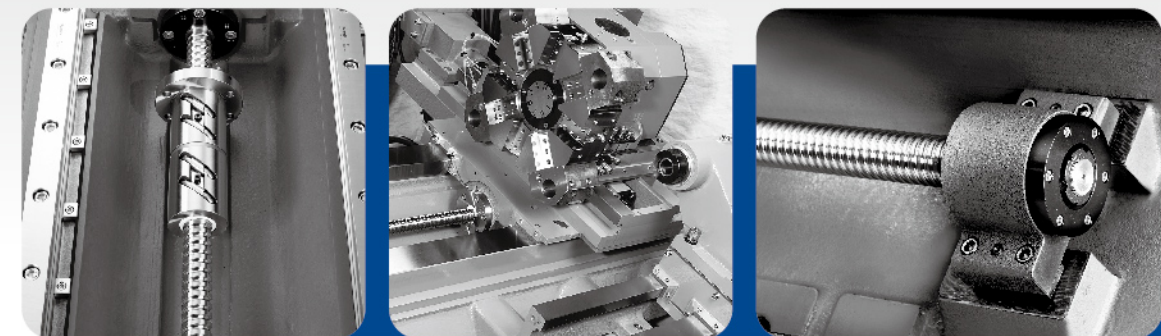
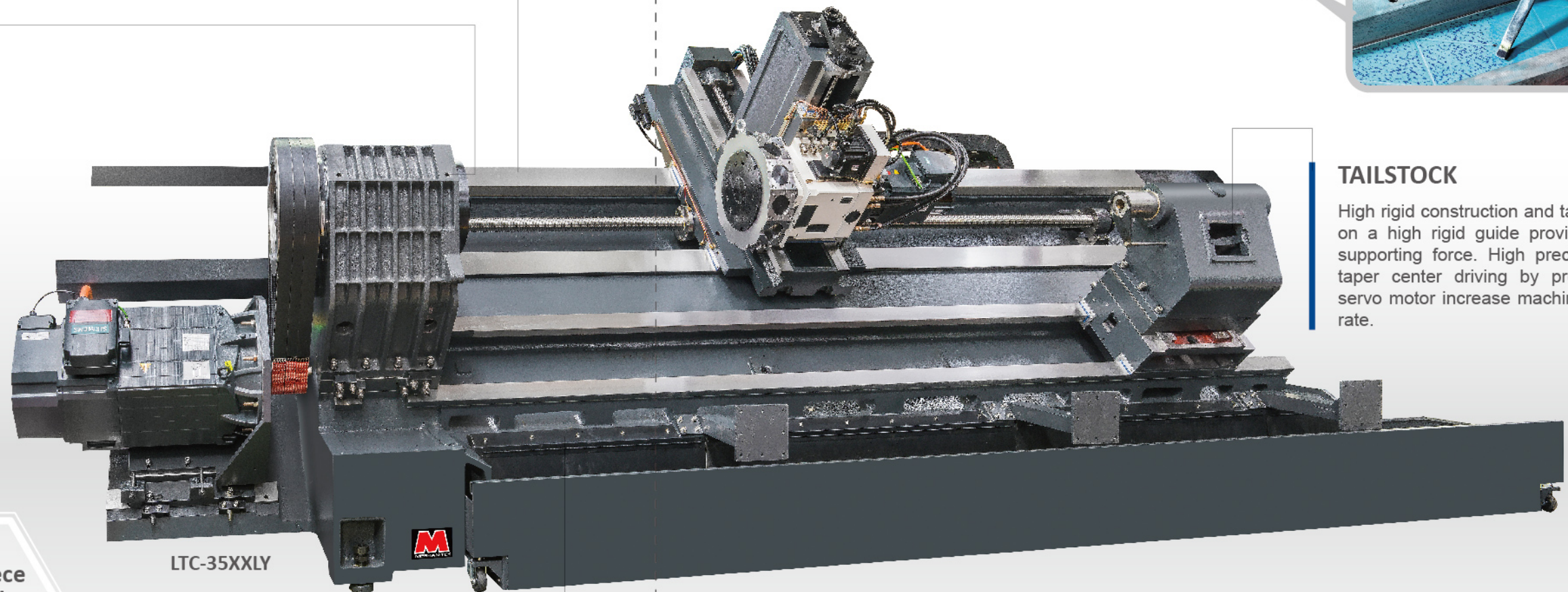
SCRAPING

Contact surfaces of all high rigid box way and TURCITE- β are accurately scrapped to ensure smooth contact surface and enhance overall bearing capacity and processing precision.



TAILSTOCK

High rigid construction and tailstock slide on a high rigid guide provides a great supporting force. High precision Morse taper center driving by programmable servo motor increase machine utilization rate.



PRECISION BALL SCREW

Apply high quality ball screw with low torque fluctuations, and long-term product lifetime.

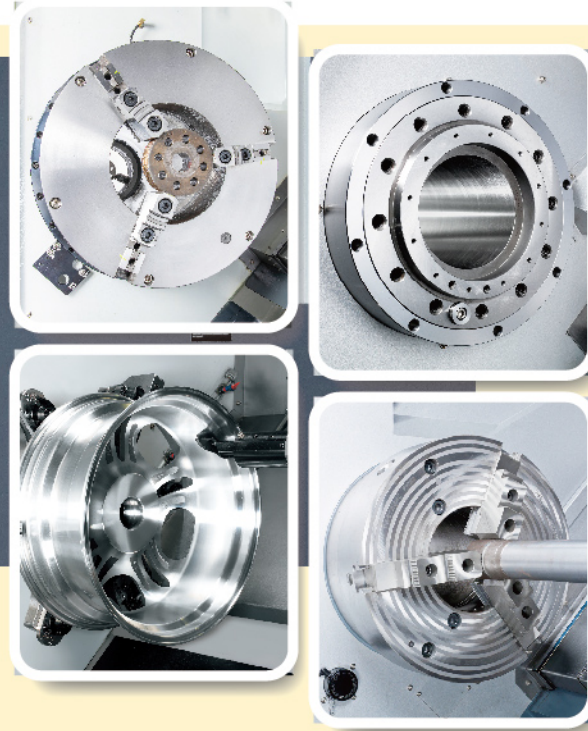
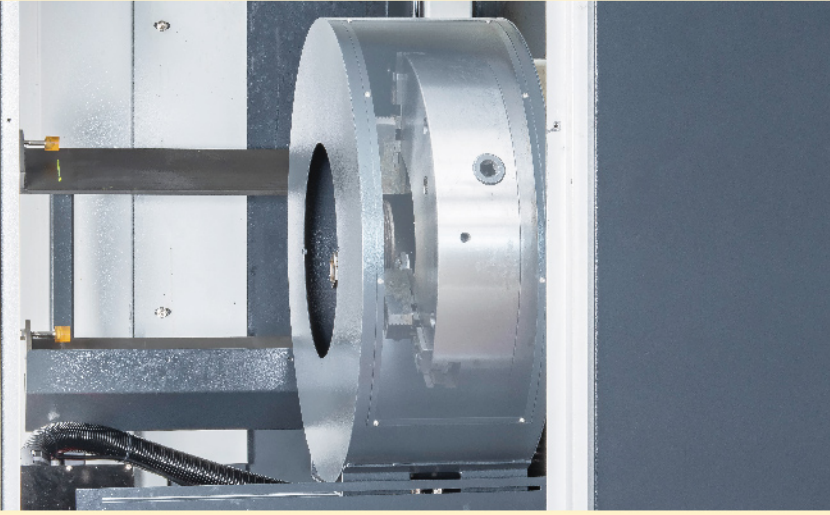
HIGH RIGID BOX WAY

With great damping resistant, high capacity and low vibration, ideal for heavy-duty cutting.

SHEET METAL

Fully enclosed splash guards keep chips and coolant contained for a safe clean working environment.

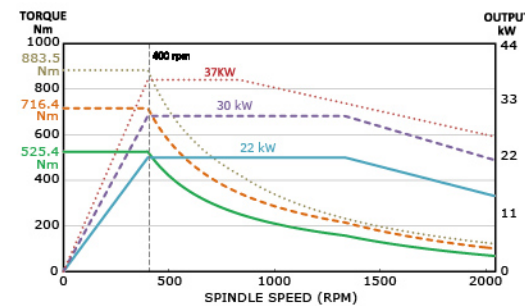
LARGE HOLE SPINDLE



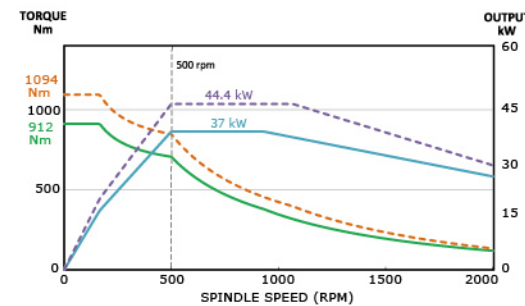
- Range of large hole spindle: 185~365mm (7.5"~14.37").
- Optional 12/21/24/32 inches chuck.
- Optional air and manual chuck.
- Foot switch for chuck control facilitates clamping and unclamping workpiece.

SPINDLE POWER CURVE

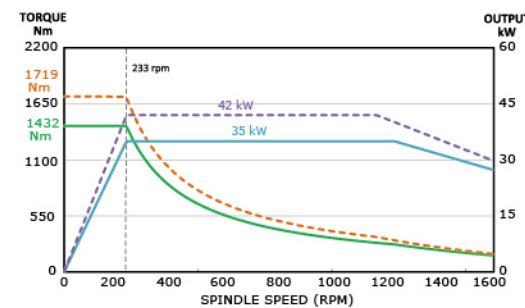
LTC-35 SERIES
(α P50i/2000rpm)



LTC-35SERIES
(1PH8165/2000rpm)

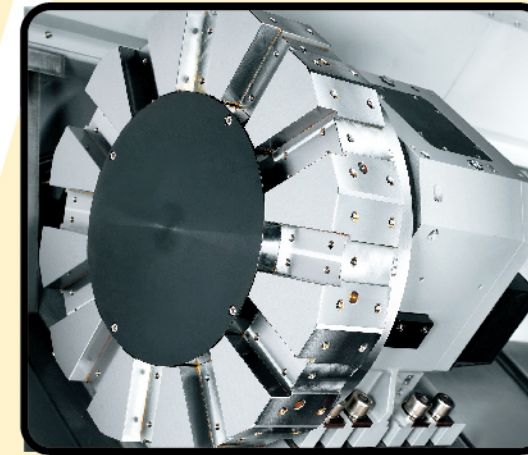


LTC-35M/LTC-35Y SERIES
(1PH8186/1600rpm)



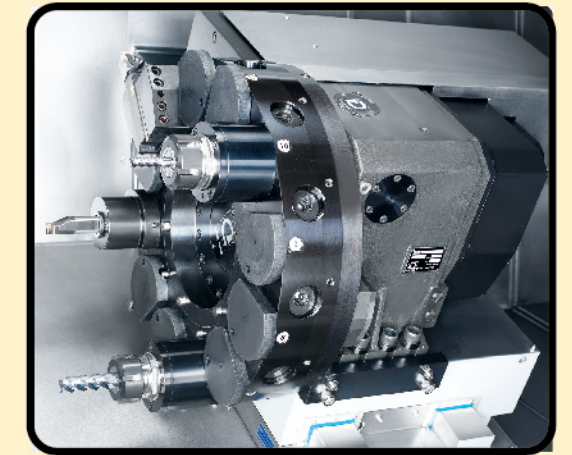
— Torque - S1 (Nm) — Torque - S2 30 min (Nm) — Torque - S3-25% (Nm)
— Output - S1 (kW) — Output - S2 30 min (kW) — Output - S3-25% (kW)

HIGH ACCURACY TURRET



STANDARD TURRET (12 TOOLS)

Driven by hydraulic, rotating smoothly and easily select the tools to avoid the collision.

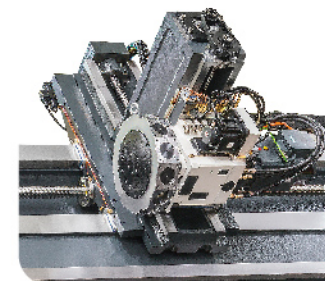
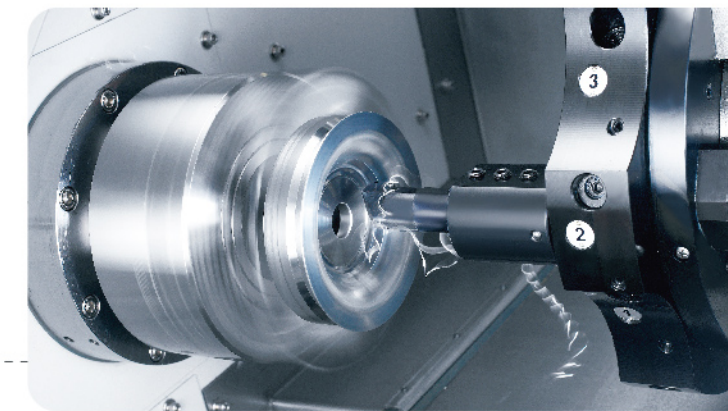


POWER TURRET(12 TOOLS)

With applying for three pieces of curve coupling, indexing belt and offset design to ensure lower noise and backlash while turret rotating.

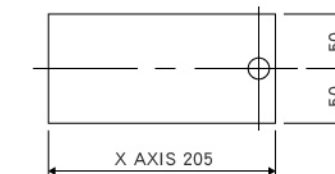
Y AXIS

- Applicable to process complex workpieces and reduce machining errors.
- 90 degrees included angle between X and Y axis ensure processing rigid and reduce deformation.
- Y-axis travel of +100/-80mm is capable of processing various workpieces efficiently.



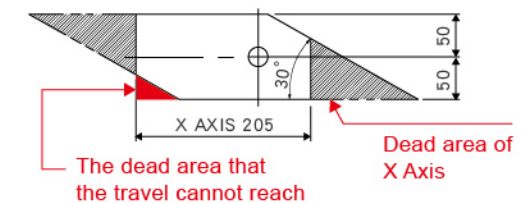
Orthogonal Y Axis Explanation

Y axis is orthogonal placed on the X axis to ensure the full range of travel and to maximize the machining purposes.



Orthogonal Y Axis

No dead area within it's travel.



Virtual Y Axis

There will be dead area within it's travel, and requires complex programs.

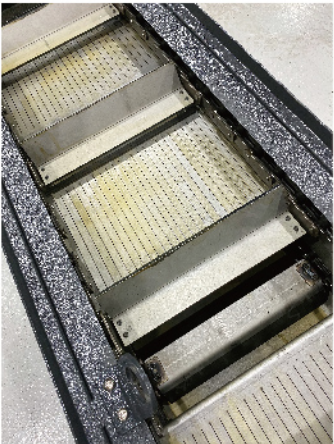
CUTTING PERFORMANCE

O.D.TURNING (S45C)			
Cutting Feed Rate	Cutting Depth	Feed Rate	Chip Removal Rate
180m/min.	11mm	0.35mm/rev.	1054.7cc/min

GROOVING (S45C)			
Cutting Feed Rate	Slot Width	Feed Rate	Distance from Chuck Face
103.2m/min.	3mm	0.2mm/rev.	300mm

DRILLING (S45C)			
Cutting Feed Rate	Hole diameter	Feed Rate	Spindle Speed
77.4m/min.	70mm	0.15mm/rev.	516rpm

CHIP REMOVAL SYSTEM

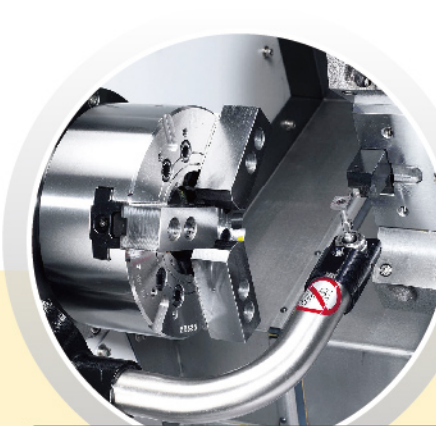
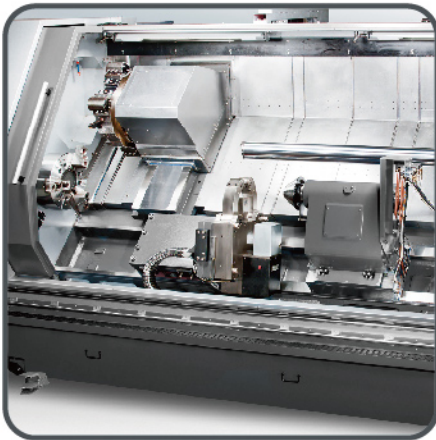
Type	Chain	Scraper	Precision Scraper
View			
Process	*chain type:>6mm chips or with round & thin chips *chain type with cylinder brush:>2mm chips or non-round or thin chips	2mm-6mm chips	<6mm chips

HIGH PERFORMANCE OPTIONS

15"chuck
115mm bar capacity

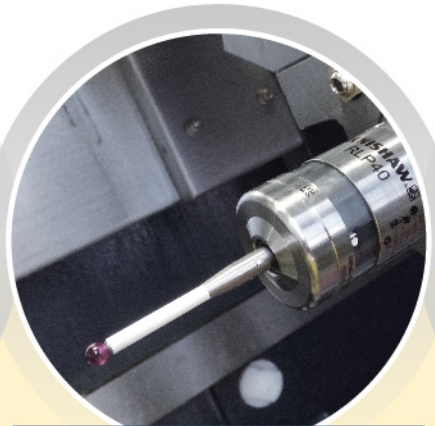
Programmable hydraulic steady rest

Steady rest to support the workpiece can avoid workpiece bending or tilting during processing. For further processing, dual or multiple hydraulic steady rests can be implemented.



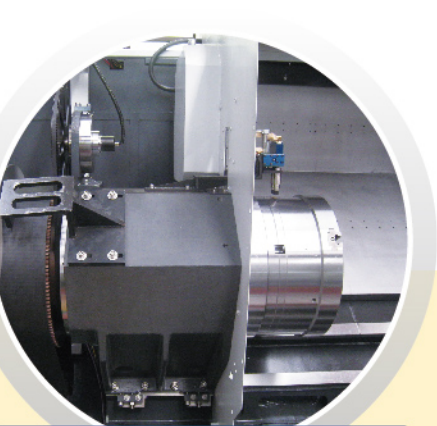
Tool Setter

The tool setter with the probe can measure various tool lengths and detect the damage of tools. Via tool life management, it can be saved all status automatically.



Automatic workpiece measurement

Equipped with high-speed workpiece measure and correct function can reduce downtime and defect products to enhance productivity.



Air chuck

Utilizing air divided ring to push the chuck and stable the clamping force to ensure the processing precision and quality.

Oil skimmer

Removing foreign matter and water, reducing wastewater emission, and recycling waste oil extend tool service life.



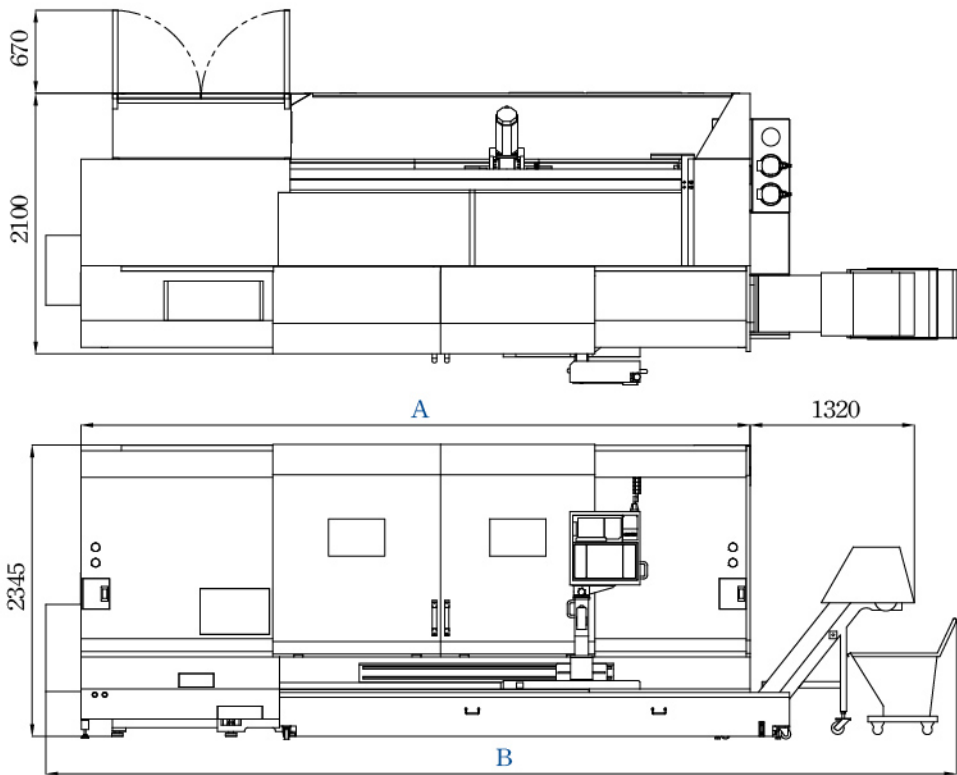
Oil mist collector

Powerful oil mist collecting performance with low cost and high service life can maintain a clean environment.

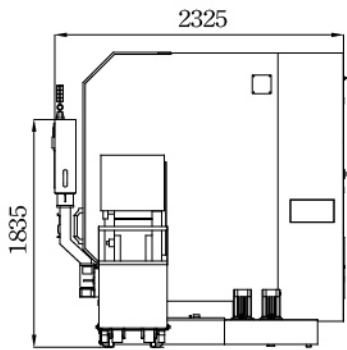


OUTLINE DIMENSION

LTC-35 SERIES

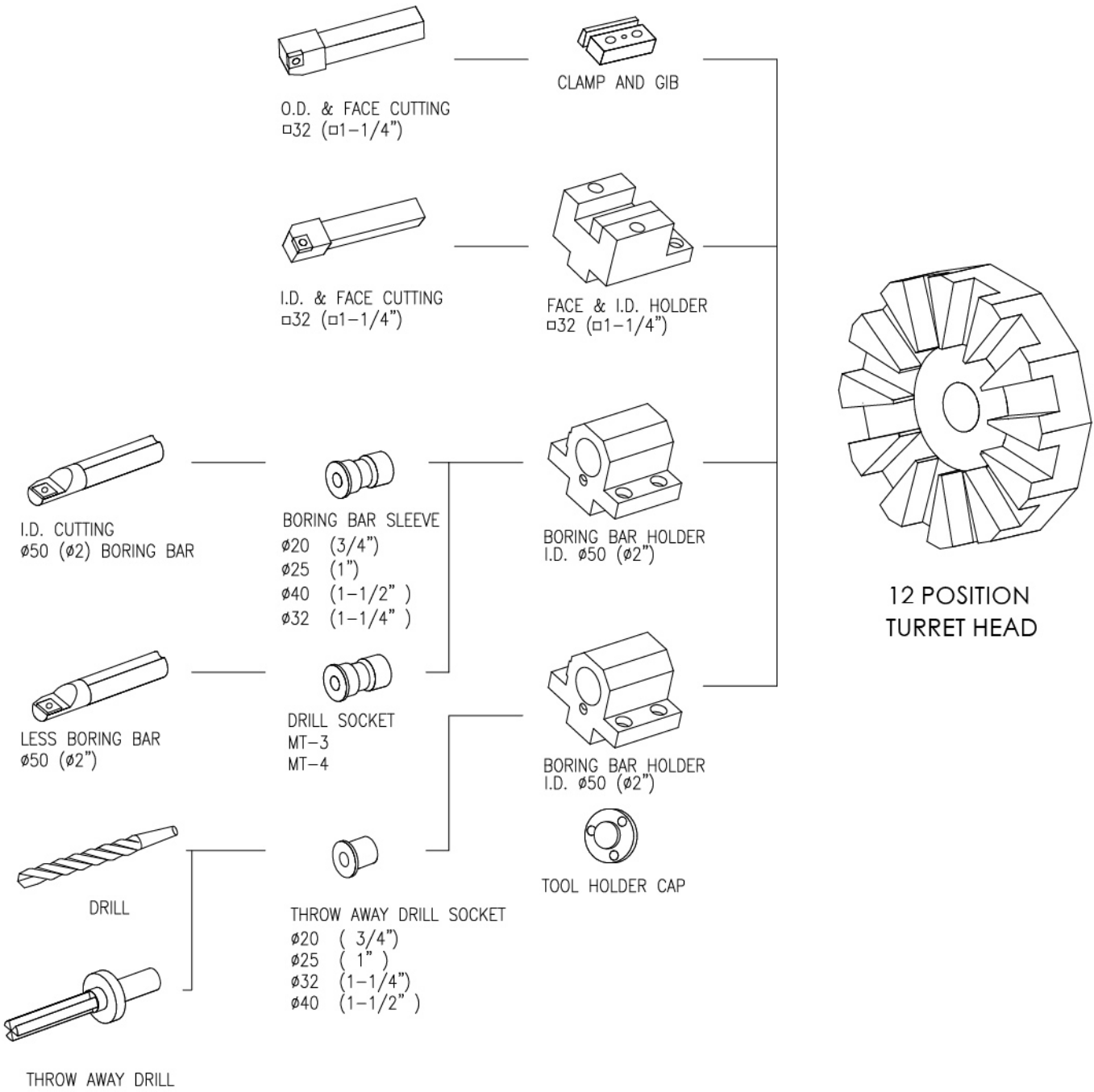


MODEL	A	B
LTC-35C/M/Y	4380	6320
LTC-35CL/LM/LY	4880	6820
LTC-35CXL/XLM/XLY	5380	7320
LTC-35CXXL/XXLM/XXLY	6500	8440
LTC-35CLV/LVM/LVY	7870	9810



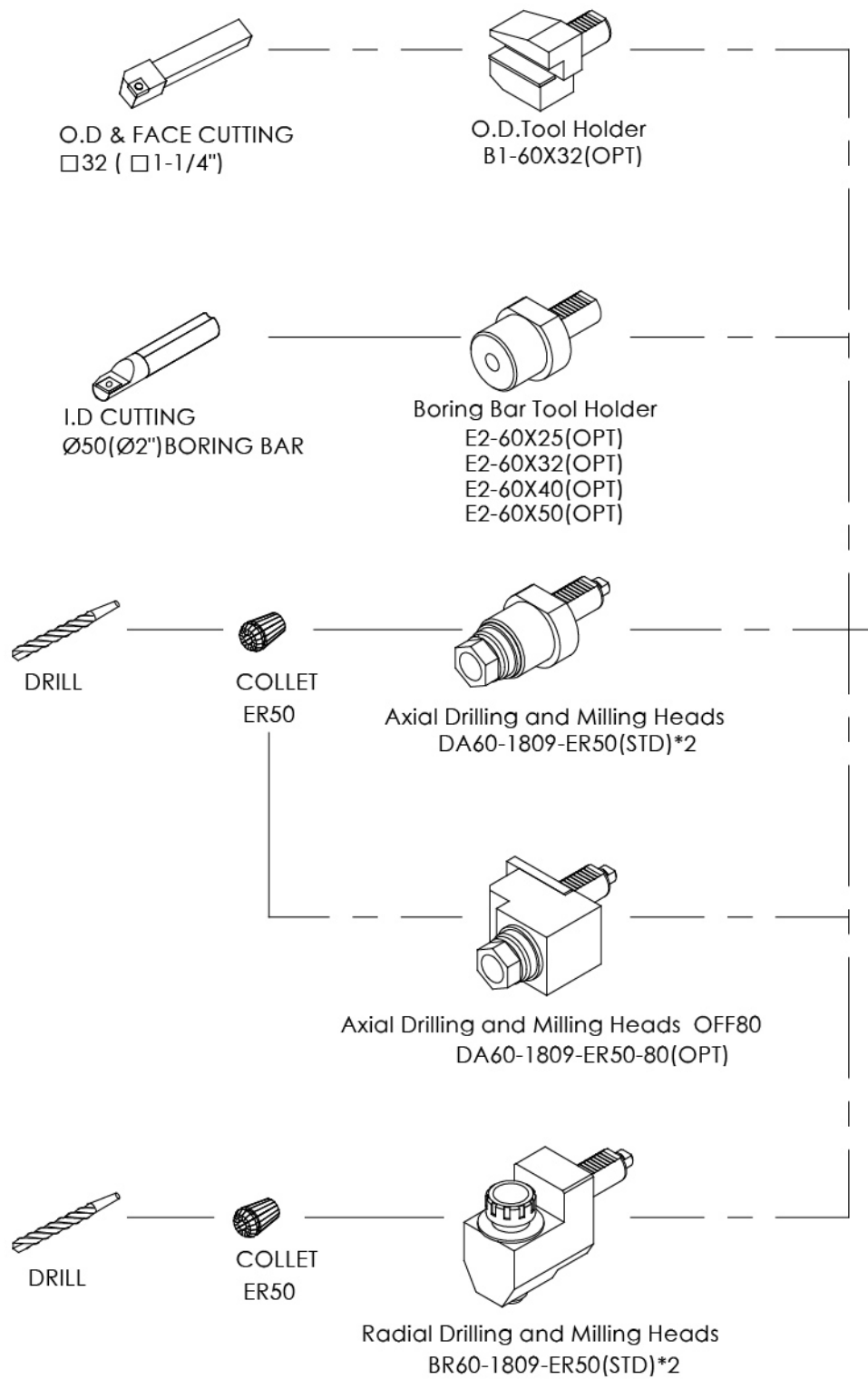
TOOL SYSTEM

LTC-35C SERIES



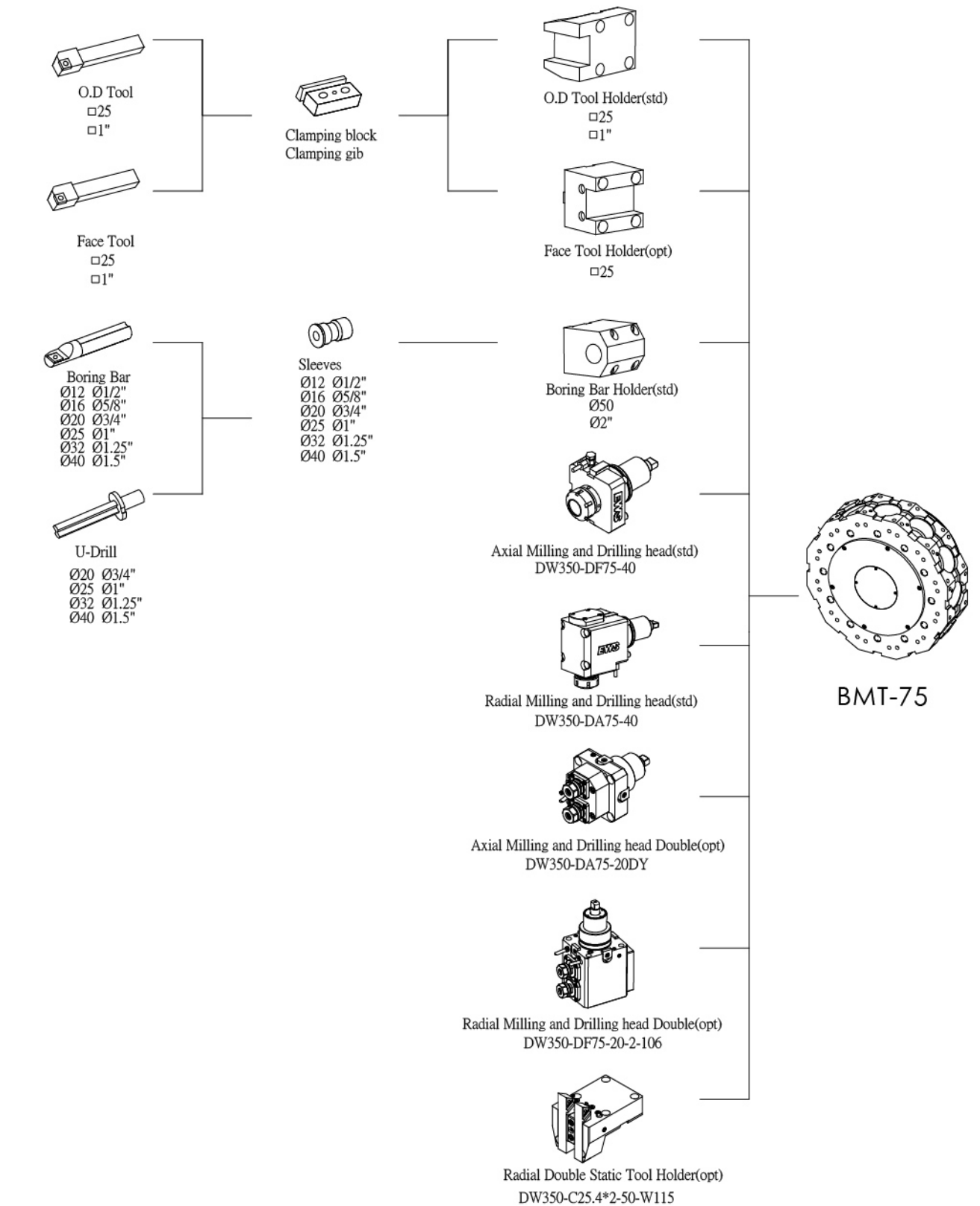
TOOL SYSTEM

LTC-35M SERIES



TOOL SYSTEM

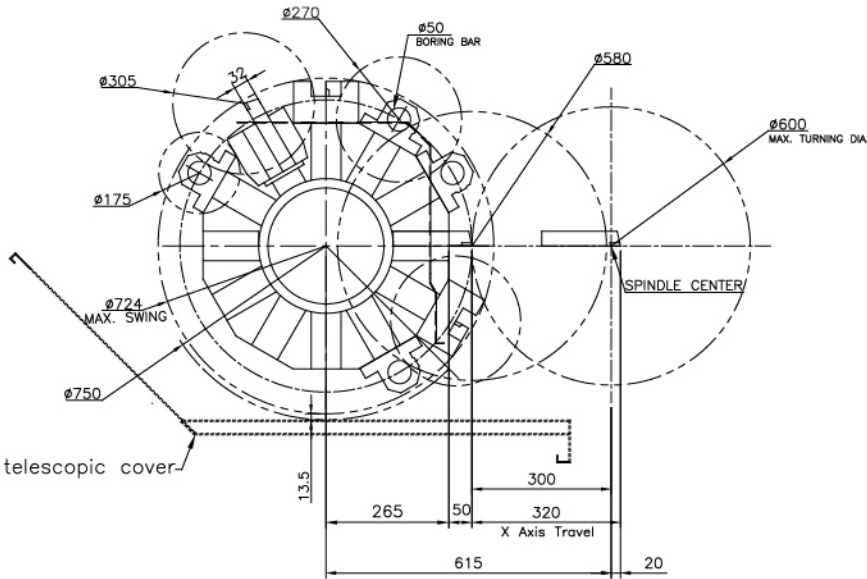
LTC-35Y SERIES



TOOLING INTERFERENCE

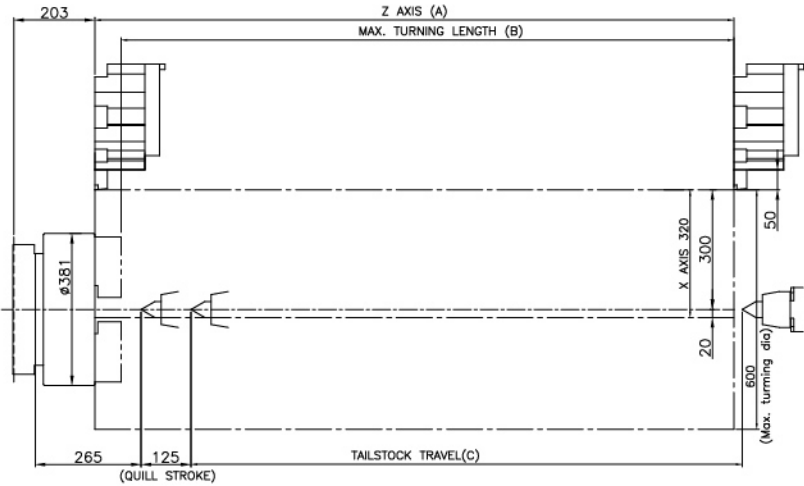
WORKING CAPACITY

LTC-35C SERIES

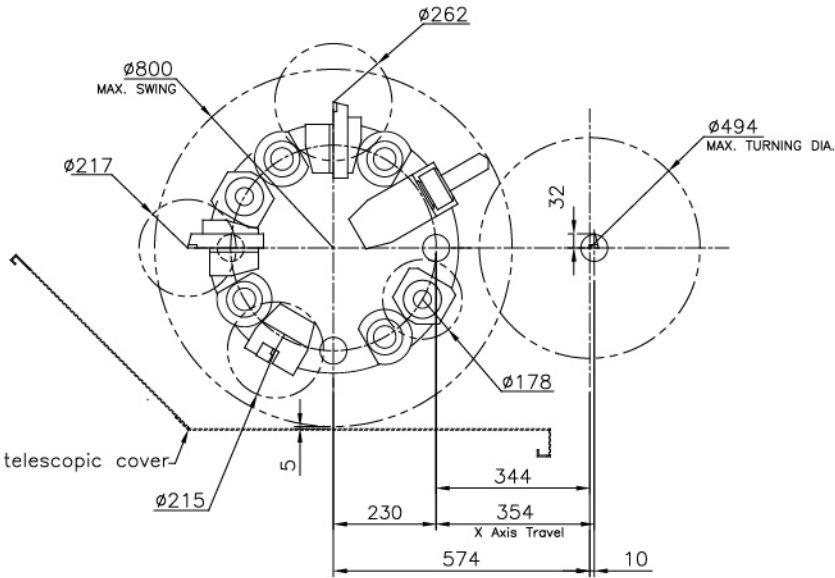


LTC-35C SERIES

MODEL	A	B	C
LTC-35C	1100	1030	880
LTC-35CL	1600	1530	1380
LTC-35CXL	2100	2030	1880
LTC-35CXXL	3100	3030	2880
LTC-35CLV	4100	4030	3880

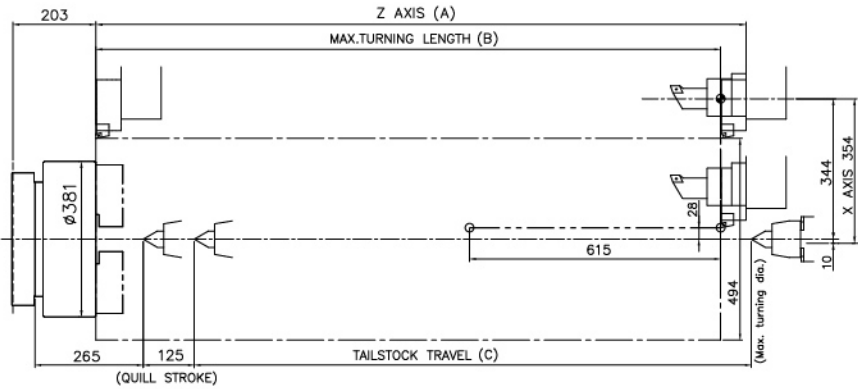


LTC-35M SERIES
VDI-60

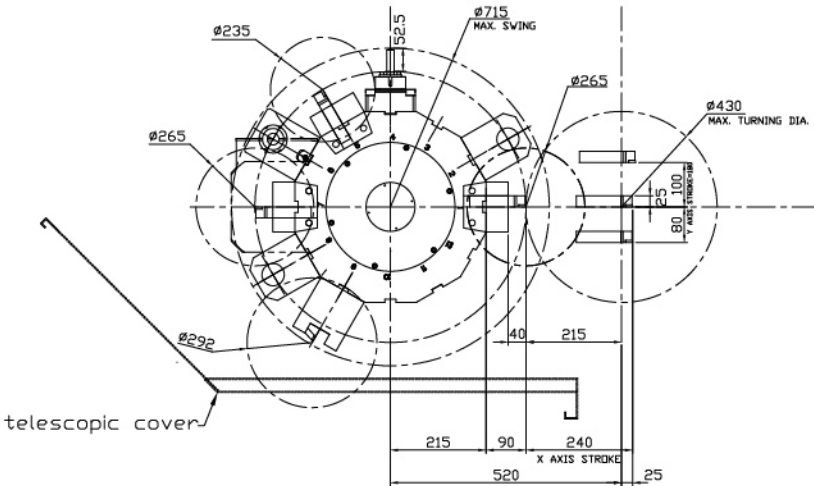


LTC-35M SERIES
VDI-60

MODEL	A	B	C
LTC-35M	1100	1030	880
LTC-35LM	1600	1530	1380
LTC-35XLM	2100	2030	1880
LTC-35XXLM	3100	3030	2880
LTC-35LVM	4100	4030	3880

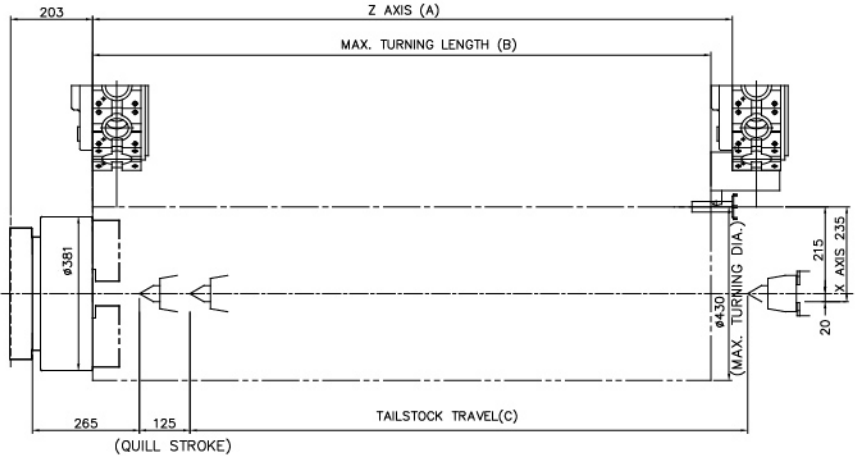


LTC-35Y SERIES
BMT-75



LTC-35Y SERIES
BMT-75

MODEL	A	B	C
LTC-35Y	1100	1030	880
LTC-35LY	1600	1530	1380
LTC-35XLY	2100	2030	1880
LTC-35XXLY	3100	3030	2880
LTC-35LVY	4100	4030	3880



MACHINE SPECIFICATIONS

ITEM \ MODEL		LTC-35C/CL/CXL/CXXL/CLV	LTC-35M/LM/XLM/XXLM/LVM	LTC-35Y/LY/XLY/XXLY/LVY
CAPACITY				
Max. swing	mm(in)	800(31.5)		
Max. turning diameter	mm(in)	600(23.6)	494/520(19.4/20.5) BMT-75	430(16.9)
Max. turning length	mm(in)	1030/1530/2030/3006/4006(40.6/60.2/79.9/118.3/157.7)		
Bar capacity	mm(in)	115(4.5)		
TRAVEL				
X-axis travel	mm(in)	300+20(11.8+0.78)	344+10(13.5+0.39)/290+20(11.4+0.8)	215+25(8.5+1)
Z-axis travel	mm(in)	1100/1600/2100/3100/4100(43/63/83/122/161)		
Y-axis travel	mm(in)	---	---	+100/-80(+3.8/-3.15)
SPINDLE				
Spindle speed	rpm	2000	10~2000	
Chuck size	in	15		
Type of spindle nose		A2-11		
Spindle motor type (30min)	kw(hp)	30(40)		
TURRET				
Number of tool stations	pcs	12		
Shank height for square tool	mm(in)	32(1.25)	32(1.25) VDI-60/25(1) BMT-75 OPT	25(1) BMT-75
Shank diameter for boring bar	mm(in)	50(2)/63(2.5) OPT	50(2) VDI-60/BMT-75 OPT	50(2) VDI-60/63(2.5) BMT-75 OPT
Rotary tool spindle speed range: axis units	rpm	---	3000	4000
Rotary tool spindle speed range: radial units	rpm	---	3000	4000
Rotary tool motor power	kw(hp)	---	15(20)	10(13.4)
FEED MOTORS				
X/Z-axis motor	kw(hp)	4/7(5.4/9.4)		
Y-axis motors	kw(hp)	---	---	4(5.4)
FEED RATE				
X-axis rapid traverse	m/min(in)	15(591)		
Z-axis rapid traverse	m/min(in)	20/20/20/12/10(787.4/787.4/787.4/472/393.7)		
Y-axis rapid traverse	m/min(in)	---	---	7.5(295.3)
TAILSTOCK				
Quill diameter	mm(in)	110(4.3)		
Quill inside taper	M.T	5		
MACHINE SIZE				
Floor space(H)	mm(in)	2310(91)		2365(93.1)
Floor space(L)	mm(in)	4380/4880/5380/6500/7880(172.4/192/211.8/255.9/310.2)		
Floor space(W)	mm(in)	2120(83.5)		2130(83.8)
Machine weight	kg	10000/11000/12000/17000/19500	11000/12000/13000/18000/20500	12700/13300/14000/20800/23300
Power requirement	KVA	55	70	
controller		Oi-T		

*Available controller: SIEMENS/FAGOR/HEIDENHAIN

MACHINE ACCESSORIES

ITEM \ MODEL		LTC-35		
		C/CL/CXL/CXXL/CLV	M/LM/XLM/XXLM/LVM	Y/LY/XLY/XXLY/LVY
Metric disc	●		X	X
Programmable tailstock	●		●	●
Buzzer	●		●	●
Heat exchanger	●		●	●
Full enclosed splash guard	●		●	●
3 jaw open center chuck	●		●	●
Foot switch	●		●	●
H.T.D. Belt	■		■	■
Two speed gearbox	■		■	■
Three layers warning light	●		●	●
High pressure pump	■		■	■
Chip conveyor and bucket	■		■	■
Transformer	■		■	■
3 jaw close center chuck	■		■	■
Inch disc	■		X	X
Tool setter	■		■	■
Oil skimmer	■		■	■
Manual steady rest	■		■	■
X/Z axis linear scale	■		■	■
High/low pressure of chuck	■		■	■
Auto door	■		■	■
Spindle air outer blow	■		■	■
Oil mist collector	■		■	■
VDI disc	■		●	■
Rotating tailstock	■		■	■
Servo programmable tailstock	■		■	■
A2-15/A-20 spindle	■		■	■
Automatic workpiece measurement	■		■	■
Robot	▲		▲	▲
Bar feeder	X		X	X

● : STD / ■ : O.P.T(DESIGNED) / ▲ : O.P.T(TO BE ADVISED) / X : N/A(NOT AVAILABLE)