



“ 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

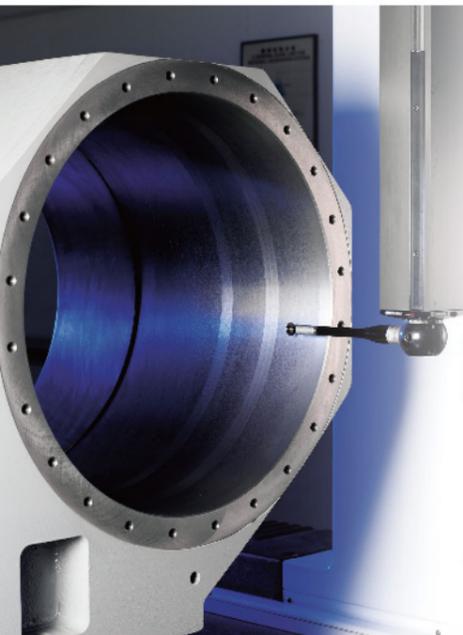
LTC-50i/iL/iXL/iXXL  
LTC-50iM/iLM/iXLM/iXXLM  
LTC-50iY/iLY/iXLY/iXXLY

# HEAVY DUTY TURNING MACHINE

## Innovative design

All machine with a highly rigid box way base design, exceptional high rigidity and stability, large-diameter servo turret, and two-speed gearbox is capable of high power turning ability with 4100mm maximum turning length.

With an optional power turret, the machine can achieve higher processing precision through turning, milling, and drilling processing models.



### High Rigidity

- All models pass Finite Element Analysis.
- High rigid construction design.
- Pre-pressured design for dual nuts on X and Z-axis screw.
- One-piece saddle with slant bed design.

### High Efficiency

- X/Z axis rapid traverse: 15/20 m/min.
- Spindle motor: 37KW/50HP.
- Optional VDI-60 & BMT-75 power turret.

### High Reliability

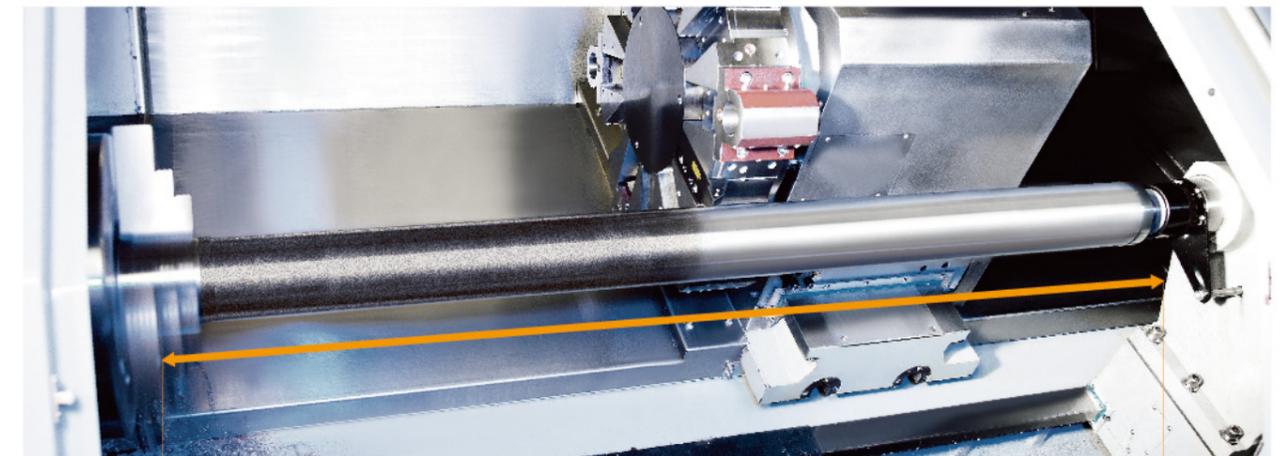
- Ball screw, bearing lubrication system.
- High precision turret.
- Steady spindle heating, minor heat deformation.

### High Flexibility

- Optional large hole spindle.
- Optional programmable hydraulic steady rest, robot arm.

# SPECIFICATION

MODEL	LTC-50i / iL / iXL / iXXL	LTC-50iM / iLM / iXLM / iXXLM	LTC-50iY / iLY / iXLY / iXXLY
X-axis travel	400+25 mm	430+25 mm	240+20 mm BMT 75
Z-axis travel	1000/2000/3000/4000 mm		
Chuck size	18		
Bar capacity	117 mm		

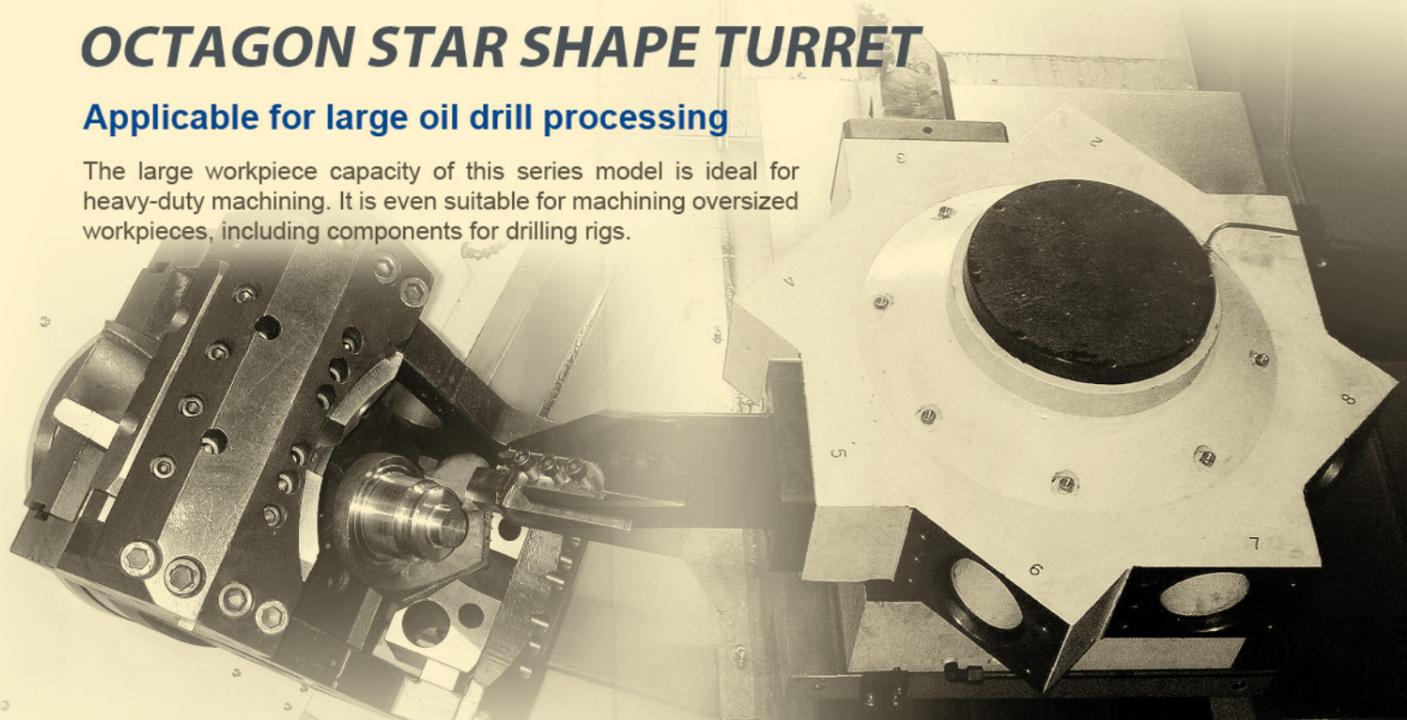


WORKPIECE LENGTH 1006-4070mm

## OCTAGON STAR SHAPE TURRET

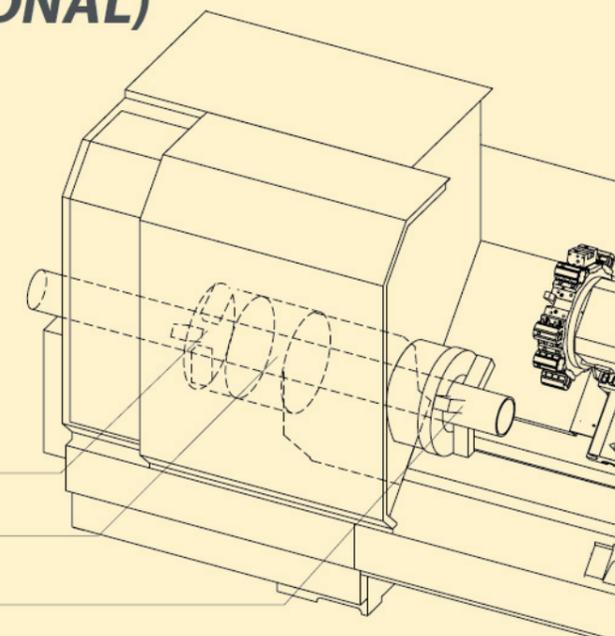
### Applicable for large oil drill processing

The large workpiece capacity of this series model is ideal for heavy-duty machining. It is even suitable for machining oversized workpieces, including components for drilling rigs.



## FRONT+REAR CHUCK(OPTIONAL)

- A2-15 or A2-20 spindle/dual chuck preparation, cover sheet design for rear chuck.
- For long workpiece threading, air and manual chuck can be installed on the front and rear ends.



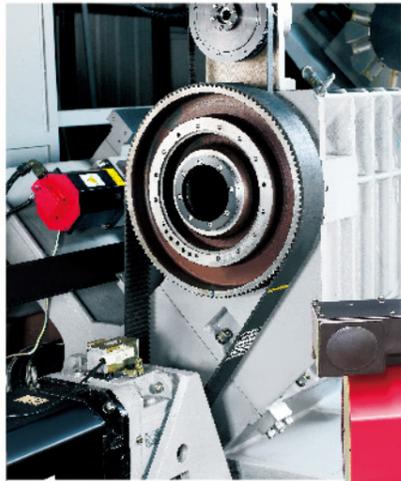
REAR CHUCK

WORKPIECE

FRONT CHUCK

## Sturdy and Durable Machine Body and Guide

The machine frame with 45 degrees slant bed design, large scale box way, and span design, manufactured with the best quality Meehanite cast iron body, scientific rib reinforcement, high torsional and vibration resistance base design to reduce heat deformation.



## Two Speed Gearbox

Capable of low rotating speed with high torque force and excellent heavy-duty machining.

(LTC-50iXXL)

## Finite Element Analysis (FEA)

Predict and improve product performance and reliability  
Reduce physical prototyping and testing.  
Maintaining high precision and extending tools service life during heavy-duty machining.

## High Rigid Box Way

The guide of all machines is designed with a box way. The contact surface of TURCITE-β is accurately scrapped to ensure the best rigidity and supporting force for the turret and tailstock.



## Turret

Driven by servo turret ensures maintaining high performance and precision.  
Optional power turret with Y-axis function provides multi-processing of drilling, milling, and tapping.

## Tailstock

High rigid structure setup.  
High precision built-in tailstock mandrel is designed with high capacity performance.

## Spindle

Heavy spindle head, high rigid spindle, and high quality bearing design are favorable for heavy-duty and precision processing.

## One-piece Design

One-piece-forged base and saddle with heat treatment and precision grinding can achieve high strength and precision.

## Precision Ball Screw

To apply for high accuracy, low torque fluctuations, and long-term maintenance-free operation by using.

## Chip Disposal

Slant bed design with large space is favorable for chip falling. With chain-type chip conveyor, it can remove chips easily and maintain a clean working environment.

## Sheet Metal

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



## CHIP REMOVAL SYSTEM

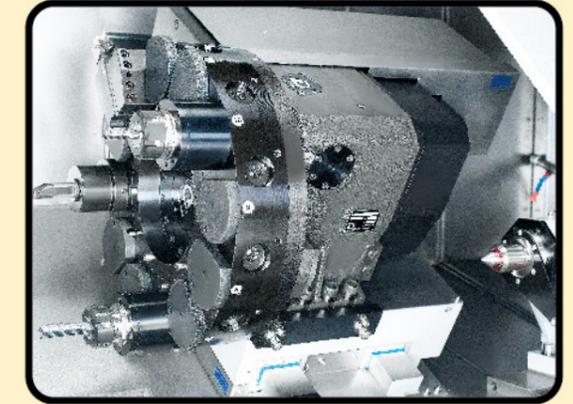
TYPE	CHAIN	SCRAPER	PRECISION SCRAPER
View			
Process	<p>*chain type: &gt;6mm chips or with round &amp; thin chips</p> <p>*chain type with cylinder brush: &gt;2mm chips or non-round or thin chips</p>	2mm-6mm chips	<6mm chips

## HIGH ACCURACY TURRET



### STANDARD TURRET(12 TOOLS)

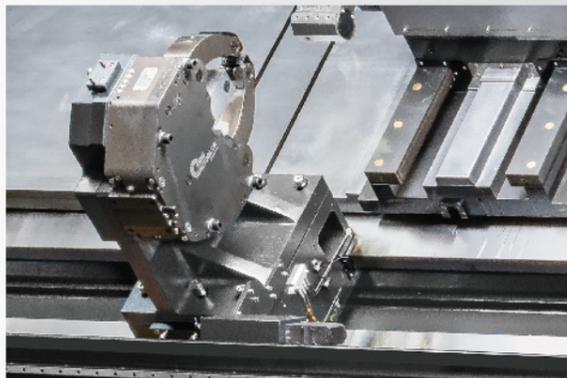
Driven by hydraulic, rotating smoothly and easily select the tools to avoid the collision.



### POWER TURRET(12 TOOLS)

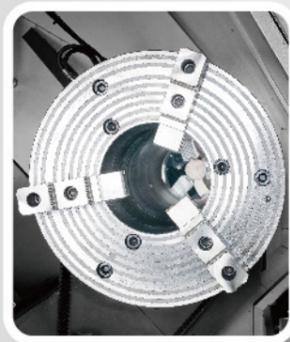
With applying for three pieces of curve coupling, indexing belt and offset design to ensure lower noise and backlash while turret rotating.

## HIGH PERFORMANCE OPTIONS



### 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.



### Manual chuck



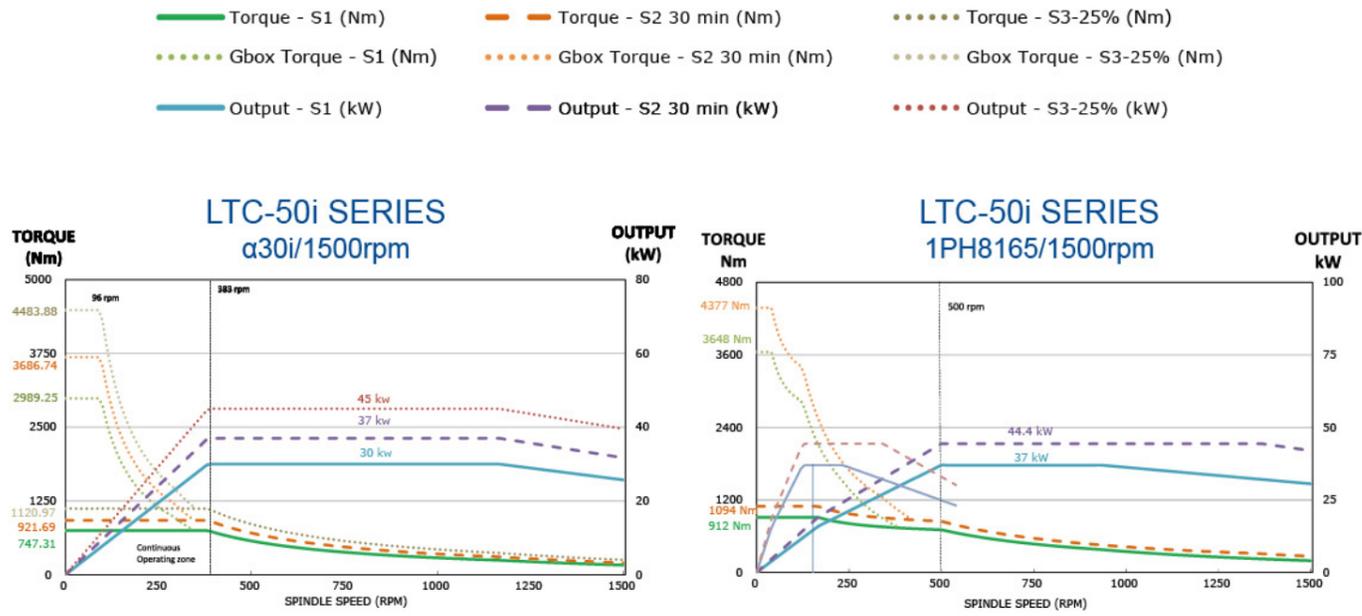
### Air chuck

## LARGE HOLE SPINDLE

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

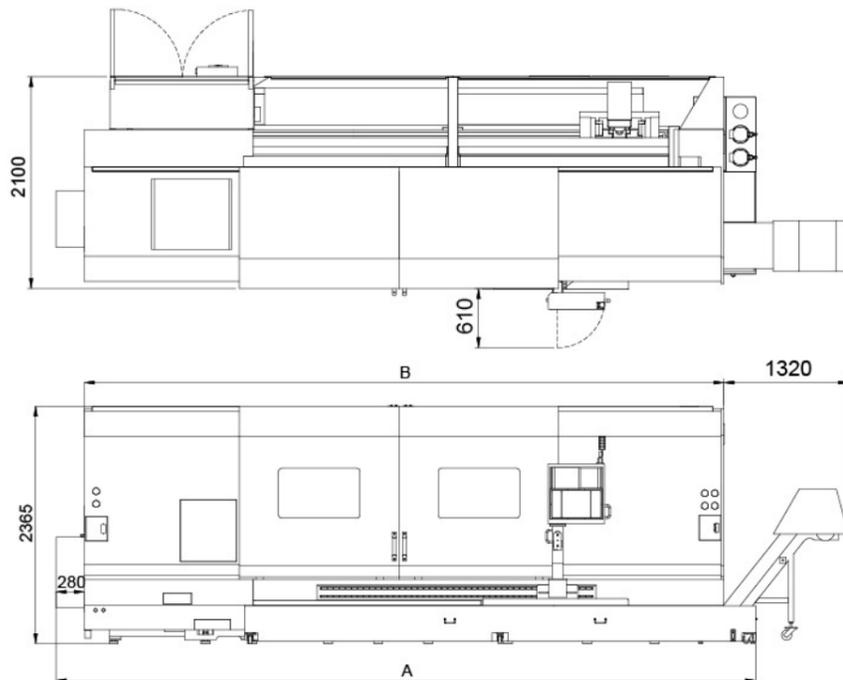


# SPINDLE POWER CURVE

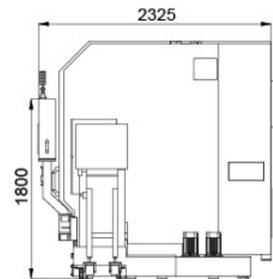


# OUTLINE DIMENSION

## LTC-50i SERIES

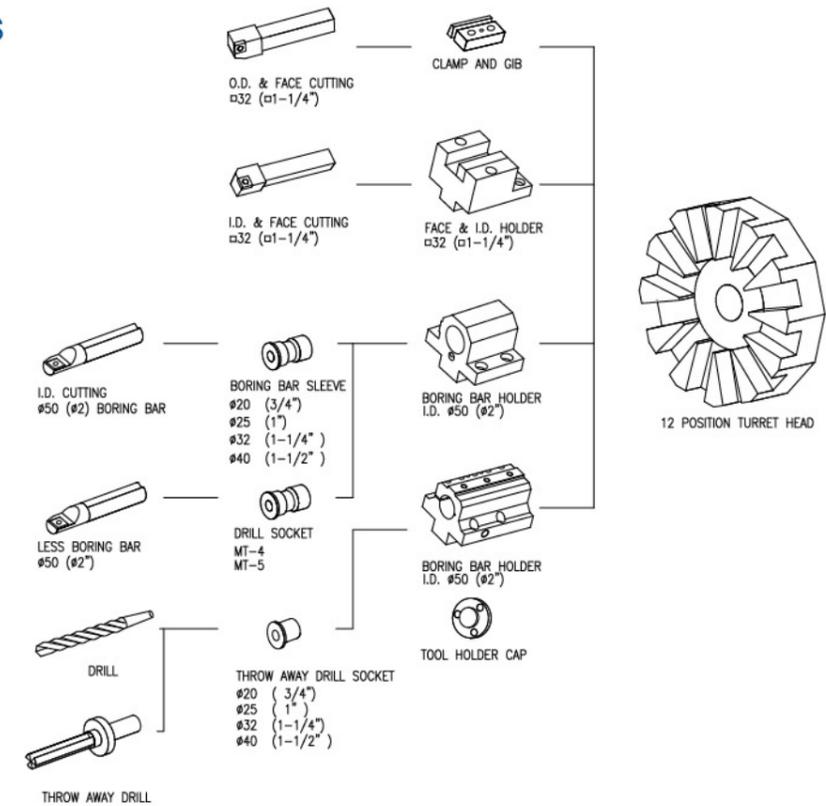


MODEL	A	B
LTC-50i/IM/iy	4980	4380
LTC-50iL/ILM/iLY	5980	5380
LTC-50iXL/iXLM/iXLY	7100	6500
LTC-50iXXL/iXXLM/iXXLY	8470	7870



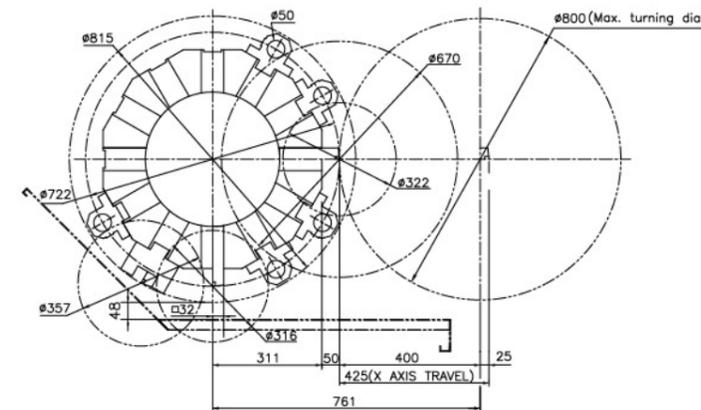
# TOOL SYSTEM

## LTC-50i SERIES



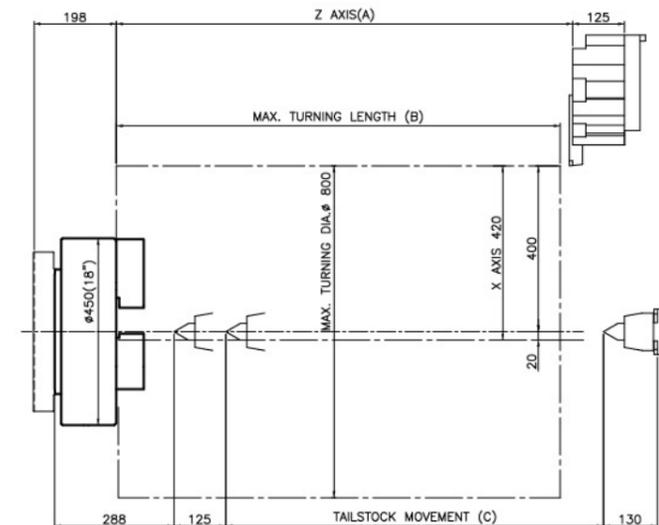
# TOOLING INTERFERENCE

## LTC-50i SERIES



# WORKING CAPACITY

## LTC-50i SERIES



MODEL	A	B	C
LTC-50i	1000	925	910
LTC-50iL	2000	1925	1910
LTC-50iXL	3000	2925	2910
LTC-50iXXL	4000	3925	3910

# MACHINE SPECIFICATIONS

ITEM	MODEL	LTC-50i/iL/iXL/iXXL	LTC-50iM/iLM/iXLM/iXXLM	LTC-50iY/iLY/iXLY/iXXLY
<b>CAPACITY</b>				
Max. swing	mm(in)	850(33.5)		
Max. turning diameter	mm(in)	800(31.5)		480(18.89)
Max. turning length	mm(in)	925/1925/2925/3925(36.4/75.7/115.1/154.5)		
Bar capacity	mm(in)	117(4.61)		
<b>TRAVEL</b>				
X-axis travel	mm(in)	400+25(15.7+1)	430+25(16.93+0.98)	240+20(9.45+0.79)
Z-axis travel	mm(in)	1000/2000/3000/4000(39.3/78.7/118.1/157.4)		
Y-axis travel	mm(in)	---	---	±100(±3.93)
<b>SPINDLE</b>				
Spindle speed	rpm	15~1500		
Chuck size	in	18		
Type of spindle nose		A2-11		
Spindle motor type(30min)	kw(hp)	37(49.6)		
<b>TURRET</b>				
Number of tool stations	pcs	12		
Shank height for square tool	mm(in)	32(1.25)	25(1) BMT-75	25(1) BMT-75
Shank diameter for boring bar	mm(in)	50(2)/63(2.5) OPT	50(2) BMT-75	50(2) BMT-75
Rotary tool spindle speed range: axis units	rpm	---	3600	4000
Rotary tool spindle speed range: radial units	rpm	---	3600	4000
Rotary tool motor power	kw(hp)	---	11(14.7)	7.5(10)
<b>FEED MOTORS</b>				
X/Z-axis motors	kw(hp)	4/7(5.4/9.4)		
Y-axis motors	kw(hp)	---	---	4(5.4)
<b>FEED RATE</b>				
X-axis rapid traverse	m/min(in)	15(591)		
Z-axis rapid traverse	m/min(in)	20/20/12/10(787.4/787.4/472/393.7)		
Y-axis rapid traverse	m/min(in)	---	---	7.5(295.28)
<b>TAILSTOCK</b>				
Quill diameter	mm(in)	155(6.1)		
Quill inside taper	M.T	6		
<b>MACHINE SIZE</b>				
Floor space(H)	min(in)	2365(93.1)		
Floor space(L)	min(in)	4380/5380/6500/7880(172.4/211.8/255.9/310.2)		
Floor space(W)	min(in)	2325(91.5)		
Machine weight	kg	13000/15000/18000/20000	13000/15000/20000/22500	
Power requirement	KVA	70		70
controller		Oi-T		

\*Available controller: SIEMENS/FAGOR/HEIDENHAIN

# MACHINE ACCESSORIES

ITEM	MODEL	LTC-50i/iL/iXL/iXXL	LTC-50iM/iLM/iXLM/iXXLM	LTC-50iY/iLY/iXLY/iXXLY
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)