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“ 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.

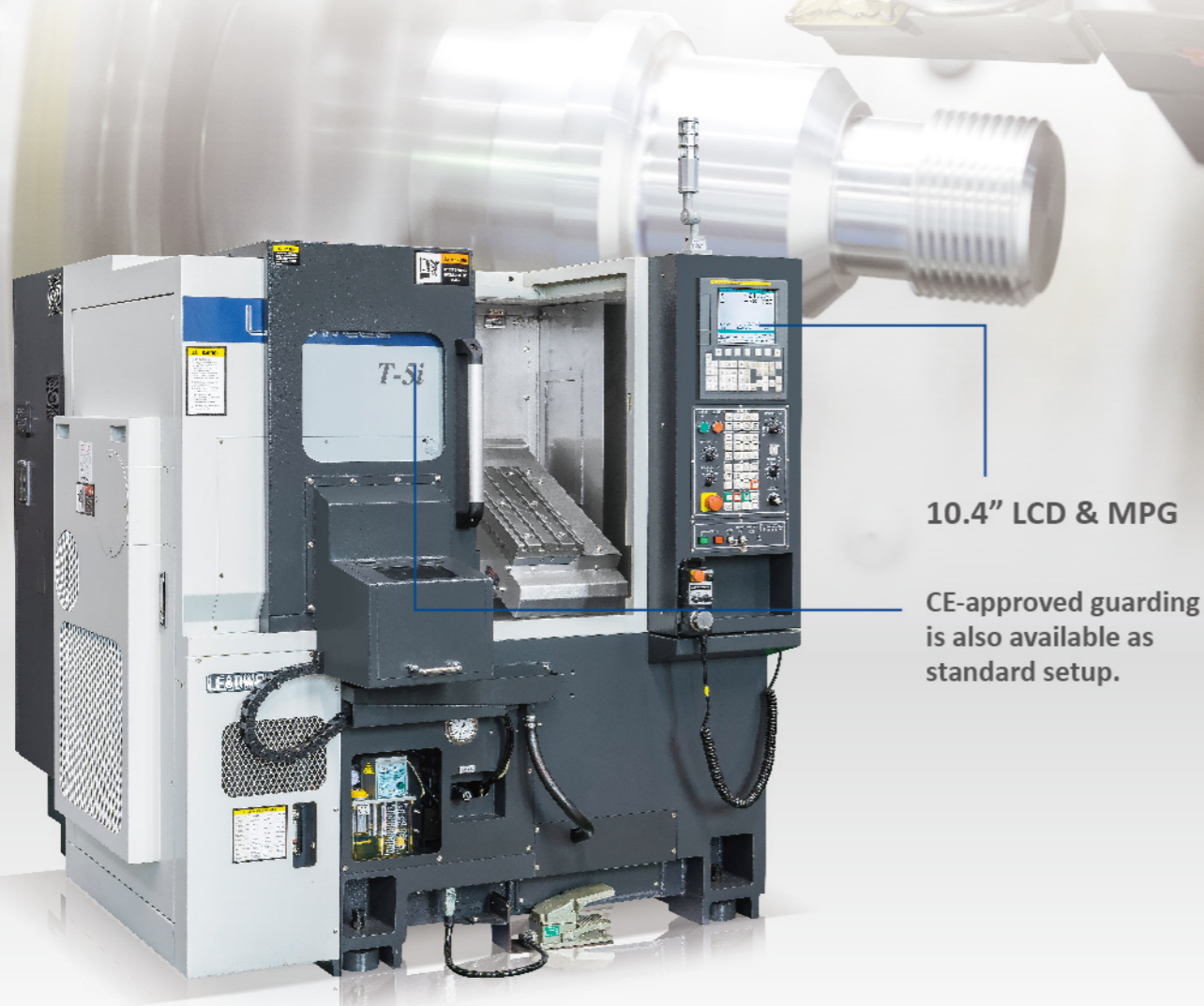
TILTC Series

**High Efficiency
Horizontal Turning Center**

**T-5i/T-5iM
T-6i/T-6iL/T-6iM/T-6iLM
LTC-200/L/M/LM/MY/LMY**

HIGH EFFICIENCY CNC TURNING CENTER

With high efficiency working capability, small face width design, small floor space, large turning diameter, and rear chip removal system, it can fit the whole line production. With the automotive processing of various workpieces, it can pair with the automatic loading and unloading robot to meet various and plenty requests of the automatic processing.



10.4" LCD & MPG

CE-approved guarding is also available as standard setup.



- An economical lathe with high efficiency is the entry-level of your first choice.
- The structure is using the platform bed and sliding table design, which can improve the rigidity of the machine and is good for chip removal.
- High precision rigid spindle design with smooth surface and high stability.
- The tailstock is used a large diameter design, which is for heavy cutting and high resistance.
- Use the servo turret, which can change tools quickly and improve processing efficiency.
- Power hydraulic chuck design, with multiple options base on your requirement.
- Optional axial/radial power tools for milling and drilling operations.

SHEET METAL

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

MODEL	T-5i GANG TYPE	T-5i TURRET	T-5iM	T-6i	T-6iL	T-6iM	T-6iLM
X-AXIS TRAVEL	230mm	150+15mm					
Z-AXIS TRAVEL	230mm	185mm	190mm	330mm	530mm	300mm	500mm
CHUCK SIZE	6			8			
BAR CAPACITY	45mm						

MODEL	LTC-200	LTC-200L	LTC-200M	LTC-200LM	LTC-200MY	LTC-200LMY
X-AXIS TRAVEL	150+15mm				150+40mm	
Z-AXIS TRAVEL	330mm	530mm	330mm	530mm	330mm	530mm
Y-AXIS TRAVEL	---				±50	
CHUCK SIZE	8					
BAR CAPACITY	52mm					

STRUCTURE

High Rigid Superior Construction and Slide

The slant bed design machine, manufactured with the best quality Meehanite cast iron body and scientific rib reinforcement creates 10 times stronger dampening capacity than regular steel. FEA analysis can predict and improve product performance and reliability so it can make the casting have high torsion and strong resistance. In addition, the operator can easily replace the tools and clamping jaws with wide internal space, creating a small space, high precision, and functional machine.

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.

	SPINDLE SPEED (RPM)	SPINDLE TORQUE	SPINDLE MOTOR	MODEL
A2-5 6"	5000	105NM	β8-7.5/11KW	T-5i(M)
A2-5 8"	5000	105NM	β8-7.5/11KW	T-6i(L)(M)
A2-6 8"	4500	124NM	β8-7.5/11KW	LTC-200(L)(M)(Y)

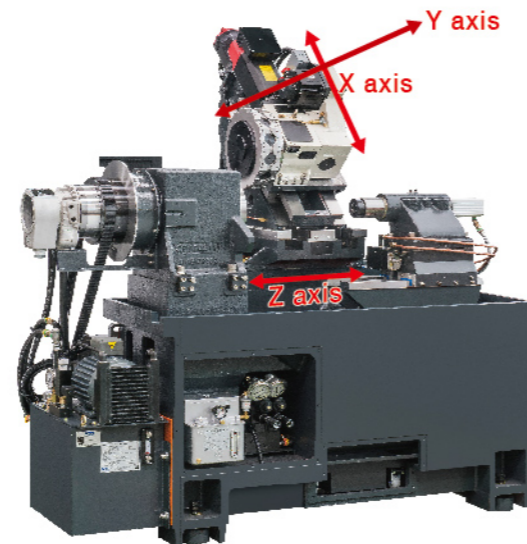
SPECIFICATION	T-6i(M) LTC-200(M)(Y)	T-6i(L)(M) LTC-200L(M)(Y)
TAILSTOCK MOVEMENT	250	450
QUILL DIAMETER	75	75
QUILL INSIDE TAPER	MT4	MT4
QUILL STROKE	75	75

TAILSTOCK

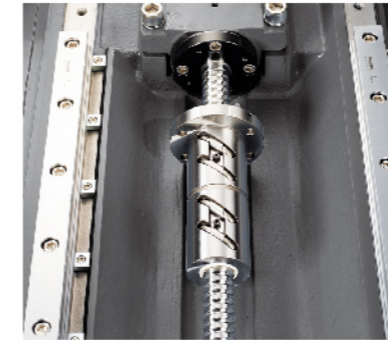
MT-4 (MANUAL) Programmable tailstock with 75mm movement (optional): Movement By Z-axis sliding plate by M code control.

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.

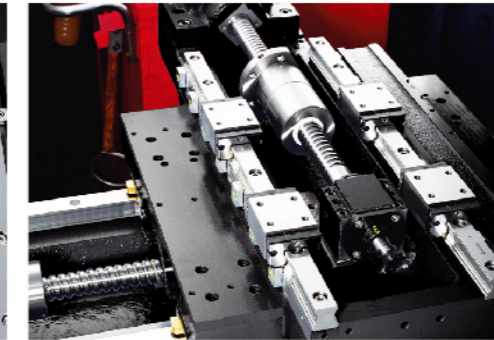


LTC-200MY



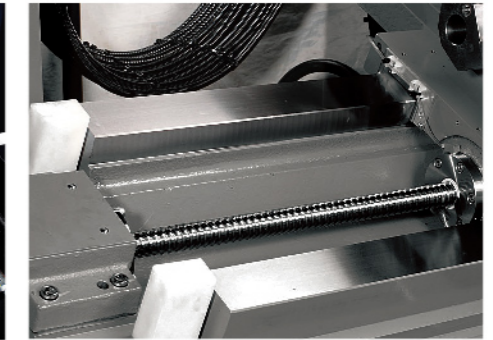
Precision Ball Screw

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



High Speed Linear way

High rigid linear way processed through curing and precision grinding ensure machine positioning accuracy and low friction and reduce motor lost.



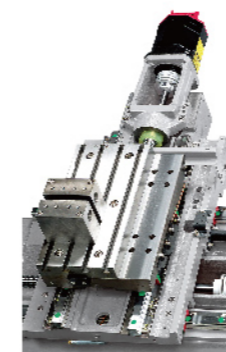
High Rigid Box way

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

HIGH ACCURACY TURRET

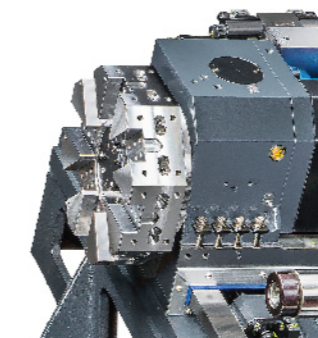
TOOLS	6	8/10	8/10	12	12
	□16 Ø25	□16 Ø25	□25 Ø40	□20 Ø32	□20 Ø25
TYPE	Gang type Turret	Servo Motor	Servo Motor	Servo Motor	Power Turret BMT-45/DIN1809
CHANGE TIME		1.0sec. 0.43sec.(opt)	1.0sec. 0.47sec.(opt)	1.0sec. 0.43sec.(opt)	0.48sec.
MODEL	T-5i/T-6i	T-5i→8T---STD T-5i→10T---OPT	T-6i(L)---OPT LTC-200(L)--- OPT	T-6i(L)---STD LTC-200(L)--- STD	T-5iM,T-6iM(iLM) LTC-200M/LM LTC-200(L)MY

GANG TYPE TURRET (6 TOOLS)



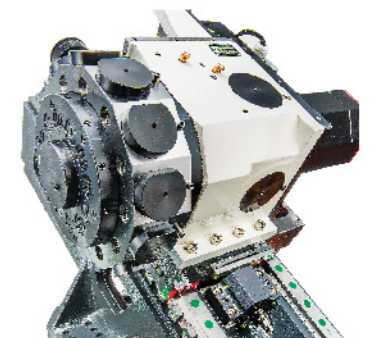
With high precision tool change and cutting capability. It suits various tools, also can saving tool change time.

STANDARD TURRET (8/10/12 TOOLS)



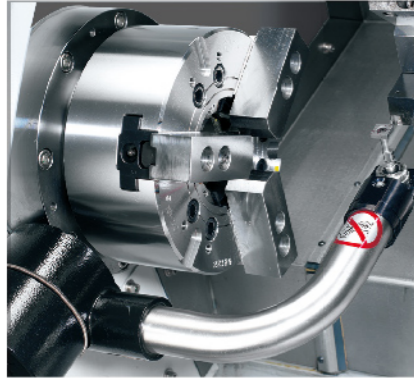
Driven by servo, rotating smoothly and easily select the tools to avoid the collision.

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



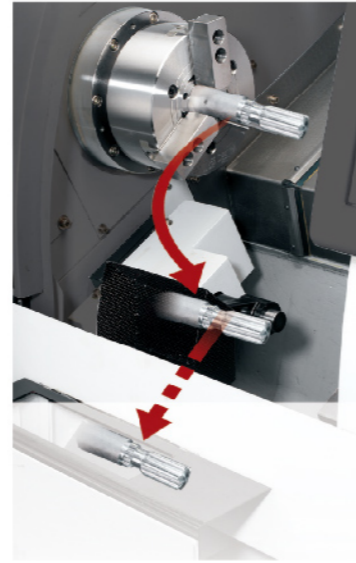
Tool Setter

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.



Bar Feeder

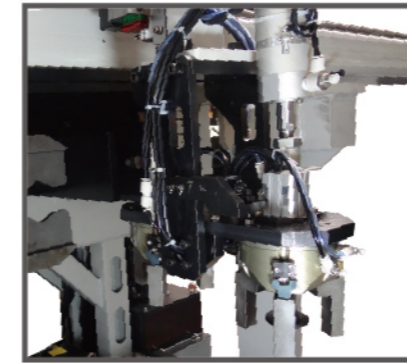
Features user-friendly, labor-saving, and greatly increase productivity, bar feeder is suggested for unattended bar machining and high production requirements. It handles bars ranging from 5 to 65 mm in diameter and can quickly accomplish bar loading and parameter setting for various bar sizes.



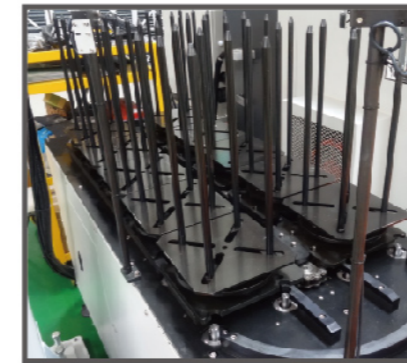
Parts Catcher

The unique parts catcher with the bar feeder option can automatically load the finished part into the bucket, and then to enhance productivity.

AUTOMATION SYSTEM



Gantry Robot (optional)



IN/OUT Stoker (optional)

One Piece design (LTC-200)



With fast and convenient installment, it is applicable for round, bar and other varieties of different shape workpieces.

CUTTING PERFORMANCE

Material: S45C Model: T-5iM

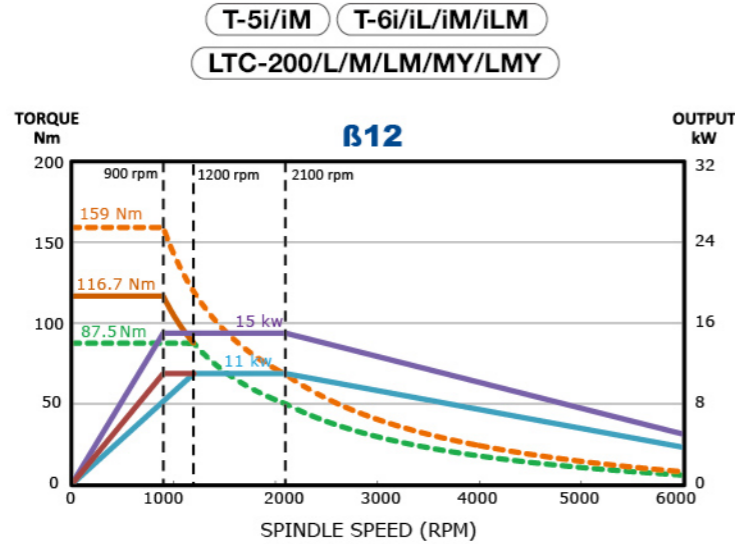
	TOOL mm	CUTTING SPEED m/min	SPINDLE SPEED rpm	FEED PER mm/rev	FEED RATE mm/min	CUTTING DEPTH mm
O.D. Cutting	---	220	850	0.25	---	2.5
Groove Cutting	3	140	1393	0.15	---	---
Fast Drilling	ø20	94	1500	0.12	---	40
Rigid Tapping	M16*2.0	---	500	---	1000	25
Power Turret Drilling	ø10	---	1000	---	200	25
Power Turret Rigid Tapping	M10*1.0	---	1000	---	1000	20
Power Turret End Face Milling	ø12	---	1200	---	120	8

GANTRY ROBOT

COMPONENTS			UNIT	LEADWELL
FULL BODY	WORKPIECE DIAMETERS	Max. Diameter	mm	120
		Max. Length	mm	100
		Max. Payload	kg	3
ROBOT ARM BODY	Z-AXIS SHOULDER	Travel	mm	1300
		Feed Rate	m/min	160
	Y-AXIS SHOULDER	Travel	mm	600
		Feed Rate	m/min	100
	WRIST TURNING DIAMETER	Servo	---	Pneumatic Cylinder
		Angle	degree	90
Wrist Style		---	L shape arm	
CLAWS	Servo	---	Pneumatic Cylinder	
	Claw Travel	mm	8	

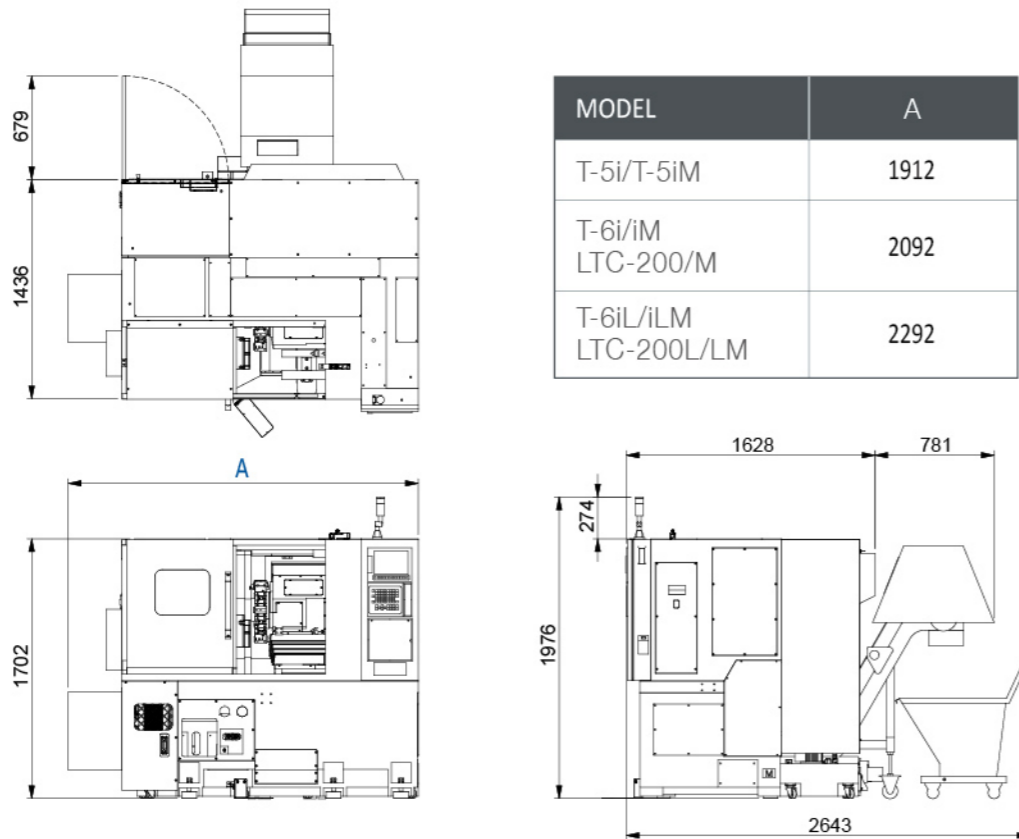
SPINDLE MOTOR POWER CURVE

--- Torque - S1 (Nm) --- Output - S1 (kW) --- Output - S3-60min (kW)
--- Torque - S2-15min(Nm) --- Output - S2-15min(kW) --- Torque -S2-60min (Nm)
--- Torque - S3-60min (Nm)



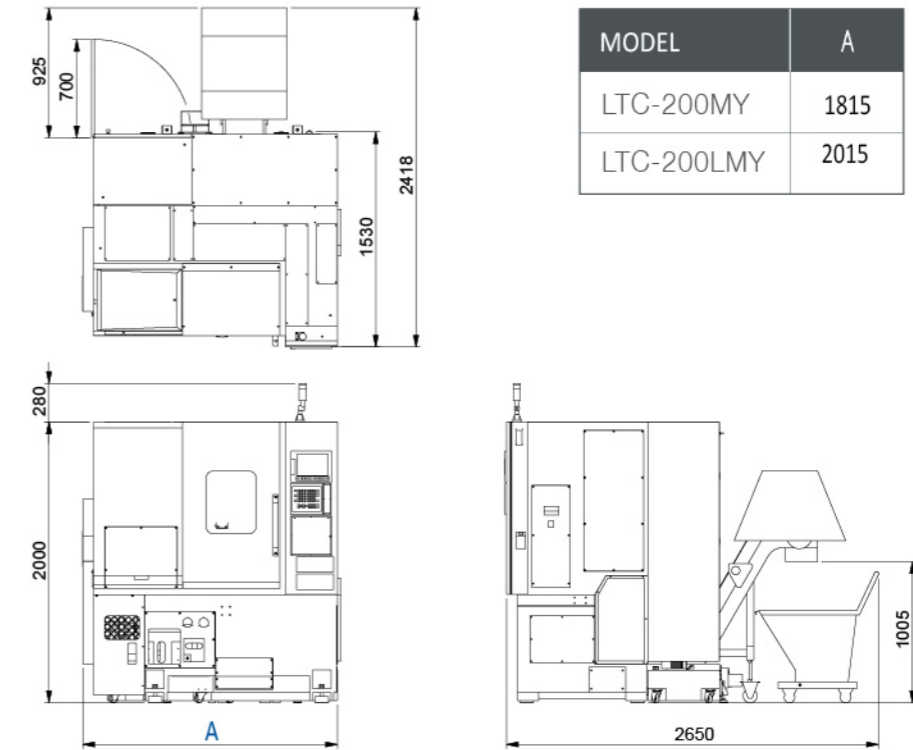
OUTLINE DIMENSION

T-5i/T-5iM T-6i/T-6iL/T-6iM/T-6iLM
LTC-200/LTC-200L/LTC-200M/LTC-200LM



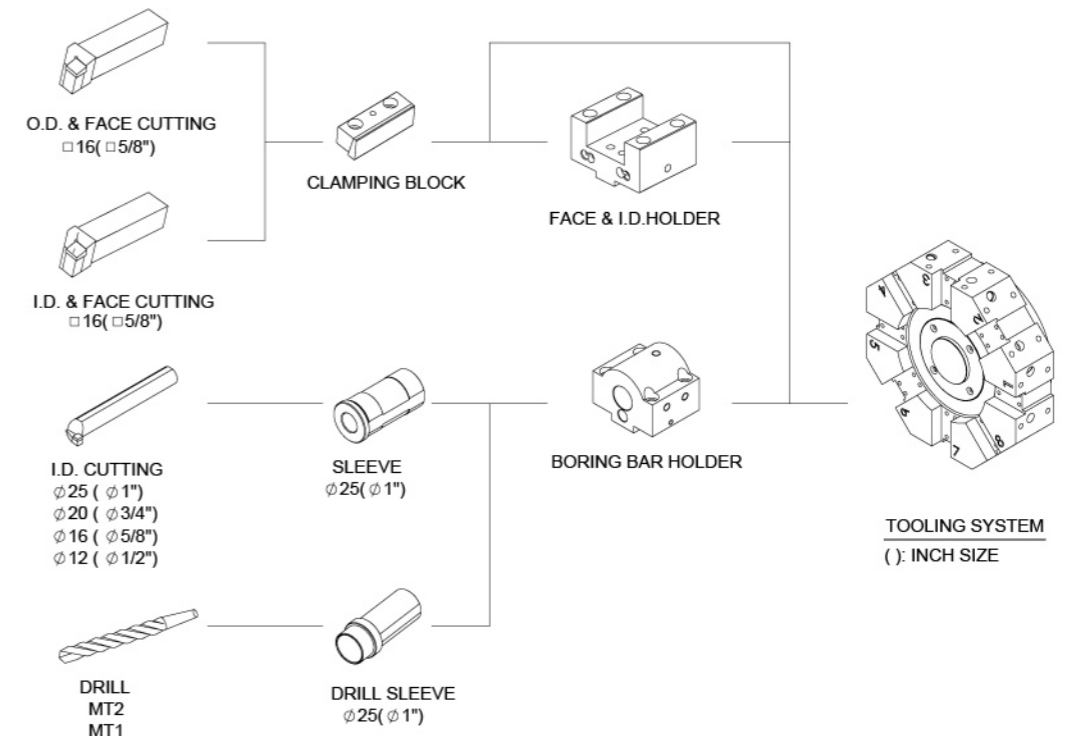
OUTLINE DIMENSION

LTC-200MY/LTC-200LMY



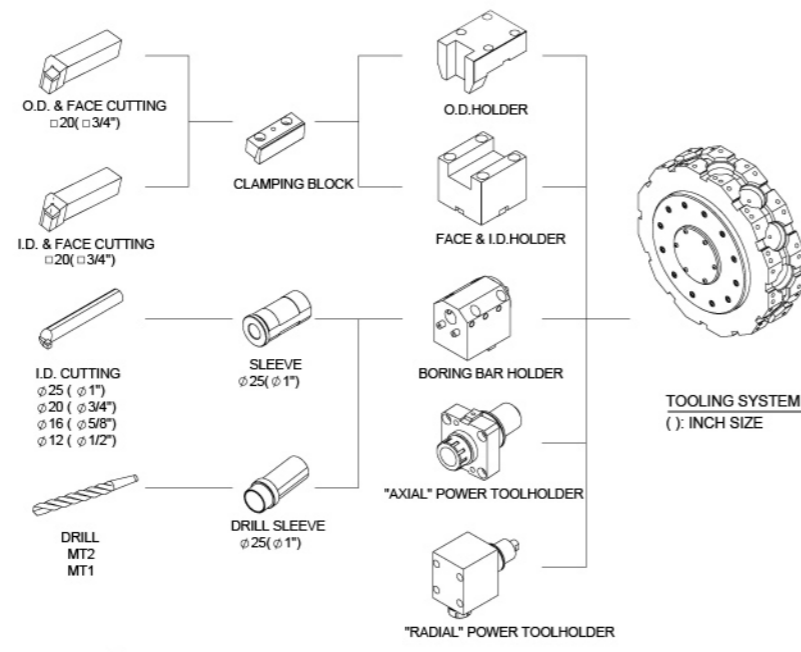
TOOL SYSTEM

T-5i

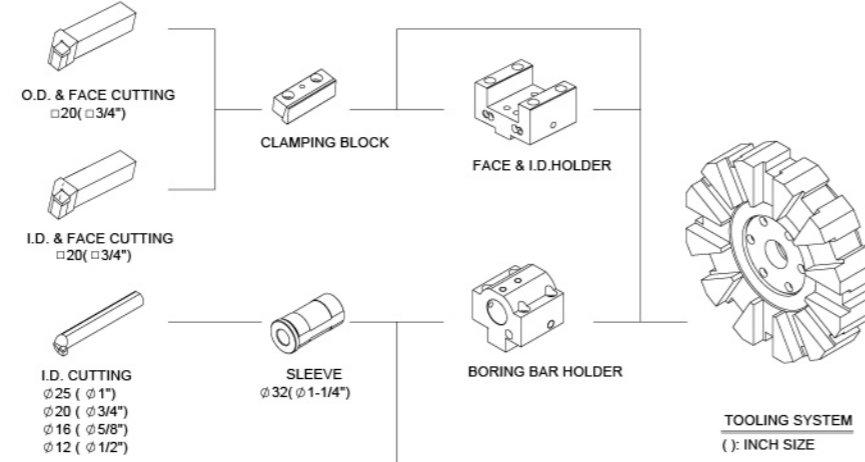


TOOL SYSTEM

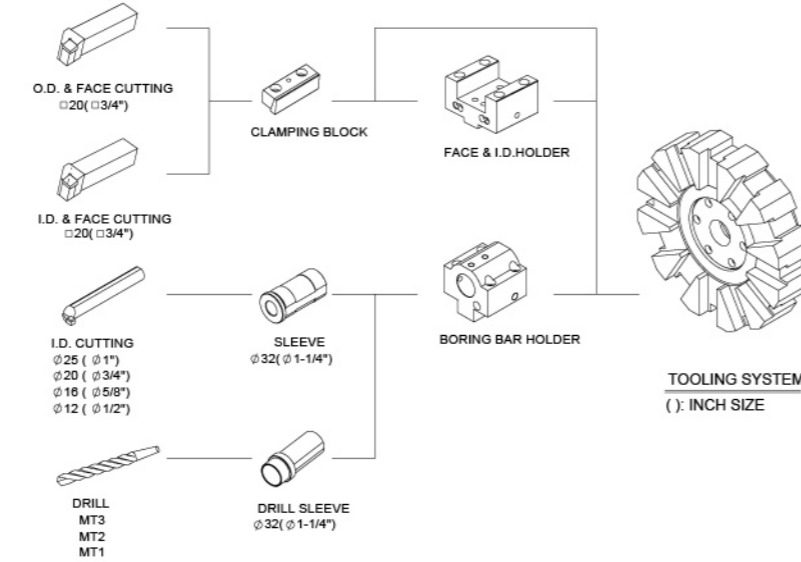
T-5iM/T-6iM/T-6iLM
LTC-200M/LTC-200LM
LTC-200MY/LTC-200LMY



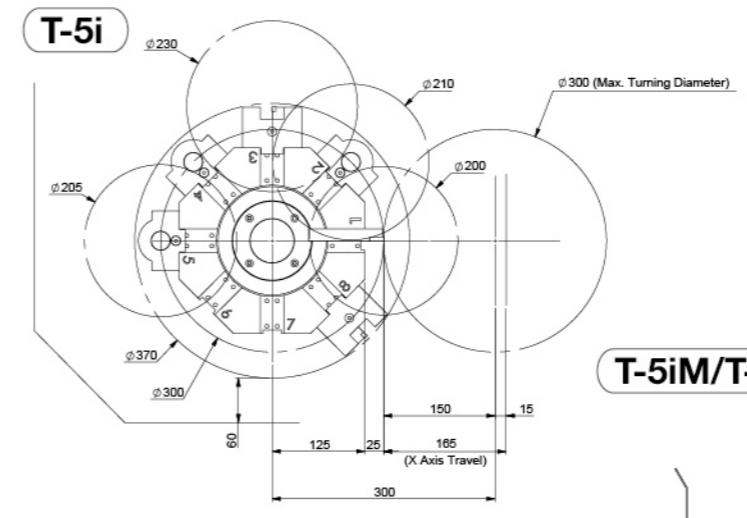
T-6i/T-6iL



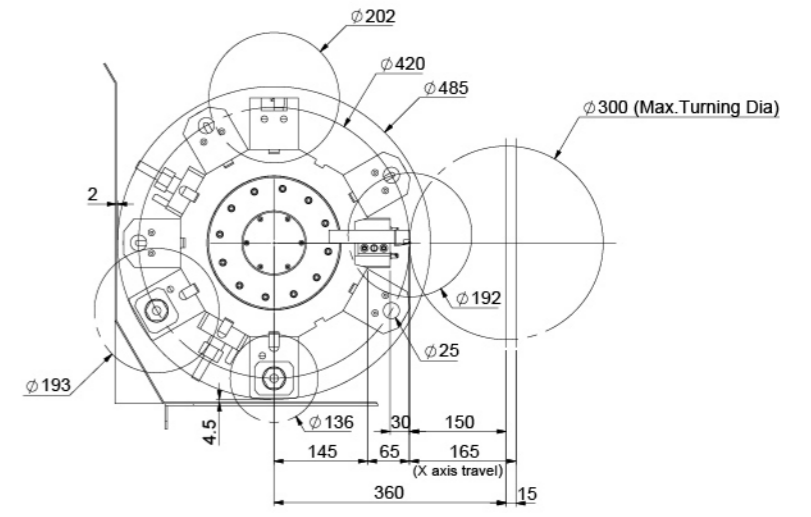
LTC-200/LTC-200L



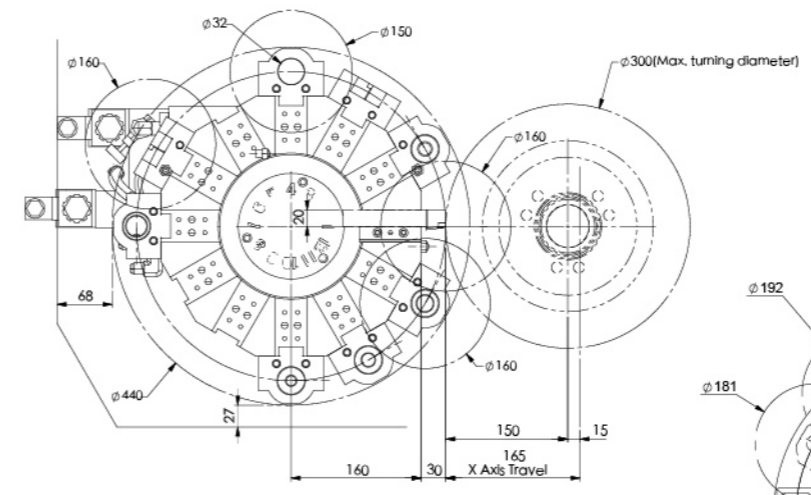
TOOLING INTERFERENCE



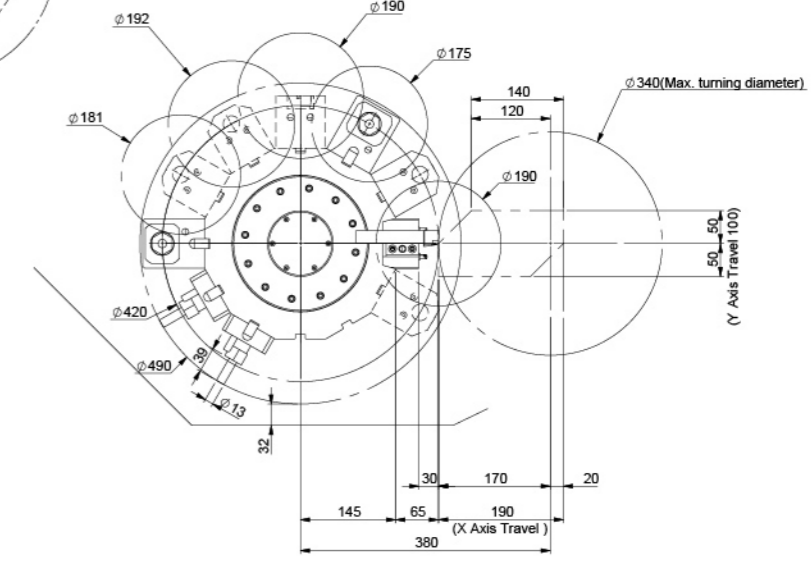
T-5iM/T-6iM/T-6iLM/LTC-200M/LTC-200LM



T-6i/T-6iL/LTC-200/LTC-200L

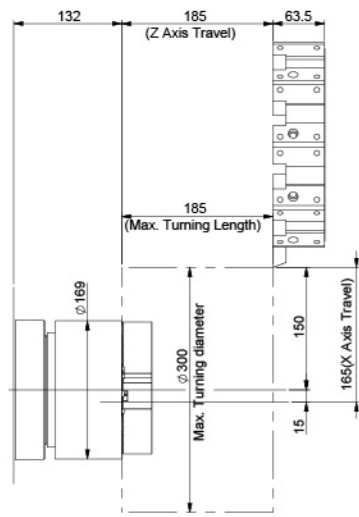


LTC-200MY/LTC-200LMY

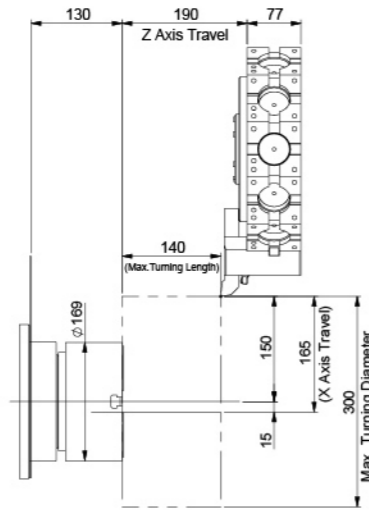


WORKING CAPACITY

T-5i



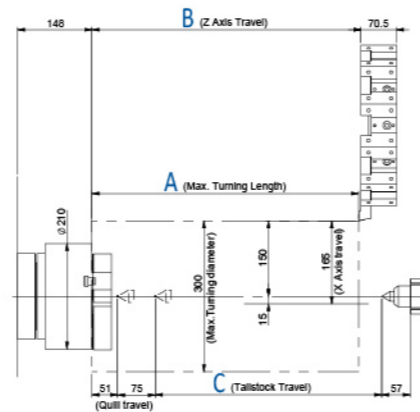
T-5iM



T-6i/T-6iL

LTC-200/LTC-200L

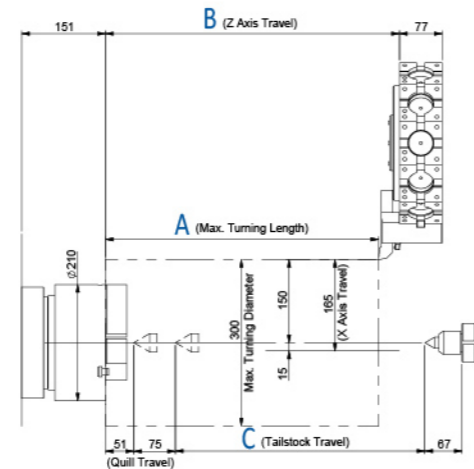
MODEL	A	B	C
T-6i/LTC-200	330	330	250
T-6iL/LTC-200L	530	530	450



T-6iM/T-6iLM

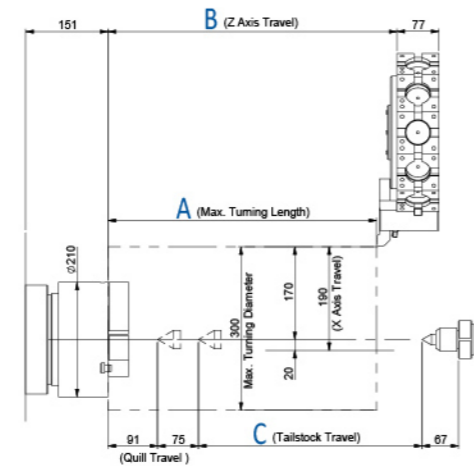
LTC-200M/LTC-200LM

MODEL	A	B	C
T-6iM	300	300	250
T-6iLM	500	500	450
LTC-200M	300	330	250
LTC-200LM	500	530	450



LTC-200MY/LTC-200LMY

MODEL	A	B	C
LTC-200MY	300	330	210
LTC-200LMY	500	530	410



MACHINE SPECIFICATIONS

ITEM	MODEL	T-5i	T-5iM	T-6i/iL	T-6iM/iLM
		GANG TYPE / WITH TURRET			
CAPACITY					
Max. swing	mm(in)	480(18.9)	480(18.9)	480(18.9)	480(18.9)
Max. turning diameter	mm(in)	136/300(5.35/11.8)	300(11.8)	300(11.8)	300(11.8)
Max. turning length	mm(in)	150(5.9)	140(5.5)	330/530(12.9/20.9)	300/500(11.8/19.7)
Bar capacity	mm(in)	45(1.77)	45(1.77)	45(1.77)	45(1.77)
TRAVEL					
X-axis travel	mm(in)	230/150+15(9/5.9+0.6)	150+15(5.9+0.6)	150+15(5.9+0.6)	150+15(5.9+0.6)
Z-axis travel	mm(in)	230/186(9/7.32)	190(7.48)	330/530(12.9/20.9)	300/500(11.8/19.7)
SPINDLE					
Spindle speed	rpm	6000	6000	5000	5000
Chuck size	in	6	6	8	8
Type of spindle nose		A2-5	A2-5	A2-5	A2-5
Spindle motor type	Fanuc	B12	B12	B12	B12
Spindle motor power (cont./15min)	kw(hp)	11/15(14.7/20)	11/15(14.7/20)	11/15(14.7/20)	11/15(14.7/20)
TURRET					
Number of tool stations	pcs	6/8	12	12	12
Shank height for square tool	mm(in)	16(0.63)	20(0.78) BMT45	20(0.78)	20(0.78) BMT45
Shank diameter for boring bar	mm(in)	25(1)	25(1) BMT45	32(1.25)	25(1) BMT45
Rotary tool spindle speed range: axis units	rpm	---	5000	---	5000
Rotary tool spindle speed range: radial units	rpm	---	5000	---	5000
Rotary tool motor power	kw(hp)	---	2.2(3)	---	2.2(3)
FEED RATE					
X/Z-axis rapid traverse	m/mm(in)	30(1181)	30(1181)	30(1181)	30(1181)
FEED MOTORS					
X/Z-axis motor	kw(hp)	1.8(2.4)	1.8(2.4)	1.8(2.4)	1.8(2.4)
TAILSTOCK					
Quill diameter	mm(in)	---	---	75(3)	75(3)
Quill inside taper	M.T	---	---	4	4
MACHINE SIZE					
Floor space(L)	mm(in)	1912(75.3)	1912(75.3)	2092/2292(82.3/90.2)	2092/2292(82.3/90.2)
Floor space(W)	mm(in)	1628(64.1)	1628(64.1)	1628(64.1)	1628(64.1)
Floor space(H)	mm(in)	1976(77.7)	1976(77.7)	1976(77.7)	1976(77.7)
Machine weight	kg	2700	3000	3500/3800	3500/3800
Power requirement	KVA	15	20	30	35
controller		0i-TF/T3	0i-TF/T3	0i-TF/T3	0i-TF/T3

*Available controller: SIEMENS/FAGOR/HEIDENHAIN

MACHINE SPECIFICATIONS

ITEM	MODEL	LTC-200/L	LTC-200M/LM	LTC-200MY/LMY
CAPACITY				
Max. swing	mm(in)	500(19.7)	500(19.7)	500(19.7)
Max. turning diameter	mm(in)	300(11.8)	300(11.8)	300(11.8)
Max. turning length	mm(in)	330/530(12.9/20.9)	280/480(11/18.9)	300/500(11.8/19.7)
Bar capacity	mm(in)	52(2)	52(2)	52(2)
TRAVEL				
X-axis travel	mm(in)	150+15(5.9+0.6)	150+20(5.9+0.79)	170+20(6.7+0.8) 擴孔刀 150+40(5.9+1.6) 外徑刀
Z-axis travel	mm(in)	330/530(12.9/20.9)	330/530(12.9+20.9)	330/530(12.9/20.9)
Y-axis travel	mm(in)	---	---	±50(±1.96)
SPINDLE				
Spindle speed	rpm	4500	4500	4500
Chuck size	in	8	8	8
Type of spindle nose		A2-6	A2-6	A2-6
Spindle motor type	Fanuc	B12	B12	B12
Spindle motor power (cont./15min)	kw(hp)	11/15(14.7/20)	11/15(14.7/20)	11/15(14.7/20)
TURRET				
Number of tool stations	pcs	12	12	12
Shank height for square tool	mm(in)	20(0.78)	20(0.78) BMT45	20(0.78) BMT45
Shank diameter for boring bar	mm(in)	32(1.25)	25(1) BMT45	25(1) BMT45
Rotary tool spindle speed range: axis units	rpm	---	5000	5000
Rotary tool spindle speed range: radial units	rpm	---	5000	5000
Rotary tool motor power	kw(hp)	---	2.2(3)	2.2(3)
FEED RATE				
X/Z/Y-axis rapid traverse	m/mm(in)	20/20/---(788/788/---)	20/20/---(788/788/---)	20(788)
FEED MOTORS				
X/Z/Y-axis motor	kw(hp)	1.8/1.8/---(2.4/2.4/---)	1.8/1.8/---(2.4/2.4/---)	1.8/1.8/1.8(2.4/2.4/2.4)
TAILSTOCK				
Quill diameter	mm(in)	75(3)	75(3)	75(3)
Quill inside taper	M.T	4	4	4
MACHINE SIZE				
Floor space(L)	mm(in)	2092/2292(82.3/90.2)	2092/2292(82.3/90.2)	1815/2015(71.5/79.3)
Floor space(W)	mm(in)	1628(64.1)	1628(64.1)	1530(60.2)
Floor space(H)	mm(in)	1976(77.7)	1976(77.7)	2000(78.7)
Machine weight	kg	3500/3800	3600/3900	3900/4200
Power requirement	KVA	30	35	35
controller		0i-TF/T3	0i-TF/T3	0i-TF/T3

*Available controller: SIEMENS/FAGOR/HEIDENHAIN

MACHINE ACCESSORIES

ITEM	MODEL	T-5i	T-5iM	T-6i/iL	T-6iM/iLM	LTC-200/L	LTC-200M/LM	LTC-200MY/LMY
BMT disc		X	●	X	●	X	●	●
Buzzer		●	●	●	●	●	●	●
Heat exchanger		●	●	●	●	●	●	●
Full enclosed splash guard		●	●	●	●	●	●	●
3 jaw open center chuck		●	●	●	●	●	●	●
Foot switch		●	●	●	●	●	●	●
V belt		●	●	●	●	●	●	●
Metric disc		●	X	●	X	●	X	X
Three layers warning light		●	●	●	●	●	●	●
Manual tailstock		X	X	●	●	●	●	X
Programmable tailstock		X	X	■	■	■	■	●
Tool setter		■	■	■	■	■	■	■
Auto door		■	■	■	■	■	■	■
Spindle air outer blow		■	■	■	■	■	■	■
High pressure pump 4bar		■	■	■	■	■	■	■
Chip conveyor and bucket		■	■	■	■	■	■	■
Collet chuck		■	■	■	■	■	■	■
Bar feeder		■	■	■	■	■	■	■
Parts catcher		■	■	■	■	■	■	■
Air conditioner		■	■	■	■	■	■	■
Robot		■	■	■	■	■	■	■
3 jaw close center chuck		■	■	■	■	■	■	■
Oil skimmer		■	■	■	■	■	■	■
Oil mist collector		■	■	■	■	■	■	■
Inch disc		■	X	■	X	■	X	X

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