



CUTEX-240

8"-10" Chucker Integrated Turning Center





8"-10" CHUCKER INTEGRATED TURNING CENTER

Integrated turning center

The fast turret indexing time of 0.15sec/step and 36m/min feedrate minimize the time between each cut process, and CUTEX-240 is capable of working multiple axes simultaneously for separate processes—to machine different workpieces of different shapes faster.

1 Serration Shaft / Automobile / SM43C 2 Output Shaft / Automobile / SCM920HSV1
3 Input Shaft / Automobile / SCM920 4 Cam Shaft / Automobile / sintered alloy



8"-10" CHUCKER WITH SUB SPINDLE & MC

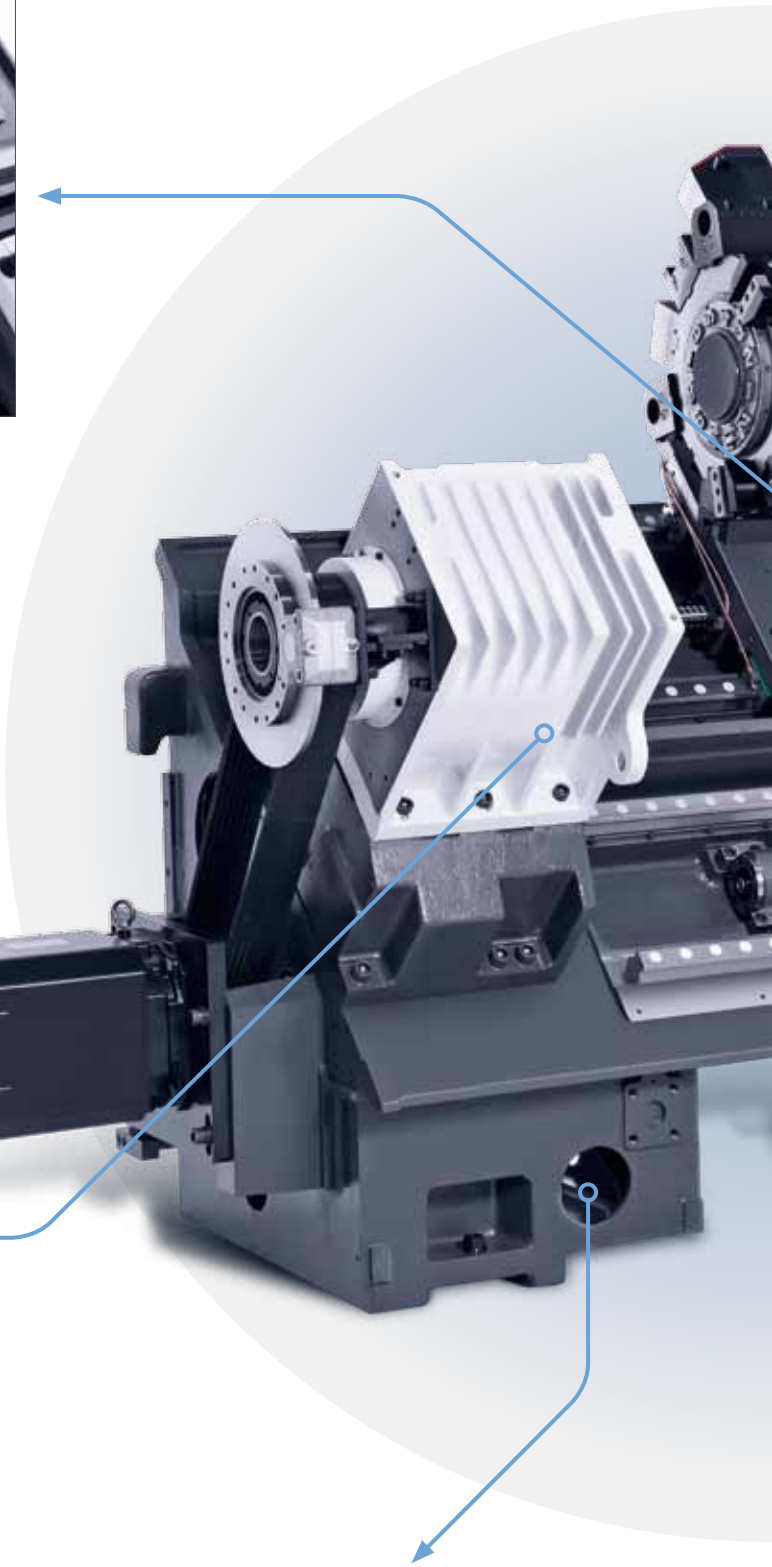
The CUTEX-240 integrated turning center is built tough. This compact turning center offers many different spindles for different jobs; the programmable tailstock and steady rest allow for turning extra long workpieces; and other optional features such as the sub spindle and the turnmill function make possible complex, multiple processes with a single chucking. Plus, component add-ons such as the bar feeder and parts catcher will help your business get results even faster.





Extra rigid LM Guide

CUTEX-240 incorporates highly rigid LM guides on all axes with fast feedrate of 36m/min, to cut down the time between processes, and to enhance machine precision.

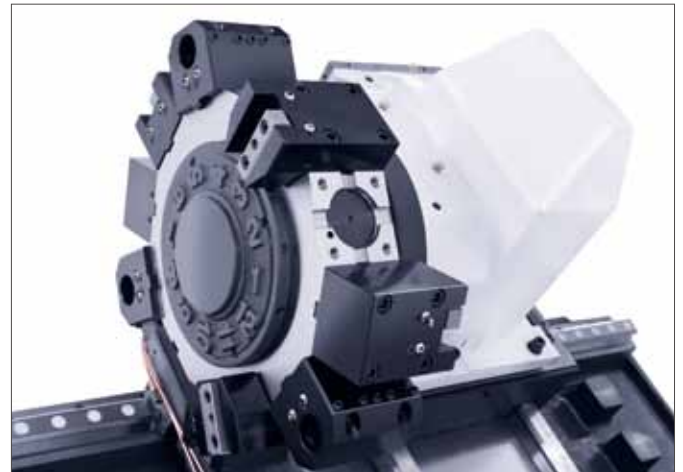
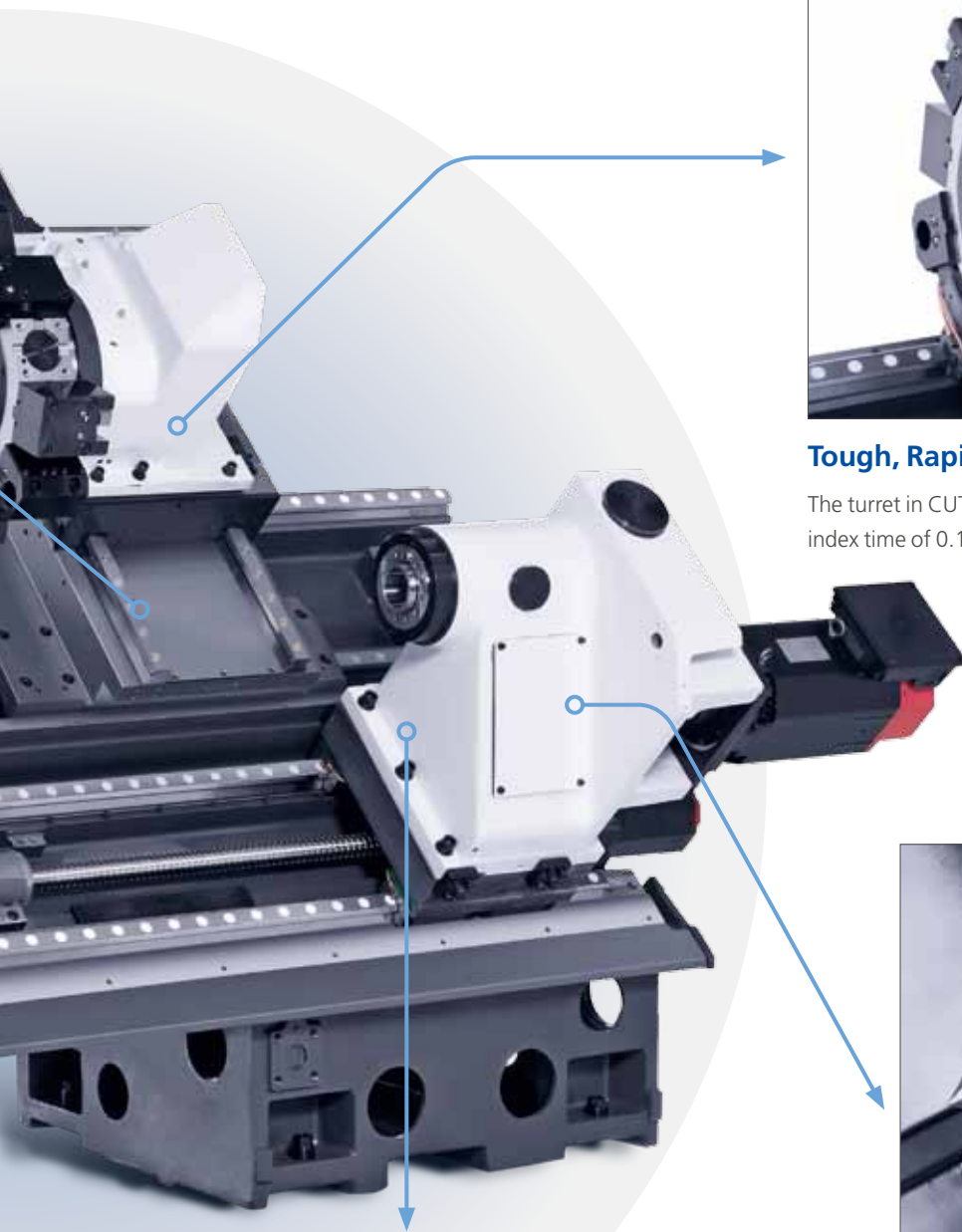


High-speed, High-performance spindle

Hwacheon's high-performance spindle delivers predictable, quality results consistently at high speed machining.

Extra rigid single frame construction

The integrated 45-degree torque rib frame bed is made of Meehanite cast iron to limit heat distortion; and it prevents thermal displacement during high-speed machining to guarantee accurate, consistent results.



Tough, Rapid Indexing Turret

The turret in CUTEX-240 with a powerful clamping force offers an index time of 0.15sec/step for faster, more stable machining.



Programmable Tailstock (Standard)

The tailstock can be programmed to position itself in semi-auto, and it provides firm support for extra-long workpieces to guarantee machining precision. The tail spindle can be operated either by the foot switch or by programming, while providing firm, stable oil-pressure chucking.



Sub Spindle (SMC only)

With the high-performance sub spindle the SMC model of CUTEX-240 can handle two separate processes with a single chucking, for maximum productivity.



USER FRIENDLY DESIGN, A WIDE RANGE OF OPTIONAL FEATURES

CUTEX-240 is designed to be user friendly, so you can concentrate on what you do best: creating quality products—without losing your valuable time to the worries of machine failure and safety. A wide variety of performance upgrade options are available for faster, more precise machining.



· Spindle synchronization

The main and the sub spindles work in sync to complete the initial and the final processes simultaneously, for increased productivity.

· Multiplex machining for different shapes

The turnmill function and spindle indexing allow for synchronous multi-axis machining.




Parts Catcher (Option)

The parts catcher dissipates the scrap materials left over after machining—to make your work safer and more time efficient.

Tool Presetter (Option)

The tool presetter employs a highly accurate sensor with the repeatability of 5µm or less to precisely compute for the coordinate settings in less than 15 seconds per tool. Different tool shapes and their tolerance values are entered automatically for the coordinate calculations.

L-HTLD: Hwacheon Lathe Tool Load Detect System (Option)

 The Hwacheon Lathe Tool Load Detect System constantly detects and diagnoses the tool load under a process to prevent tool wear and damage, and to keep your machine and tools in optimal shape.

Load Detection Limit 1	Load Detection Limit 2
Alarm + Feed Hold	Alarm + Machine Stop
> When the LIMIT 1 Alarm sounds, the system holds the feed and the machine goes into standby.	> When the LIMIT 2 Alarm sounds, the system stops the machine, and must be reset to operate it.

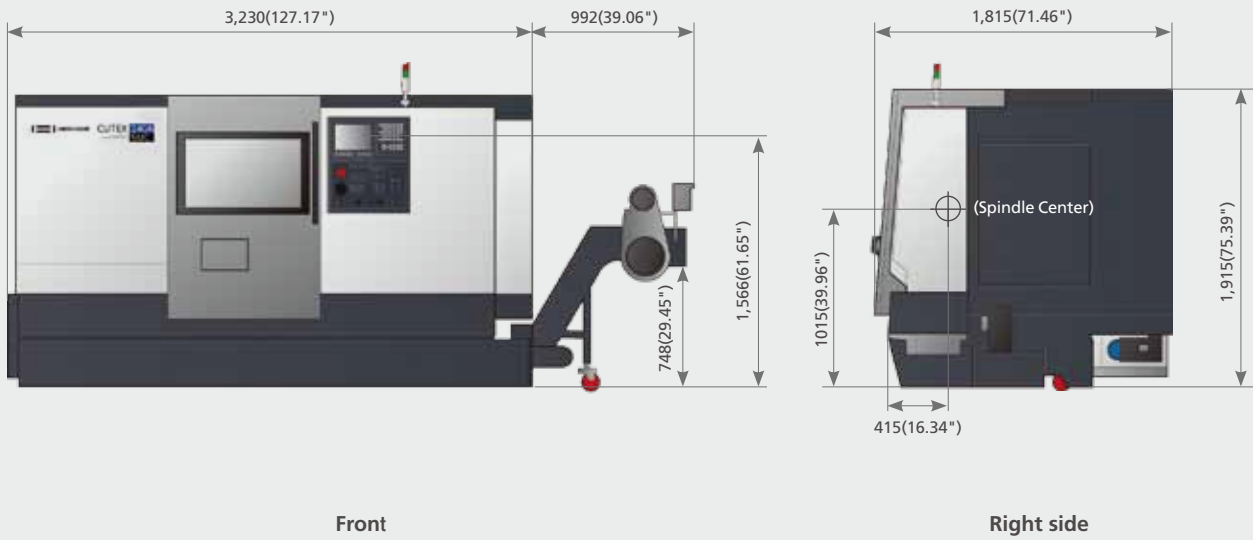


Steady Rest (Option)

Add the optional Steady Rest when working with extra-long workpieces to raise machining precision.

Product Data

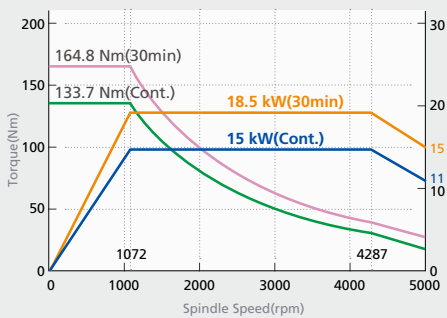
* Unit: mm(inch)



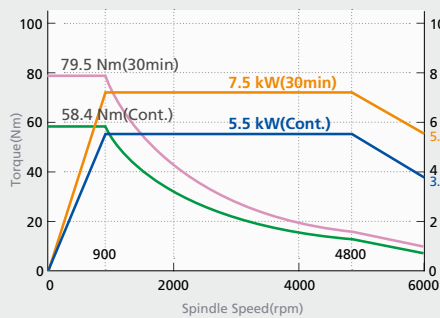
Spindle Power-Torque Diagram

CUTEX-240A/B

Main Spindle

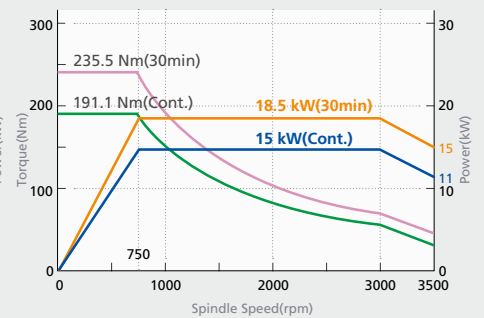


Sub Spindle



CUTEX-240C

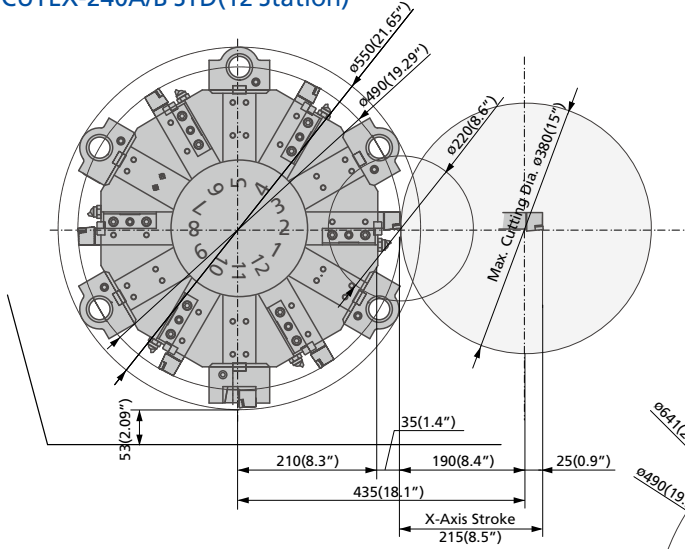
Main Spindle



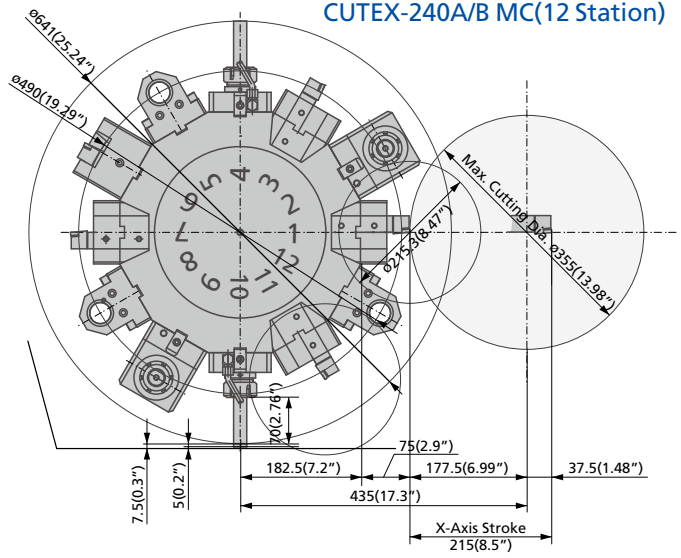
Tool Interference Diagram

※Unit : mm(inch)

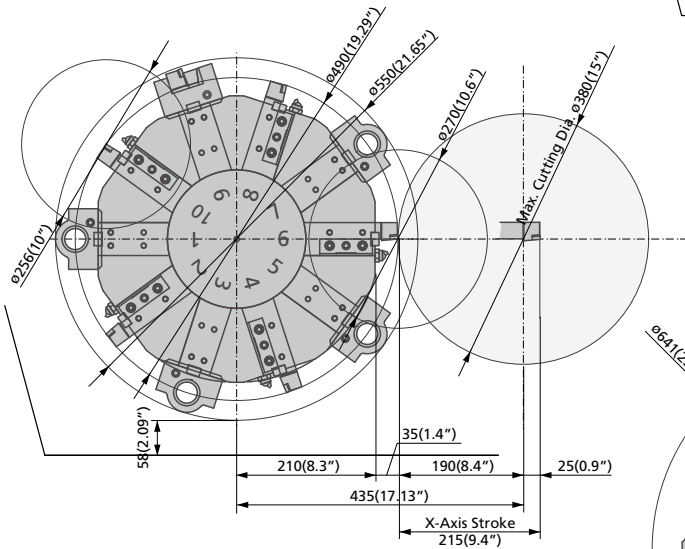
CUTEX-240A/B STD(12 Station)



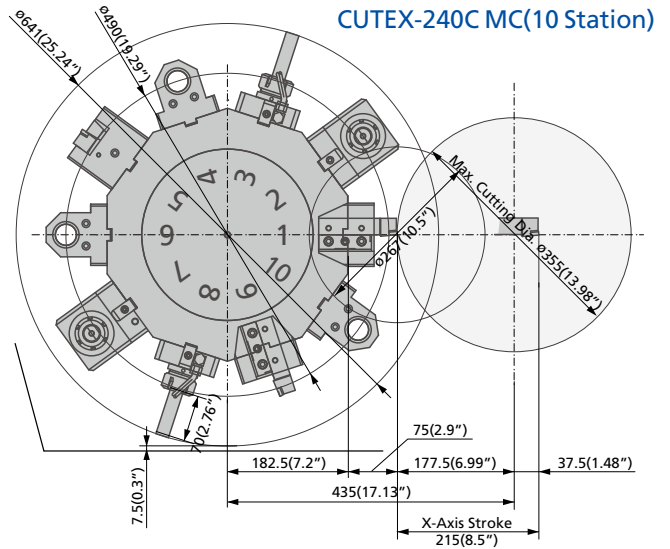
CUTEX-240A/B MC(12 Station)



CUTEX-240C STD(10 Station)



CUTEX-240C MC(10 Station)

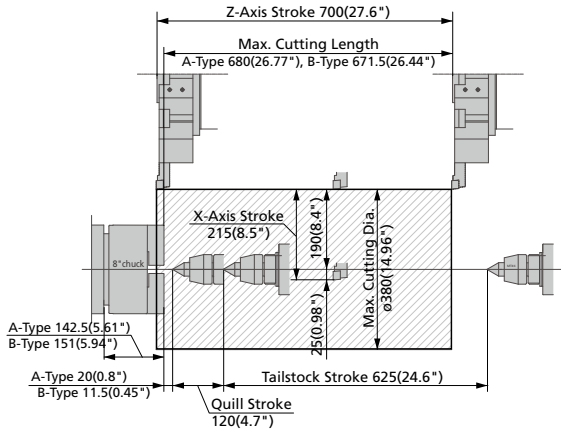


Moving Range

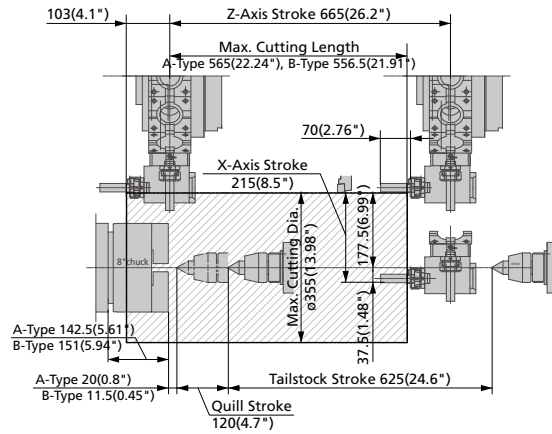
※Unit : mm(inch)

CUTEX-240A/B

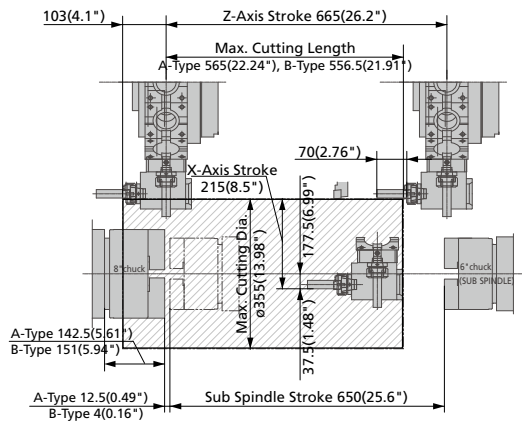
STD Moving Range



MC Moving Range

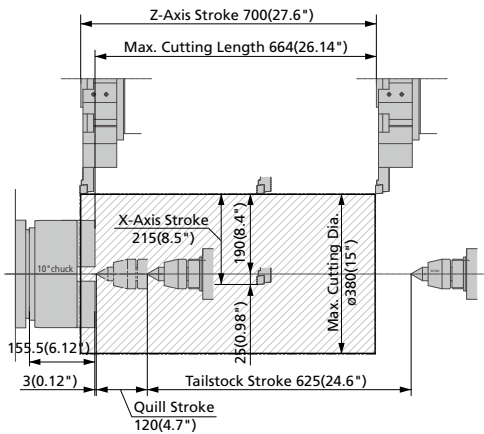


SMC Moving Range

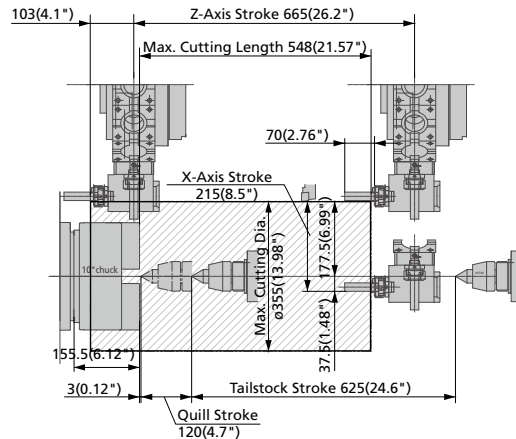


CUTEX-240C

STD Moving Range

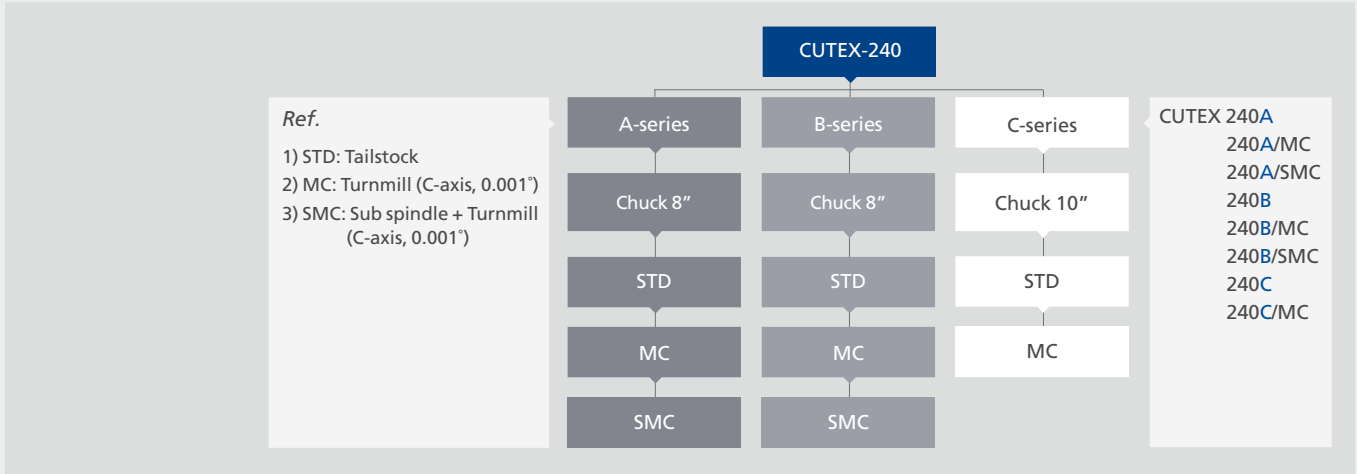


MC Moving Range



Product Configuration

Each product can be configured to fit your application.



Machine Specifications

ITEM	CUTEX-240 SERIES								
	240A	240A/MC	240A/SMC	240B	240B/MC	240B/SMC	240C	240C/MC	
Capacity									
Swing over bed	mm (inch)	Ø580 (22.84")							
Max. Cutting diameter	mm (inch)	Ø380 (14.96")	Ø355 (13.98")	Ø380 (14.96")	Ø355 (13.98")	Ø380 (14.96")	Ø355 (13.98")		
Standard Cutting diameter	mm (inch)	Ø220 (8.6")	Ø215 (8.47")	Ø220 (8.6")	Ø215 (8.47")	Ø270 (10.6")	Ø267 (10.5")		
Max. Cutting length	mm (inch)	680 (26.77")	565 (22.24")	671.5 (26.44")	556.5 (21.91")	664 (26.14")	548 (21.58")		
Chuck Size	inch	8"	8" / 6"	8"	8" / 6"	10"			
Spindle									
Type of spindle nose	ASA	A2-6	A2-6 / A2-5	A2-6	A2-6 / A2-5	A2-8			
Max. Spindle speed	rpm	5,000	5,000 / 6,000	5,000	5,000 / 6,000	3,500			
Through spindle hole diameter	mm (inch)	Ø75 (2.95")	Ø75 / Ø55 (2.95" / 2.17")	Ø75 (2.95")	Ø75 / Ø55 (2.95" / 2.17")	Ø90 (3.54")			
Max. Bar size	mm (inch)	Ø51 (2")	Ø51 / Ø46 (2" / 1.81")	Ø65 (2.56")	Ø64 / Ø46 (2.5" / 1.81")	Ø76 (3")			
Spindle bearing inner diameter	mm (inch)	Ø100 (3.94")	Ø100 / Ø90 (3.94" / 3.54")	Ø100 (3.94")	Ø100 / Ø90 (3.94" / 3.54")	Ø130 (5.12")			
Spindle motor	kW (HP)	18.5/15 (25/20)	18.5/15(25/20), [7.5/5.5(10/7.5)]	18.5/15 (25/20)	18.5/15 (25/20), [7.5/5.5(10/7.5)]	18.5/15 (25/20)			
Turret									
Number of tool station	ea	12					10		
Tool size	mm (inch)	□25 x Ø40 (□1" x Ø1.5")							
Turret indexing time	sec / step	0.15							
Feedrates									
Rapid speed (X/Z/B)	m/min	36 / 36 / -	36 / 36 / -	36 / 36 / 30	36 / 36 / -	36 / 36 / -	36 / 36 / 30	36 / 36 / -	
Max. Stroke (X/Z/B)	mm (inch)	215 / 700 / - (8.47" / 27.56" / -)	215 / 665 / - (8.47" / 26.18" / -)	215 / 665 / 650 (8.47" / 26.18" / 25.59")	215 / 700 / - (8.47" / 27.56" / -)	215 / 665 / - (8.47" / 26.18" / -)	215 / 665 / 650 (8.47" / 26.18" / 25.59")	215 / 700 / - (8.47" / 27.56" / -)	215 / 665 / - (8.47" / 26.18" / -)
Feed Motor (X/Z/B)	kW (HP)	3/3/- (4/4/-)	3/3/- (4/4/-)	3/3/1.6(4/4/2.2)	3/3/- (4/4/-)	3/3/- (4/4/-)	3/3/1.6(4/4/2.2)	3/3/- (4/4/-)	3/3/- (4/4/-)
Tailstock									
Quill dia.	mm (inch)	Ø80 (3.15")	-	Ø80 (3.15")	-	Ø80 (3.15")			
Quill stroke	mm (inch)	120 (4.12")	-	120 (4.12")	-	120 (4.12")			
Quill taper	MT	#4	-	#4	-	#4			
Turnmill (Opt.)									
Spindle motor	kW (HP)	-	3.7 / 2.2 (5/3)	-	3.7 / 2.2 (5/3)	-	3.7 / 2.2 (5/3)		
Max. Spindle speed	rpm	-	5,000	-	5,000	-	5,000		
Max. Drill/Tap size	mm	-	Ø20 (0.79") / M16	-	Ø20 (0.79") / M16	-	Ø20 (0.79") / M16		
Min. Index angle	° (deg)	-	0.001°	-	0.001°	-	0.001°		
Tank Capacity									
Lubrication	ℓ (gal)	3 (0.8)							
Hydraulic	ℓ (gal)	20 (5.28)							
Coolant	ℓ (gal)	200(52.83)							
Power Sources									
Electrical power supply	kVA	35							
Dimension									
Height	mm (inch)	1,915 (75.39")							
Floor space (LxW)	mm (inch)	3,230 x 1,815 (127.2" x 71.5")							
Weight	kg (lb)	4,200 (9,259)	4,300 (9,480)	4,400 (9,700)	4,200 (9,259)	4,300 (9,480)	4,400 (9,700)	4,200 (9,259)	4,300 (9,480)
NC Controller		Fanuc 0i-TD							

Standard and Optional Product Components





Standard Accessories		Optional Accessories	
• Coolant system	• 10.4" LCD monitor	• Air blower	• Parts catcher
• Door interlock	• Operation manual & parts list	• Air gun	• Siemens Controller (828D)
• Foot switch	• Set of soft jaws	• Auto door	• Signal lamp with 3 colors(R, G, Y)
• Hydraulic chuck & cylinder	• Signal lamp with 2 colors(R, G)	• Bar feeder interface	• Steady Rest
- CUTEX-240A: 8"	• Tool kit & box	• Chip conveyor & Box (Side Type)	• Tool presetter (Manual)
- CUTEX-240B: 8"	• Tooling system	• Chuck dual pressure system	• Tool & work counter, External / Internal
- CUTEX-240C: 10"	• Work light	• Chuck pressure check switch	• Tool Life Management
• Hydraulic Tailstock (MT#4) (Except SMC version)		• Chuck pressure compensation	• Turnmill function including C-axis (0.001°)
- Body Program		• Coolant gun	• Turnmill holder (Axial / Radial)
- Quill Program		• Hard jaw	• Transformer
• Leveling bolt & plate		• High pressure pump, 6bar/15bar	• U-Drill Holder
• Manual Guide i		• L-HTLD (Lathe-Hwacheon Tool Load Detect)	• VDI 4D Turret
		• NC cooler	

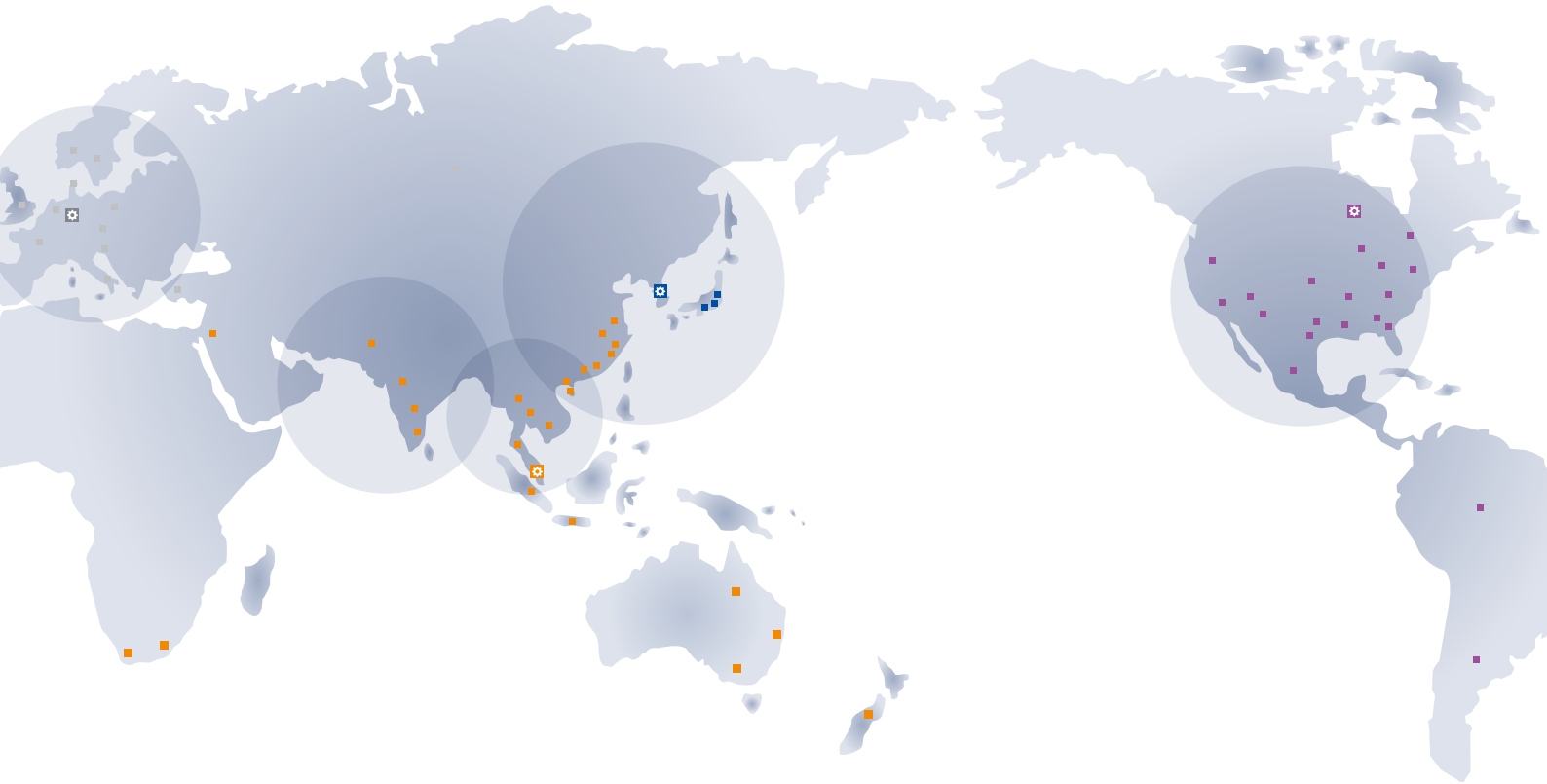
NC Specifications [Fanuc Oi-TD]

※ - : Not available S : Standard O : Option

ITEM	SPECIFICATION	STD	MC	SMC	ITEM	SPECIFICATION	STD	MC	SMC
Controlled axis					Program input				
Controlled axis (Cs axis)	2-Axes	2-Axes	3-Axes	5-Axes	Tape code	EIA RS244 / ISO840	S	S	S
Simultaneously controlled axes	2-Axes	2-Axes	3-Axes	4-Axes	Optional block skip	1ea	S	S	S
Least input increment	0.001mm, 0.001deg, 0.0001inch	S	S	S	Program number	O4-Digits	S	S	S
Least input increment 1/10	0.0001mm, 0.0001deg, 0.00001inch	O	O	O	Sequence number	N5-Digits	S	S	S
inch/metric conversion	G20, G21	S	S	S	Decimal point programming		S	S	S
Stored stroke check 1		S	S	S	Coordinate system setting	G50	S	S	S
Stored stroke check 2,3		S	S	S	Coordinate system shift		S	S	S
Chamfering on/off		S	S	S	Workpiece coordinate system	G54-G59	S	S	S
Backlash compensation		S	S	S	Workpiece coordinate system preset	G92.1	S	S	S
Operation					Direct drawing dimension programming		S	S	S
Automatic & MDI operation		S	S	S	G code system	A	S	S	S
Program number search		S	S	S	Programmable data input	G10	S	S	S
Sequence number search		S	S	S	Sub program call	10Folds Nested	S	S	S
Dry run, single block		S	S	S	Custom macro B		S	S	S
Manual handle feed	1Unit	S	S	S	Addition of custom macro -common variables	#100-#199, #500-#999	S	S	S
Manual handle feed rate	x1, x10, x100	S	S	S	Canned cycles		S	S	S
Interpolation function					Multiple repetitive cycle		S	S	S
Positioning	G00	S	S	S	Multiple repetitive cycle II		S	S	S
Linear interpolation	G01	S	S	S	Canned cycles for drilling		S	S	S
Circular interpolation	G02, G03	S	S	S	Small-hole peck drilling cycle		S	S	S
Dwell (Per seconds)	G04	S	S	S	Manual guide i		S	S	S
Polar coordinate interpolation	G12.1/G13.1	-	S	S	Spindle speed function				
Cylindrical interpolation	G7.1	-	S	S	Constant surface speed control	G96 / G97	S	S	S
Threading	G32	S	S	S	Spindle override	50-120 %	S	S	S
Multiple threading		S	S	S	Spindle orientation		S	S	S
Threading retract		S	S	S	Rigid tapping		O	S	S
Continuous threading		S	S	S	Spindle synchronous control		-	-	S
Variable lead threading	G34	S	S	S	Editing operation				
Reference position return 1st	G28	S	S	S	Part program storage length	1,280m (512 kB)	S	S	S
Reference position return check	G27	S	S	S	Number of register able programs	400ea	S	S	S
2,3,4th reference position return	G30	S	S	S	Background editing		S	S	S
Feed function					Extended part program editing		S	S	S
Rapid traverse override	F0, F25, F50, F100	S	S	S	Play back		S	S	S
Feed per minute (mm/min)	G98	S	S	S	Operation/Display				
Feed per revolution (mm/rev)	G99	S	S	S	Clock function		S	S	S
Rapid traverse bell-shaped acceleration/deceleration		S	S	S	Self-diagnosis function		S	S	S
Feedrate override	0-150 %	S	S	S	Alarm history display		S	S	S
Jog feed override	0-1,260 mm/min	S	S	S	Help function		S	S	S
Tool function / compensation					Run hour and parts count display		S	S	S
Tool function	T4-digits	S	S	S	Graphic function		S	S	S
Tool offset pairs	±6pairs	S	S	S	Multi-language display		-	-	-
Tool nose radius compensation		S	S	S	Multi-language display	English, German, French, Italian, Chinese, Spanish, Korean, Portuguese, Polish, Hungarian, Swedish, Russia	S	S	S
Tool geometry/wear compensation		S	S	S	Data input/output				
Tool life management	Tool presetter option is required	O	O	O	Reader/Puncher interface CH1	RS232C	S	S	S
Automatic tool offset	Tool presetter option is required	O	O	O	Reader/Puncher interface CH2	RS232C	S	S	S
Direct input tool offset value measured B	Tool presetter option is required	O	O	O	Ethernet interface	Embedded Ethernet	S	S	S
Others					Memory card interface		S	S	S
Display unit	10.4" Color LCD	S	S	S					

Hwacheon Global Network

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HWACHEON

Please call us for product inquiries.

www.hwacheon.com

The product design and specifications may change without prior notice.
Read the operation manual carefully and thoroughly before operating the product,
and always follow the safety instructions and warnings labels attached on the surfaces of the machines.

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