



CUTEX-240

8"-10" Chuck 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 / SCM920HSV
3 Input Shaft / Automobile / SCM920 **4** Cam Shaft / Automobile / sintered alloy



2



3



4

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.





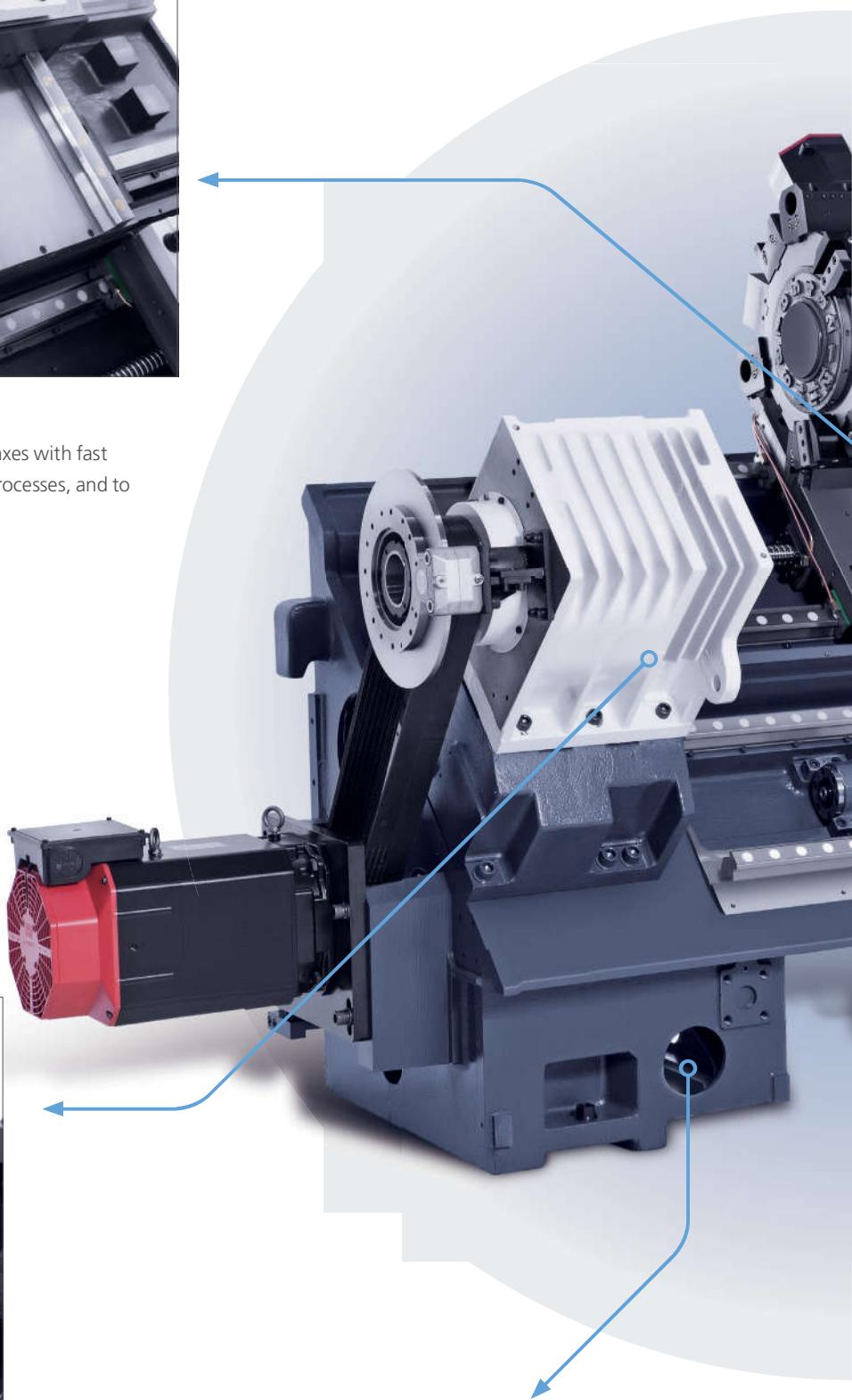
Extra Rigid LM Guide

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.



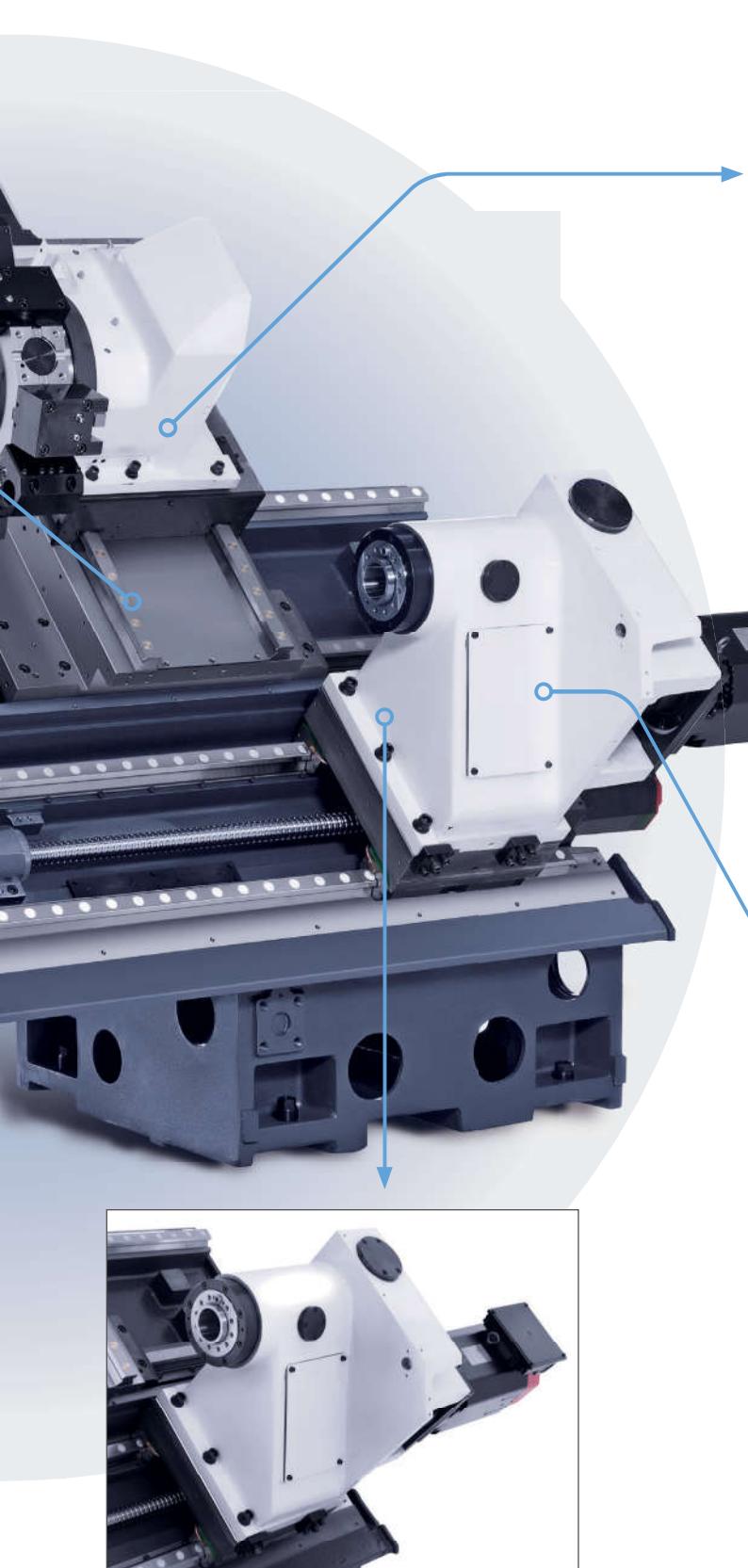
High Speed, High Performance Spindle

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



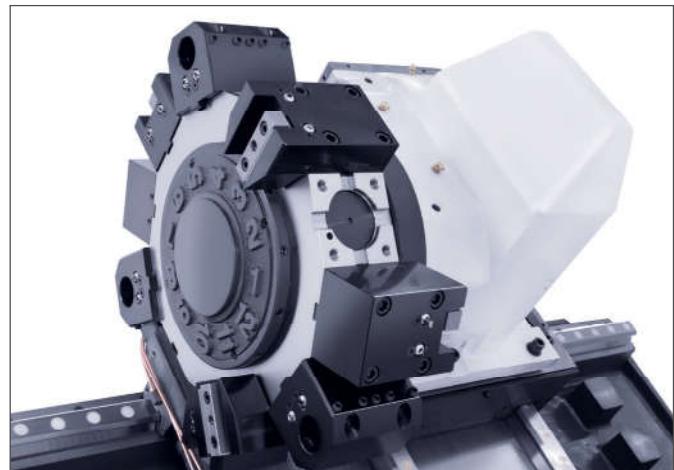
Extra Rigid Single Frame Construction

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.



Sub Spindle (SMC only)

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



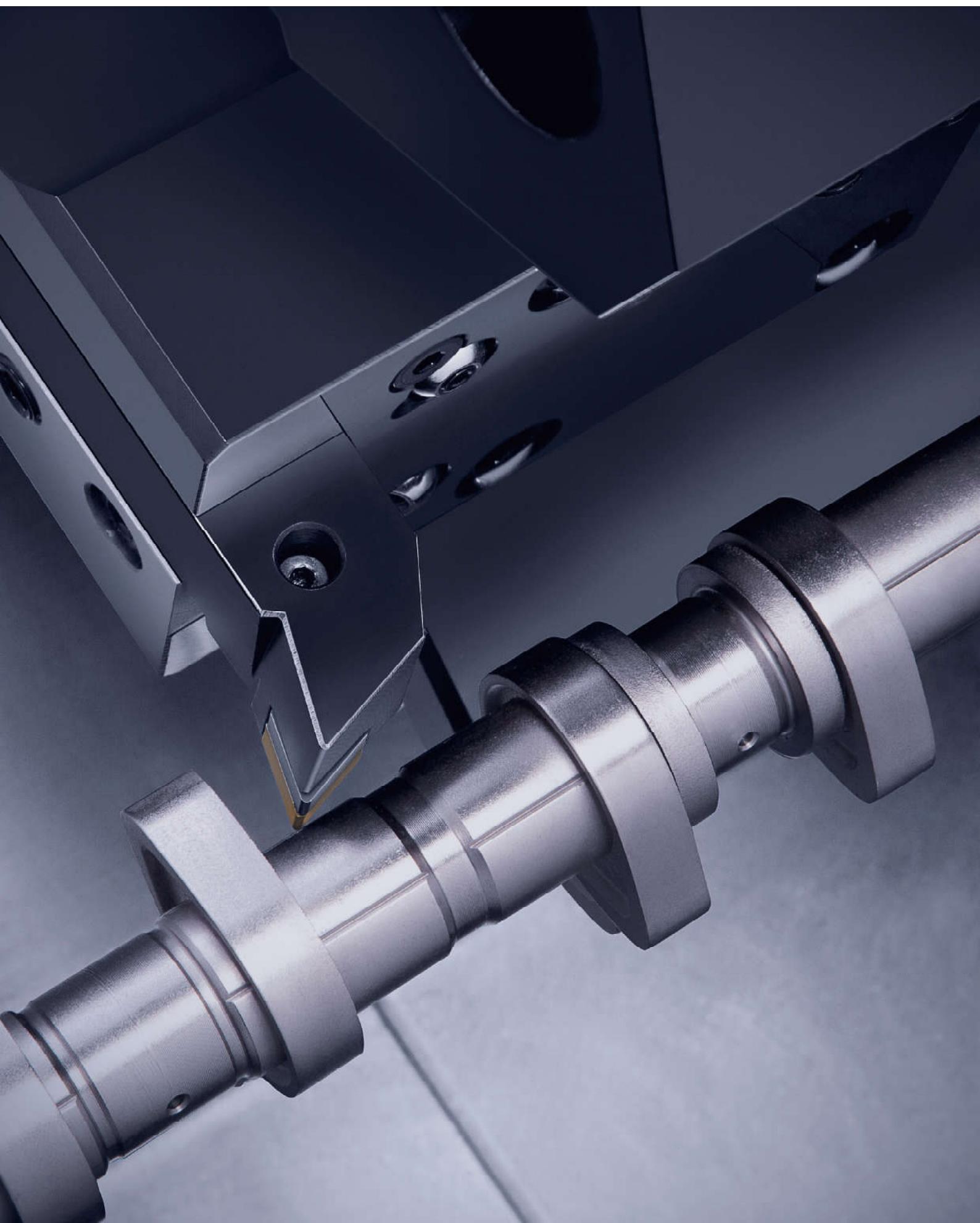
Tough, Rapid Indexing Turret

The turret in CUTEK-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.



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.



① Main Spindle Process

② Pick-up

③ Sub Spindle Process

- 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.



Manual Tool Presetter (Option)

The tool presetter employs a highly accurate sensor 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.



Steady Rest (Option)

SMC Type Not Available

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

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

Alarm + Feed Hold

- > When the LIMIT 1 Alarm sounds, the system holds the feed and the machine goes into standby.

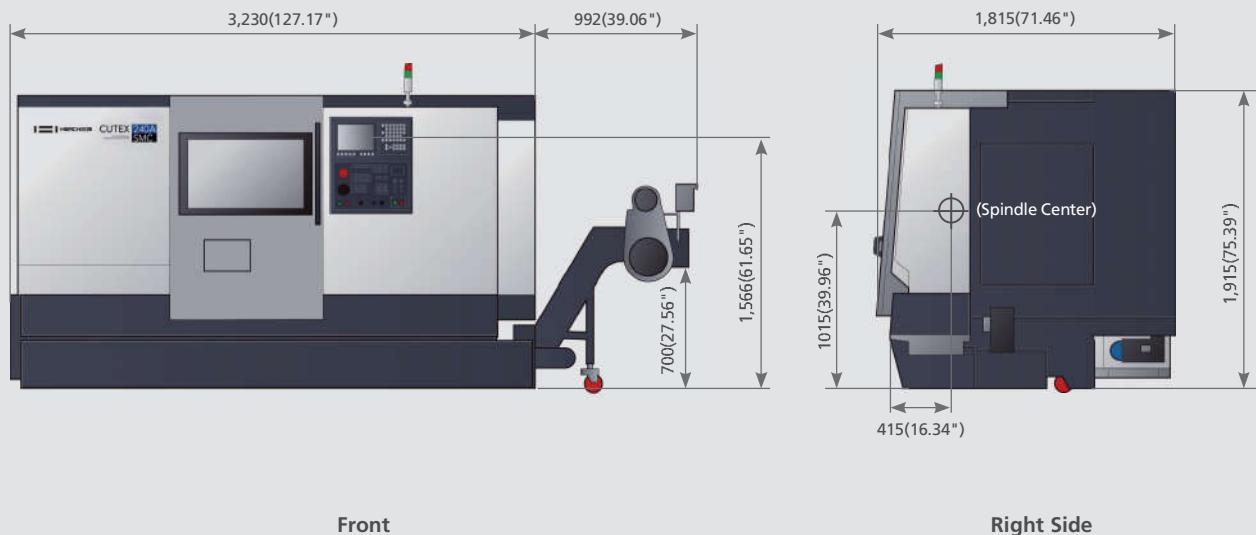
Load Detection Limit 2

Alarm + Machine Stop

- > When the LIMIT 2 Alarm sounds, the system stops the machine, and must be reset to operate it.

Product Data

* Unit: mm(inch)

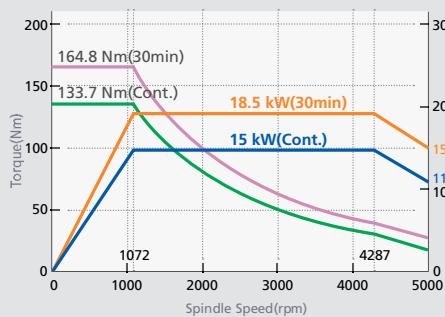


Front

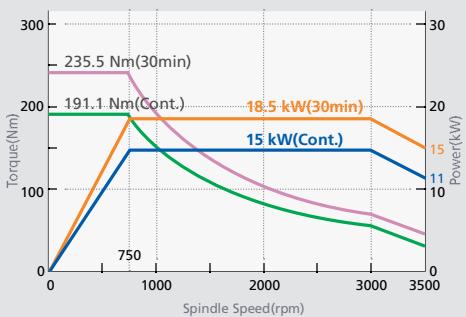
Right Side

Spindle Power-Torque Diagram**CUTEX-240A/B**

Main Spindle

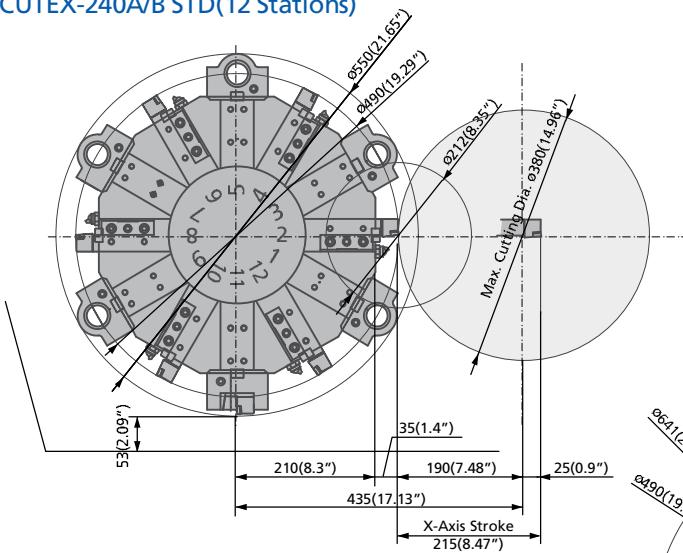
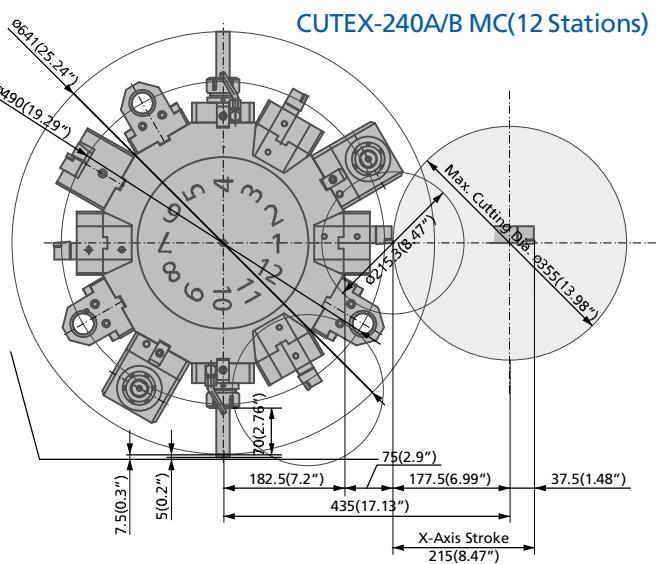
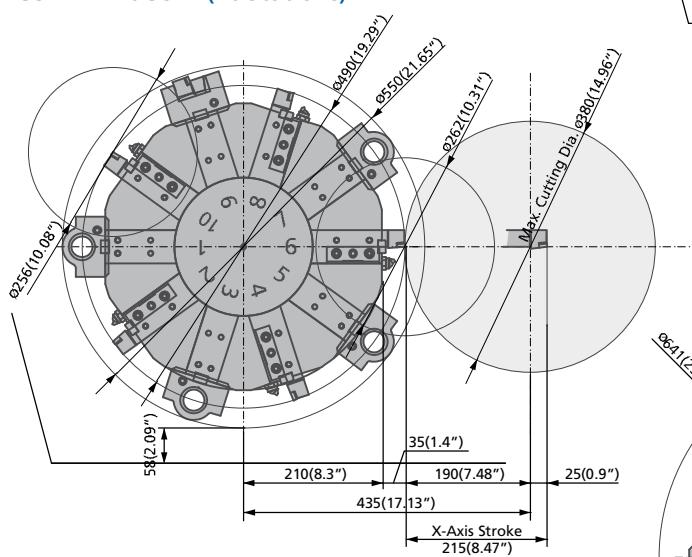
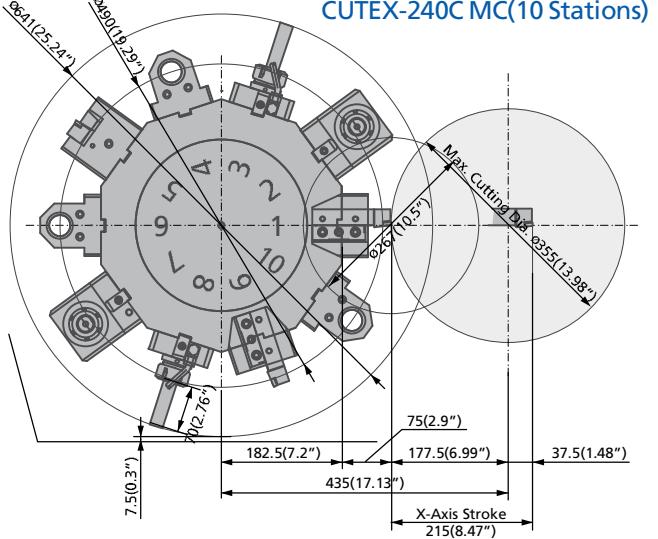
**CUTEX-240C**

Main Spindle



Tool Interference Diagram

※ Unit: mm(inch)

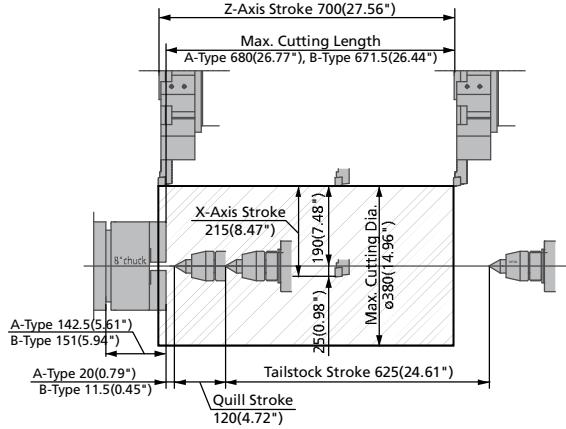
CUTEX-240A/B STD(12 Stations)**CUTEX-240A/B MC(12 Stations)****CUTEX-240C STD(10 Stations)****CUTEX-240C MC(10 Stations)**

Moving Range

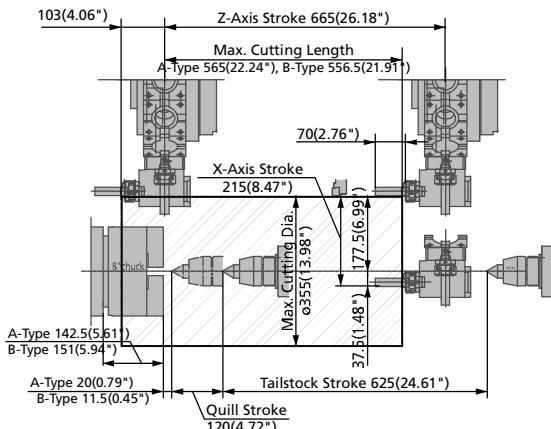
※Unit:mm(inch)

CUTEX-240A/B

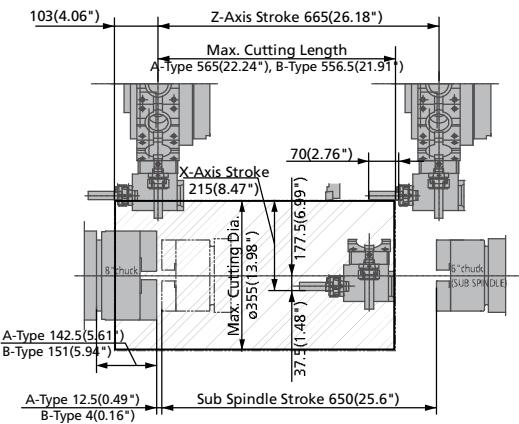
STD Moving Range



MC Moving Range

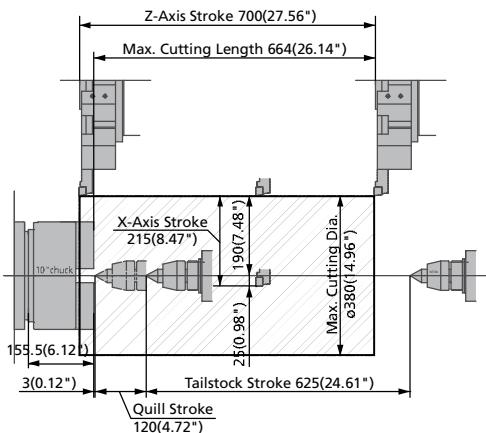


SMC Moving Range

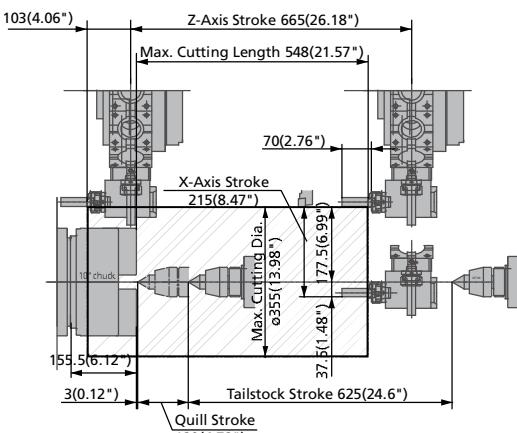


CUTEX-240C

STD Moving Range

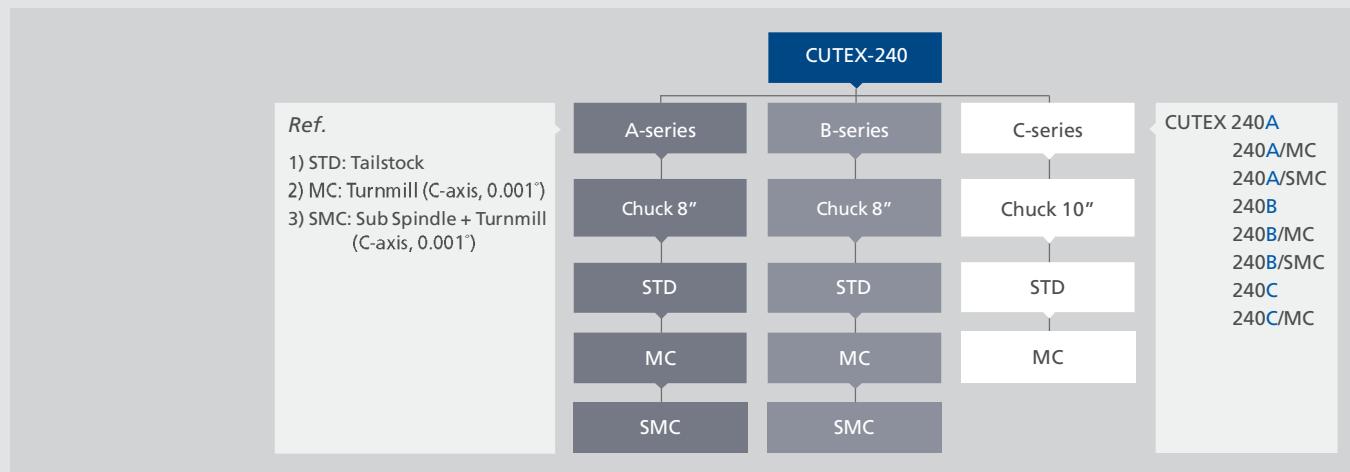


MC Moving Range



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)	Ø212 (8.35")	Ø215 (8.47")	Ø212 (8.35")	Ø215 (8.47")	Ø262 (10.31")	Ø267 (10.5")	
Max. Cutting Length	mm (inch)	680 (26.77")	565 (22.24")	671.5 (26.44")	556.5 (21.90")	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")	Ø65 / Ø46 (2.55" / 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)			Ø25 x Ø40 ([Ø1" x Ø1.5"])				
Turret Indexing Time	sec / step			0.15				
Axes								
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" / 25.59")	215 / 665 / 650 (8.47" / 26.18" / 25.59")	215 / 700 / - (8.47" / 27.56" / -)
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/-)
Tailstock								
Quill Dia.	mm (inch)	Ø80 (3.15")	-	Ø80 (3.15")	-	-	Ø80 (3.15")	
Quill Stroke	mm (inch)	120 (4.72")	-	120 (4.72")	-	-	120 (4.72")	
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 (inch)	-	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	kgf (lb _f)	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)
NC Controller					Fanuc 0i-TF			

Standard and Optional Product Components

Standard Accessories					Optional Accessories				
• Coolant System		• 10.4" Color LCD			• 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 (except SMC)		
- 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		• VDI 40 Turret		
					(Lathe-Hwacheon Tool Load Detect)				
					• NC Cooler		• 15" Color LCD (only FANUC)		

NC Specifications [Fanuc 0i-TF]

ITEM	SPECIFICATION	STD	MC	SMC
Controlled axis				
Controlled axis (Cs axis)	2-Axes	2-Axes	3-Axes	5-Axes
Simultaneously controlled axes	2-Axes	2-Axes	3-Axes	4-Axes
Least input increment	0.001mm, 0.001deg, 0.0001inch	S	S	S
Least input increment 1/10	0.0001mm, 0.0001deg, 0.00001inch	O	O	O
inch/metric conversion	G20, G21	S	S	S
Stored stroke check 1,2,3		S	S	S
Chamfering on/off		S	S	S
Backlash compensation		S	S	S
Operation				
Automatic & MDI operation		S	S	S
Program number search		S	S	S
Sequence number search		S	S	S
Dry run, single block		S	S	S
Manual handle feed	1Unit	S	S	S
Manual handle feed rate	x1, x10, x100	S	S	S
Interpolation function				
Positioning	G00	S	S	S
Linear interpolation	G01	S	S	S
Circular interpolation	G02, G03	S	S	S
Dwell (Per seconds)	G04	S	S	S
Polar coordinate interpolation	G12.1/G13.1	-	S	S
Cylindrical interpolation	G7.1	-	S	S
Threading	G32	S	S	S
Multiple threading		S	S	S
Threading retract		S	S	S
Continuous threading		S	S	S
Variable lead threading	G34	S	S	S
Reference position return 1st	G28	S	S	S
Reference position return check	G27	S	S	S
2,3,4th reference position return	G30	S	S	S
Arbitrary speed threading		O	O	O
Feed function				
Rapid traverse override	F0, F25, F50, F100	S	S	S
Feed per minute (mm/min)	G98	S	S	S
Feed per revolution (mm/rev)	G99	S	S	S
Rapid traverse bell-shaped acceleration/deceleration		S	S	S
Feedrate override	0-150 %	S	S	S
Jog feed override	0-1,260 mm/min	S	S	S
Tool function / compensation				
Tool function	T4-digits	S	S	S
Tool offset pairs	128pairs	S	S	S
Tool nose radius compensation		S	S	S
Tool geometry/wear compensation		S	S	S
Tool life management		O	O	O
Automatic tool offset	Tool presetter option is required	O	O	O
Direct input tool offset value measured B	Tool presetter option is required	O	O	O
Others				
Display unit	10.4" Color LCD	S	S	S

ITEM	SPECIFICATION	STD	MC	SMC
Program input				
Tape code	EIA / ISO	S	S	S
Optional block skip	9ea	S	S	S
Program number	04-Digits	S	S	S
Sequence number	N8-Digits	S	S	S
Decimal point programming		S	S	S
Coordinate system setting	G50	S	S	S
Coordinate system shift		S	S	S
Workpiece coordinate system	G54-G59	S	S	S
Workpiece coordinate system preset	G92.1	S	S	S
Direct drawing dimension programming		S	S	S
G code system	A	S	S	S
Programmable data input	G10	S	S	S
Sub program call	10Folds Nested	S	S	S
Custom macro B		S	S	S
Addition of custom macro -common variables	#100-#199, #500-#999	S	S	S
Canned cycles		S	S	S
Multiple repetitive cycle		S	S	S
Multiple repetitive cycle II		S	S	S
Canned cycles for drilling		S	S	S
Small-hole peck drilling cycle		S	S	S
Manual Guide i		S	S	S
Spindle speed function				
Constant surface speed control	G96 / G97	S	S	S
Spindle override	50-120 %	S	S	S
Spindle orientation		S	S	S
Rigid tapping	O	S	S	S
Spindle synchronous control		-	-	S
Editing operation				
Part program storage length	1,280m (512 kB)	S	S	S
Number of register able programs	400ea	S	S	S
Background editing		S	S	S
Extended part program editing		S	S	S
Play back		S	S	S
Operation/Display				
Clock function		S	S	S
Self-diagnosis function		S	S	S
Alarm history display		S	S	S
Help function		S	S	S
Run hour and parts count display		S	S	S
Graphic function		S	S	S
Dynamic graphic display		O	O	O
Multi-language display	English, German, French, Italian, Chinese, Spanish, Korean, Portuguese, Polish, Hungarian, Swedish, Russian	S	S	S
Data input/output				
Reader/Puncher interface CH1	RS232C	S	S	S
Reader/Puncher interface CH2	RS232C	S	S	S
Ethernet interface		S	S	S
Memory card interface		S	S	S
USB card interface		S	S	S

Hwacheon Global Network

■ Hwacheon Headquarter ■ Hwacheon America ■ Hwacheon Europe ■ Hwacheon Asia



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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