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— GLOBAL NETWORK —
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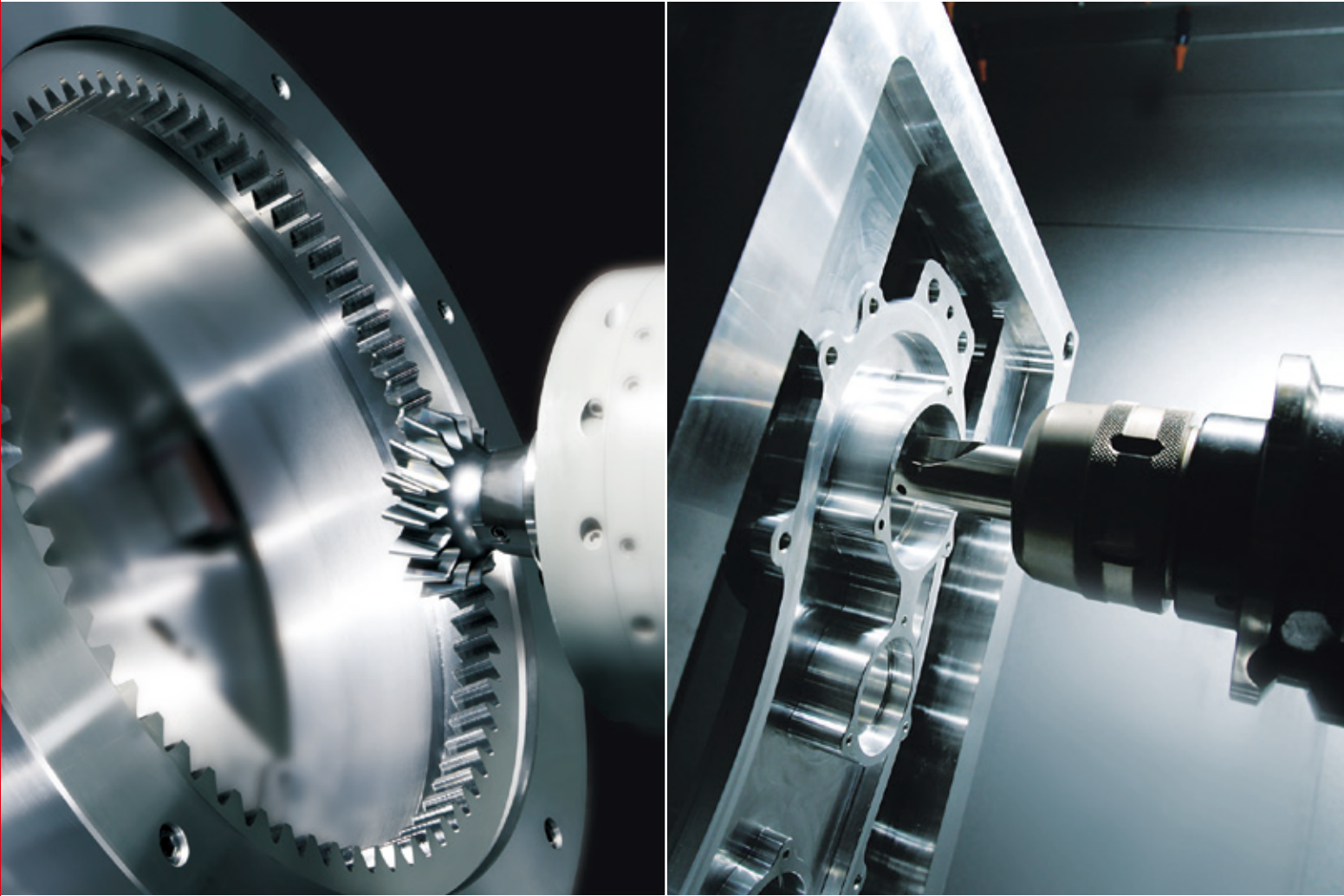
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Gear Skiving Centers Machining Centers

Line Up



JTEKT

JTEKT CORPORATION

<https://www.jtekt.co.jp>

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Available machines or machines shown may vary depending on optional equipment or periodic design changes.
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In order to observe laws and regulations and prevent inappropriate export, re-sale and relocation, JTEKT has equipped all of our NC machine tools with devices that detect relocation. If this device is activated, the machine will cease operation and will not restart until it has been checked by JTEKT. JTEKT may refuse to restart the machine should it be deemed that such an action would amount to the inappropriate export of a commodity or technology, or violate export regulations. In such a case, JTEKT will not be liable for any damages arising from the refusal to restart machine operation and do not bear any liability to perform services pertaining to product warranty.
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Type of Equipment: Gear Skiving Center, Machining Center

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JTEKT
JTEKT CORPORATION

Improved productivity
with higher accuracy,
faster speeds &
greater rigidity.
Armed with the latest
technology for
reliability & efficiency.

Today's highly productive
machining centers are on
the main track for metal-
cutting.
JTEKT offers a full line of
machines for rapid pro-
cessing of small-to-medi-
um size parts, and highly
precise machining for
large workpieces.
Choose from a range of
sizes and options to match
the machining center to
your quality, size and
volume requirements.

5-axis machining centers

FH630SX-5A



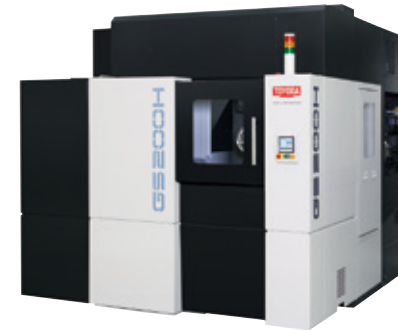
- Biggest workpiece range in it's class.
- Excellent spindle accessibility to workpiece
- High power spindle that allows for the machining of difficult-to-cut materials, such as aluminum and titanium

	FH630SX-5A
Pallet size (mm)	□630
Travel X-axis (mm)	800 (+300 ATC stroke)
Travel Y-axis (mm)	850
Travel Z-axis (mm)	1,050
Travel C-axis (°)	-210 ~ +20
Rapid feedrate (m/min)	60 (X, Y, Z)
Spindle rotation speed (min ⁻¹)	15,000 [8,000]
Spindle nose shape	No.50
Spindle drive motor (kW)	55/37 [80/55]

Gear skiving centers

GS200H / GS300H

Integrated gear machining
into one machine



- Improved productivity through high-speed machining
- Provides compact and lightweight product
- Simple programming function

	GS200H	GS300H
Spindle nose shape	No.50	No.50
Spindle rotation speed (min ⁻¹)	6,000	6,000
Spindle drive motor (kW)	30/25	30/25
Workpiece axis (C-axis)	Rotating speed (min ⁻¹)	3,000
	Drive motor (kW)	32/19.5
	Max. workpiece dia. (mm)	φ220
	Max. workpiece height (mm)	100



GS700H

Integrated machining of large diameter
and large module gears
into one machine



- Sliding guideway (box slide) which emphasizes rigidity and achieves high-speed machining
- High-rigidity, high-speed trunnion rotary table
- Heavy duty spindle: 6,000min⁻¹, #50

		GS700H
Spindle nose shape		No.50
Spindle rotation speed (min ⁻¹)		6,000
Spindle drive motor (kW)		30/22
Workpiece axis (B-axis)	Rotating speed (min ⁻¹)	1,000
	Drive motor (kW)	50/17.5
	Max. workpiece dia. (mm)	φ 700
	Max. workpiece height (mm)	500



* Photo features equipment with optional specifications.
[] shows optional specifications.

Horizontal spindle machining centers

FH1000SX / FH1250SX / FH1250SX-5Axis /
FH1250SW / FH1600SW5i

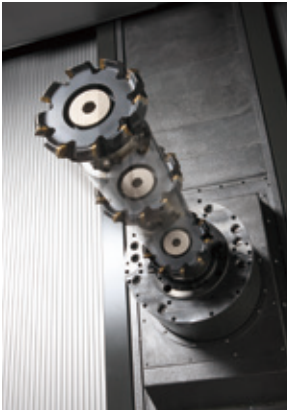
Biggest and fastest in it's class



The photo is FH1600SW5i.



Tilt spindle (A-axis)
FH1250SX-5Axis



Quill spindle (W-axis)
FH1250SW

- Biggest workpiece range and stroke in it's class.
- Rapid feedrate and tool change time equivalent to that of small machines.
- High torque spindle making heavy cutting of difficult-to-cut material possible.

	FH1000SX			FH1250SX			FH1250SX-5Axis			FH1250SW			FH1600SW5i		
Pallet size (mm)	800×1,000 [□800]			□1250 [1,250×1,600]			□1250			□1250 [1,250×1,600]			1,600×1,250		
Travel X-axis (mm)	1,600			2,200			2,200			2,200			3,000		
Travel Y-axis (mm)	1,400			1,600			1,600			1,500			1,900		
Travel Z-axis (mm)	1,850			1,850			1,850			1,850			2,100		
Travel	—			—			−100° ~ +45° (A-axis)			550mm (W-axis)			750mm (W-axis)		
Rapid feedrate (m/min)	54			42			32 (X,Y), 42 (Z)			32 (X, Y), 42 (Z), 5 (W)			35 (X), 40 (Y, Z), 20 (W)		
Spindle rotation speed (min ⁻¹)	6,000	[6,000]	[15,000]	6,000	[6,000]	[15,000]	10,000			3,000			4,000		
Spindle nose shape	No.50			No.50			No.50			No.50			No.50		
Spindle drive motor (kW)	30/22	[37/30]		30/22	[37/30]		30/25			45/37			55/37		

FA630S / FA800S / FA1050S

A high rigidity box slide machine
suiting all Mono-Zukuri



The photo is FA1050S.



Box slide

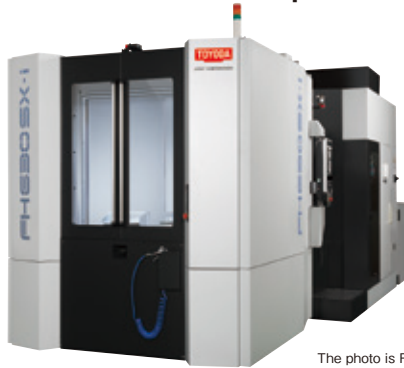
- Rigid bed and column supporting heavy cutting.
- Box side structure, the strong in the class.
- Gear spindle which exhibit strength in cutting difficult-to-cut materials

	FA630S					FA800S			FA1050S			
Pallet size (mm)	□630					□800			□1050			
Travel X-axis (mm)	1,000					1,350			1,600			
Travel Y-axis (mm)	800					1,150			1,400			
Travel Z-axis (mm)	750					1,150			1,150			
Rapid feedrate (m/min)	36					24			24			
Spindle rotation speed (min ⁻¹)	6,000	[5,000 (gear)]	[15,000]	[15,000]		6,000	[6,000 (gear)]	[15,000]		6,000	[6,000 (gear)]	[15,000]
Spindle nose shape	No.50					No.50				No.50		
Spindle drive motor (kW)	30/22	[18.5/15]	[22/18.5]	[30/25]		30/22	[45/37]	[37/30]		30/22	[45/37]	[37/30]

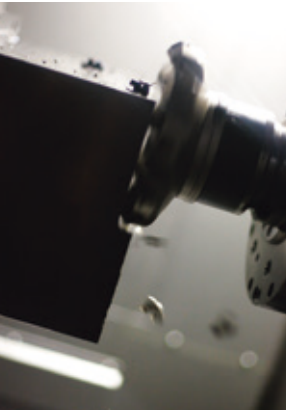
Horizontal spindle machining centers

FH550SX / FH630SX-i / FH800SX-i

Realizing middle/large component machining
for various industries with the top-level



The photo is FH630SX-i.



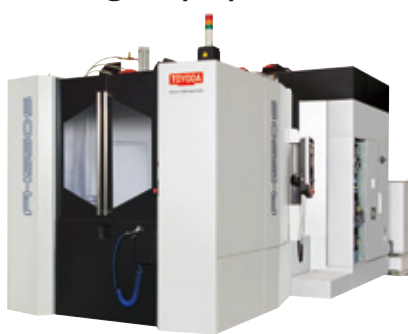
Y axis dual ball screw drive

- Stable column design proven with thermal analysis methods.
- Improved responsiveness with synchronized dual ballscrews drives on Y and Z axis.
- High torque spindle supports heavy cutting of iron and castings.

	FH550SX			FH630SX-i			FH800SX-i		
Pallet size (mm)	□550 [□500]			□630			□800		
Travel X-axis (mm)	750			1,050			1,450		
Travel Y-axis (mm)	800			900			1,250		
Travel Z-axis (mm)	850			1,050			1,550		
Rapid feedrate (m/min)	60			60			54		
Spindle rotation speed (min ⁻¹)	6,000	[6,000]	[15,000]	6,000	[6,000]	[15,000]	6,000	[6,000]	[15,000]
Spindle nose shape	No.50			No.50			No.50		
Spindle drive motor (kW)	30/22	[37/30]		30/22	[37/30]		30/22	[37/30]	

FH450S / FH550S

Basic model applicable to
a wide-range of purpose



The photo is FH550S.

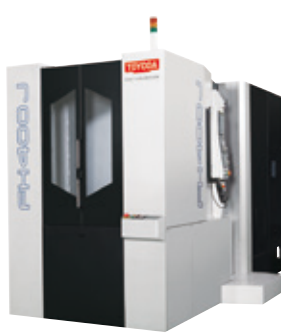


- Fast traverse speeds and instant acceleration: 60m/min at 9.8m/sec² (1.0G) . (FH550S)
- Cylindrical roller guide and high rigid 3-point support bed keeping machine level stable over a long period.
- High speed spindle which is best for mass production of products ranging from aluminum to castings.

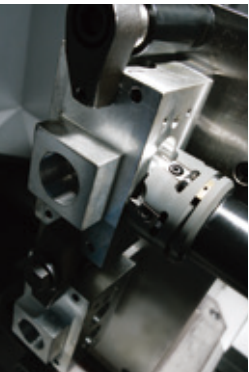
	FH450S			FH550S			
Pallet size (mm)	□450			□550 [□500]			
Travel X-axis (mm)	600			750			
Travel Y-axis (mm)	600			800			
Travel Z-axis (mm)	600			850			
Rapid feedrate (m/min)	50			60			
Spindle rotation speed (min ⁻¹)	15,000	[20,000]	[8,000]	15,000	[20,000]	[8,000]	[15,000]
Spindle nose shape	No.40			No.40			No.50
Spindle drive motor (kW)	22/18.5	[22/18.5]	[17.7/15]	22/18.5	[22/18.5]	[17.7/15]	[22/18.5]

FH400J / FH500J

Smallest and fastest
in it's class



The photo is FH400J.



- Smallest floor space in it's class.
- Rapid feedrate 60m/min, tool change time (C to C) 2.4sec.
- Cylindrical roller guide and high rigid 3-point support bed keeping machine level stable over a long period.

	FH400J		FH500J	
Pallet size (mm)	□400		□500	
Travel X-axis (mm)	600		730	
Travel Y-axis (mm)	560		730	
Travel Z-axis (mm)	630		850	
Rapid feedrate (m/min)	60		60	
Spindle rotation speed (min ⁻¹)	15,000		15,000	
Spindle nose shape	No.40		No.40	
Spindle drive motor (kW)	22/18.5		22/18.5	

* Photo features equipment with optional specifications.
[] shows optional specifications.

Vertical spindle machining centers

FV965S / FV1165S / FV1365S / FV1565S /
FV1480S / FV1680S / FV1890S / FV2090S

High rigidity box slide machine suiting
all kinds of manufacturing



The photo is FV1165S.

- High rigidity bed and box slide supporting heavy cutting^{*1}
- 4-slide Y-axis with little overhang
- User-friendly with good workability for the operator



Box slide

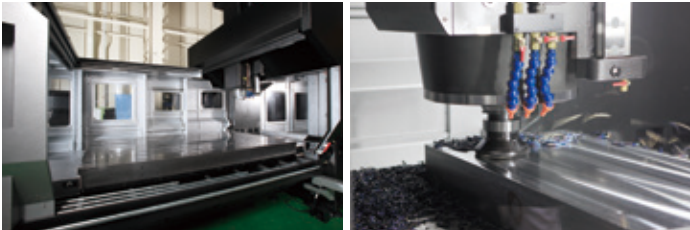
	FV965S	FV1165S	FV1365S	FV1565S	FV1480S	FV1680S	FV1890S	FV2090S
Table (Working plane) size (mm)	1,100×650	1,300×650	1,450×650	1,650×650	1,550×800	1,750×800	1,950×900	2,150×900
Travel X-axis (mm)	900	1,100	1,300	1,500	1,400	1,600	1,800	2,000
Travel Y-axis (mm)	650	650	650	650	800	800	900	900
Travel Z-axis (mm)	600	600	600	600	700	800	900	900
Rapid feedrate (m/min)	30 (X, Y), 24 (Z)	30 (X, Y), 24 (Z)	30 (X, Y), 24 (Z)	24 (X, Y), 18 (Z)	24 (X, Y), 18 (Z)	24 (X, Y), 18 (Z)	20 (X, Y), 18 (Z)	20 (X, Y), 18 (Z)
Spindle rotation speed (min ⁻¹)	8,000 [12,000] 6,000 [10,000]	8,000 [12,000] 6,000 [10,000]	8,000 [12,000] 6,000 [10,000]	8,000 [12,000] 6,000 [10,000]	8,000 [12,000] 6,000 [10,000]	8,000 [12,000] 6,000 [10,000]	6,000 [10,000] 6,000 [10,000]	6,000 [10,000] 6,000 [10,000]
Spindle nose shape	No.40 No.50	No.40 No.50	No.40 No.50	No.40 No.50	No.40 No.50	No.40 No.50	No.40 No.50	No.40 No.50
Spindle drive motor (kW)	15/11 [18.5/15] 18.5/15	15/11 [18.5/15] 18.5/15	15/11 [18.5/15] 18.5/15	15/11 [18.5/15] 18.5/15	26/22 [18.5/15] 26/22 [18.5/15]	26/22 [18.5/15] 26/22 [18.5/15]	26/22 [18.5/15] 26/22 [18.5/15]	26/22 [18.5/15] 26/22 [18.5/15]

^{*1} The Y axis of FV1890S and FV2090S is a hybrid of a box slide and linear guide.

Bridge-type machining centers

RB2112 / RB3012 /
SB2116 / SB3016 / SB4016

Gantry type series making a wide machining range possible



Wide working area



The photo is SB3016.

- Cylindrical roller slide and high rigidity bed for long term level stability.
- Enhanced reliability thanks to a simple triple axes structure
- 6,000min⁻¹ high rigidity gear spindle

	RB2112	RB3012	SB2116	SB3016	SB4016
Table (Working plane) size (mm)	2,000×1,100	3,000×1,100	2,000×1,500	3,000×1,500	4,000×1,500
Travel X-axis (mm)	2,120	3,060	2,120	3,060	4,060
Travel Y-axis (mm)	1,200	1,200	1,600	1,600	1,600
Travel Z-axis (mm)	800	800	800	800	800
Effective distance between columns (mm)	1,300	1,300	1,700	1,700	1,700
Rapid feedrate (m/min)	24 (X,Y), 15 (Z)	24 (X,Y), 15 (Z)	24 (X,Y), 15 (Z)	24 (X,Y), 15 (Z)	20 (X), 24 (Y), 15 (Z)
Spindle rotation speed (min ⁻¹)	6,000 [10,000]	6,000 [10,000]	6,000 [10,000]	6,000 [10,000]	6,000 [10,000]
Spindle nose shape	No.50	No.50	No.50	No.50	No.50
Spindle drive motor (kW)	18.5/15 [22/18.5]	18.5/15 [22/18.5]	26/22 [22/18.5]	26/22 [22/18.5]	26/22 [22/18.5]

Machining centers for line

TOPCENTER

Best-selling model
for mass-produced
cell machines



The photo is TH555F4X.



Travelling robot method

Workpiece direct transfer method

- Triple axes (X, Y, Z (Z: quill spindle)) mounted on the column side
- Offers high speed & high acceleration feed with a rapid feedrate of 60m/min and a Z axis rapid acceleration of 17.64m/s² (1.8G) (TH355F4, TH555F4)
- Cylindrical roller guide and high rigid bed keeping machine level stable over a long period.

	TH355F4	TH555F4	TH355F4X	TH555F4X	TH555i4
Travel X-axis (mm)	300	500	300	500	500
Travel Y-axis (mm)	550+33 ^{*2}	550+33 ^{*2}	550	550	550
Travel Z-axis (mm)	530	530	530	530	530
Rapid feedrate (m/min)	60	60	60	60	60
Spindle rotation speed (min ⁻¹)	10,000	10,000	8,000	8,000	10,000
Spindle nose shape	No.40	No.40	No.40	No.40	No.40
Spindle drive motor (kW)	11/7.5	11/7.5	30/26	30/26	11/7.5

^{*2} ATC stroke

e500H

Single table suitable
for mass production lines



e640V

Tilt table suitable
for mass production lines



Direct magazine tool change method

- Easy to automate by optional package of supporting hydraulic fixtures
- Selectable from No. 40, or No. 50 spindle according to machining
- Selectable from standard JTEKT's own CNC [TOYOPUC] or optional [FANUC-32i]

	e500H
Travel X-axis (mm)	730
Travel Y-axis (mm)	650
Travel Z-axis (mm)	850
Rapid feedrate (m/min)	60
Spindle rotation speed (min ⁻¹)	12,000 6,000
Spindle nose shape	No.40 No.50
Spindle drive motor (kW)	15.8/13 30/25
CNC unit	TOYOPUC [FANUC]

- Easy to automate by optional package of supporting hydraulic fixtures
- Well-balanced and highly rigid CUBE-ON structure
- Selectable from standard JTEKT's own CNC [TOYOPUC] or optional [FANUC-32i]

	e640V
Table (Working plane) size (mm)	600×400
Travel X-axis (mm)	600
Travel Y-axis (mm)	500
Travel Z-axis (mm)	400
Rapid feedrate (m/min)	48
Spindle rotation speed (min ⁻¹)	10,000
Spindle nose shape	No.40
Spindle drive motor (kW)	11/7.5
CNC unit	TOYOPUC [FANUC]

FANUC is a registered trademark of FANUC LTD.
* Photo features equipment with optional specifications.
[] shows optional specifications.