HYUNDAI WIA

MACHINE TOOLS

LINE-UP

HYUNDAI WIA

Advanced Production

Amazing Crystallizations From Precision Machine Technology

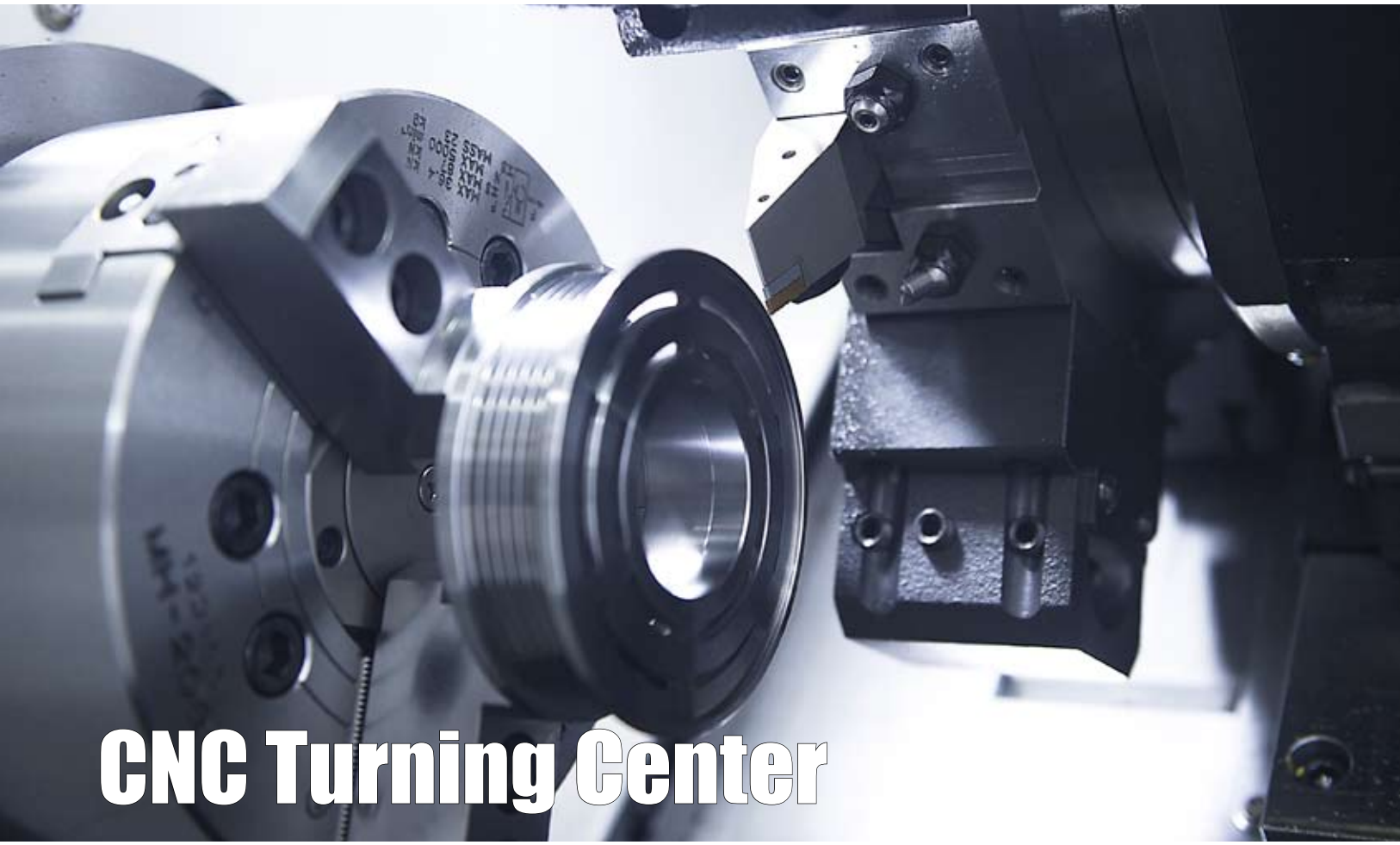
Machine tools are dubbed into core of the machine tools industry.

HYUNDAI WIA has been laying accent on the machine tools manufacturing sector since the early days of its management, especially to cope with the arrival of the age of unattended plant operation.

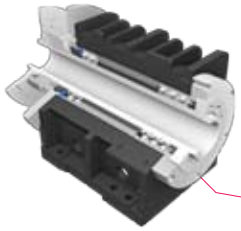
HYUNDAI WIA's machine tools are the crystals of secret efforts poured on the whole process of production and distribution, covering from self-reliant designing to manufacturing and after service.

HYUNDAI WIA's products are well received not only in the country but also overseas markets with a worldwide network of over 80 dealerships. The products faithfully reflect the conviction of hyundai wia's dreams of an earlier realization of factory automation via harmony between human being and machines.

Machine Tools Line-up



CNC Turning Center



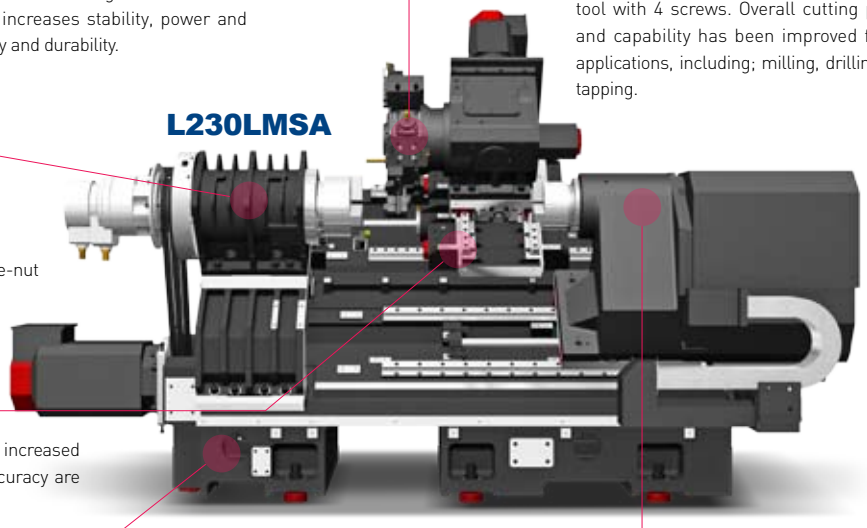
Spindle

The main spindle is designed with a large diameter outer bearing assembly, which increases stability, power and speed while ensuring safety and durability.

BMT Turret

Latest generation BMT turret increases tool performance and rigidity by securing each tool with 4 screws. Overall cutting power and capability has been improved for all applications, including; milling, drilling and tapping.

L230LMSA



Pre-tensioned & Double Anchored Ball Screw

All axis are driven by large diameter, high precision double-nut ball screws. The double pretension design provides outstanding positioning and repeatability with virtually no thermal growth.

Roller Type LM Guide

Roller type guideways offer improved rigidity due to the increased surface contact with the guideway. Repeatability and accuracy are both increased dramatically as a result.

Bed

45 degree slope type bed is combined with square type and tube type rib structure, which maintain an high rigidity, As absorption capablilty for vibration is good, powerful cutting and high precision maintaining is allowed.

Sub Spindle

S-type turning centers offer enhanced capability and functionality by allowing the operator to add secondary operations through the addition of a sub-spindle.

Gang Type CNC Turning Center

KIT Series

ITEM		KIT250	KIT450
Max. Swing	mm(in)	Ø320 (12.6″)	Ø530 (30.9″)
Max. Turning Length	mm(in)	150 (5.9″)	300 (11.8″)
Chuck Size	inch	5″	6″
Bar Capacity	mm(in)	Ø32 (1.26″)	Ø45 (1.8″)
Sp. Speed	r/min	7,000	6,000 [6,000]
Sp. Power	kW(HP)	5.5/3.7 (7.3/5)	15/11 (20/15) [10.8/9 (14.5/12)]
Travel (X/Z)	mm(in)	250/200 (9.8″/7.9″)	450/300 (17.7″/11.8″)
No. of Tools	EA	4	6

[ ] : Option ● : SIEMENS

Economy Type CNC Turning Center

E160/200 Series

ITEM		E160A I E160LA	E160C I E160LC	E160LMA I E160LMC
Max. Swing	mm(in)	Ø480 (18.9″)	Ø480 (18.9″)	Ø480 (18.9″)
Max. Turning Length	mm(in)	300 (11.8″) I 510 (20.1″)	510 (20.1″) I 280 (11″)	450 (17.7″)
Chuck Size	inch	6″	8″	6″ I 8″
Bar Capacity	mm(in)	Ø45 (1.8″)	Ø51 (2″)	Ø45 (1.8″) I Ø51 (2″)
Sp. Speed	r/min	6,000 [6,000]	4,000 [4,000] [4,000]	6,000 I 4,000
Sp. Power	kW(HP)	11/7.5 (15/10) [10.8/9 (14.5/12)]	11/7.5 (15/10) [15/11 (20/15)] [10.8/9 (14.5/12)]	7.5/5.5 (10/7.3) I 11/7.5 (15/10)
Travel (X/Z)	mm(in)	165/330 (6.5″/13″) I 165/530 (6.5″/20.9″)	165/530 (6.5″/20.9″) I 165/330 (6.5″/13″)	165/460 (6.5″/18.1″)
No. of Tools	EA	12	10	12

ITEM		E200A	E200C	E200MA I MC	E200PA	E200PC
Max. Swing	mm(in)	Ø550 (21.7″)	Ø550 (21.7″)	Ø550 (21.7″)	Ø550 (21.7″)	Ø550 (21.7″)
Max. Turning Length	mm(in)	300 (11.8″)	300 (11.8″)	255 (10″)	280 (11″)	280 (11″)
Chuck Size	inch	6″	8″	8″	6″	8″
Bar Capacity	mm(in)	Ø45 (1.8″)	Ø65 (2.3″)	Ø45 (1.8″) I Ø65 (2.3″)	Ø45 (1.8″)	Ø65 (2.3″)
Sp. Speed	r/min	6,000 [6,000]	4,000 [4,000] [6,000]	6,000 I 4,000	6,000 [6,000]	4,000 [6,000]
Sp. Power	kW(HP)	15/11 (20/15) [10.8/9 (14.5/12)]	15/11 (20/15) [18.5/15 (25/20)] [10.8/9 (14.5/12)]	15/11 (20/15)	15/11 (20/15) [10.8/9 (14.5/12)]	15/11 (20/15) [10.8/9 (14.5/12)]
Travel (X/Z)	mm(in)	210/330 (8.3″/13″)	210/330 (8.3″/13″)	210/286 (8.3″/11.3″)	210/310 (8.3″/12.2″)	210/310 (8.3″/12.2″)
No. of Tools	EA	12	12	12	12	12

[ ] : Option ● : SIEMENS

Standard CNC Turning Center

L210 Series

ITEM		L210A	L210LA	L210C
Max. Swing	mm(in)	Ø550 (20.7″)	Ø550 (20.7″)	Ø550 (20.7″)
Max. Turning Length	mm(in)	410 (16.1″)	530 (20.9″)	400 (15.7″)
Chuck Size	inch	8″	8″	10″
Bar Capacity	mm(in)	Ø65 (1.8″)	Ø65 (1.8″)	Ø80 (3.1″)
Sp. Speed	r/min	4,000 [4,000]	4,000 [4,000]	3,000
Sp. Power	kW(HP)	15/11 (20/15) [22/18.5 (30/25)]	15/11 (20/15) [22/18.5 (30/25)]	15/11 (20/15)
Travel (X/Z)	mm(in)	210/430 (8.3″/16.9″)	210/550 (8.3″/21.7″)	210/430 (8.3″/16.9″)
No. of Tools	EA	12	12	12

[ ] : Option ● : SIEMENS

Versatile CNC Turning Center

L160 Series

ITEM		L160A	L160LA	L160MA
Max. Swing	mm(in)	Ø600 (23.6″)	Ø600 (23.6″)	Ø600 (23.6″)
Max. Turning Length	mm(in)	460 (18.1″)	560 (22″)	388 (15.3″)
Chuck Size	inch	6″	6″	6″
Bar Capacity	mm(in)	Ø45 (1.8″)	Ø45 (1.8″)	Ø45 (1.8″)
Sp. Speed	r/min	6,000 [6,000]	6,000 [6,000]	6,000 [6,000]
Sp. Power	kW(HP)	11/7.5 (15/10) [10.8/9 (14.5/12)]	11/7.5 (15/10) [10.8/9 (14.5/12)]	11/7.5 (15/10) [10.8/9 (14.5/12)]
Travel (X/Z)	mm(in)	220/460 (8.7″/18.1″)	220/560 (8.7″/22″)	220/400 (8.7″/15.7″)
No. of Tools	EA	12	12	12

ITEM		L160LMA	L160LMSA
Max. Swing	mm(in)	Ø600 (23.6″)	Ø600 (23.6″)
Max. Turning Length	mm(in)	550 (21.7″)	550 (21.7″)
Chuck Size	inch	6″	M:6″ S:6″
Bar Capacity	mm(in)	Ø45 (1.8″)	M:Ø45(1.8″) S:Ø43(1.7″)
Sp. Speed	r/min	6,000 [6,000]	M:6,000 [6,000] S:5,000 [5,000]
Sp. Power	kW(HP)	11/7.5 (15/10) [10.8/9 (14.5/12)]	M:11/7.5 (15/10) [10.8/9 (14.5/12)] S:5.5/3.7 (7.5/5) [5.9/4.9 (8/6.6)]
Travel (X/Z/B)	mm(in)	220/560 (8.7″/22″)	220/560/590 (8.7″/22″/23.2″)
No. of Tools	EA	12	12

[ ] : Option ● : SIEMENS

Versatile CNC Turning Center

L230 Series

ITEM		L230A	L230LA	L230MA	L230LMA
Max. Swing	mm(in)	Ø600 (23.6″)	Ø600 (23.6″)	Ø600 (23.6″)	Ø600 (23.6″)
Max. Turning Length	mm(in)	440 (17.3″)	560 (22″)	360 (14.2″)	521 (20.5″)
Chuck Size	inch	8″	8″	8″	8″
Bar Capacity	mm(in)	Ø65 (2.6″)	Ø65 (2.6″)	Ø65 (2.6″)	Ø65 (2.6″)
Sp. Speed	r/min	4,000 [4,000]	4,000 [4,000]	4,000 [4,000]	4,000 [4,000]
Sp. Power	kW(HP)	15/11 (20/15) [22/18.5 (30/25)]	15/11 (20/15) [22/18.5 (30/25)]	15/11 (20/15) [22/18.5 (30/25)]	15/11 (20/15) [22/18.5 (30/25)]
Travel (X/Z)	mm(in)	220/440 (8.7″/17.3″)	220/560 (8.7″/22″)	220/400 (8.7″/15.7″)	220/560 (8.7″/22″)
No. of Tools	EA	12	12	12	12

ITEM		L230LMSA	L230C	L230MC
Max. Swing	mm(in)	Ø600 (23.6″)	Ø600 (23.6″)	Ø600 (23.6″)
Max. Turning Length	mm(in)	521 (20.5″)	422 (16.6″)	342 (13.5″)
Chuck Size	inch	M:8″ S:6″	10″	10″
Bar Capacity	mm(in)	M:Ø65 (2.6″) S:Ø43 (1.7″)	Ø76 (3″)	Ø76 (3″)
Sp. Speed	r/min	M:4,000 [4,000] S:5,000 [5,000]	3,000	3,000
Sp. Power	kW(HP)	M:15/11 (20/15) [22/18.5 (30/25)] S:5.5/3.7 (7.5/5) [5.9/4.9 (8/6.6)]	18.5/15 (25/20)	18.5/15 (25/20)
Travel (X/Z/B)	mm(in)	220/560/590 (8.7″/22″/23.2″)	220/440 (8.7″/17.3″)	220/400 (8.7″/15.7″)
No. of Tools	EA	12	12	12

[ ] : Option ● : SIEMENS

Standard CNC Turning Center

L280 Series

ITEM		L280	L280L	L280LM
Max. Swing	mm(in)	Ø590 (23.2″)	Ø590 (23.2″)	Ø650 (25.6″)
Max. Turning Length	mm(in)	720 (28.4″)	1,070 (42.1″)	1,000 (39.4″)
Chuck Size	inch	10″	10″	10″
Bar Capacity	mm(in)	Ø76 (3″)	Ø76 (3″)	Ø76 (3″)
Sp. Speed	r/min	3,000 [3,000]	3,000 [3,000]	3,500 [3,500]
Sp. Power	kW(HP)	22/18.5 (30/25) [33.6/28 (45/37.5)]	22/18.5 (30/25) [33.6/28 (45/37.5)]	22/18.5 (30/25) [33.6/28 (45/37.5)]
Travel (X/Z)	mm(in)	220/750 (8.7″/29.5″)	220/1,100 (8.7″/43.3″)	220/1,020 (8.7″/40.2″)
No. of Tools	EA	10	10	12

[ ] : Option ● : SIEMENS

Standard CNC Turning Center

L300 Series

ITEM		L300A	L300MA	L300LA	L300MSA
Max. Swing	mm(in)	Ø750 (29.5″)	Ø750 (29.5″)	Ø750 (29.5″)	Ø750 (29.5″)
Max. Turning Length	mm(in)	720 (28.3″)	680 (26.8″)	1,320 (52″)	680 (26.8″)
Chuck Size	inch	10″	10″	10″	M:10″ S:8″
Bar Capacity	mm(in)	Ø76 (3″)	Ø76 (3″)	Ø76 (3″)	M:Ø76 (3″) S:Ø65 (2.6″)
Sp. Speed	r/min	3,600 [3,500]	3,500	3,600 [3,500]	M:3,500 S:4,000
Sp. Power	kW(HP)	22/18.5 (30/25) [22/18.5 (30/25)]	22/18.5 (30/25)	22/18.5 (30/25) [22/18.5 (30/25)]	M:22/18.5 (30/25) S:11/7.5 (15/10)
Travel (X/Z/B)	mm(in)	290/750 (11.4″/29.5″)	290/750 (11.4″/29.5″)	290/1,350 (11.4″/53.1″)	290/750/700 (11.4″/29.5″/27.6″)
No. of Tools	EA	12	12	12	12

ITEM		L300LMA	L300LMSA	L300C	L300MC
Max. Swing	mm(in)	Ø750 (29.5″)	Ø750 (29.5″)	Ø750 (29.5″)	Ø750 (29.5″)
Max. Turning Length	mm(in)	1,280 (50.4″)	1,250 (49.2″)	720 (28.3″)	600 (23.6″)
Chuck Size	inch	10″	M:10″ S:8″	12″	12″
Bar Capacity	mm(in)	Ø76 (3″)	M:Ø76 (3″) S:Ø65 (2.6″)	Ø90 (3.5″)	Ø90 (3.5″)
Sp. Speed	r/min	3,500	M:3,500 S:4,000	3,000 [3,300]	3,000 [3,500]
Sp. Power	kW(HP)	22/18.5 (30/25)	M:22/18.5 (30/25) S:11/7.5 (15/10)	26/22 (35/30) [26.4/22 (35/30)]	22/18.5 (30/25) [33.6/28 (45/38]
Travel (X/Z/B)	mm(in)	290/1,350 (11.4″/53.1″)	290/1,350/1,200 (11.4″/53.1″/47.2″)	335/750 (13.2″/29.5″)	335/750 (13.2″/29.5″)
No. of Tools	EA	12	12	12	12

ITEM		L300LC	L300MSC	L300LMC
Max. Swing	mm(in)	Ø750 (29.5″)	Ø750 (29.5″)	Ø750 (29.5″)
Max. Turning Length	mm(in)	1,320 (52″)	600 (23.6″)	1,260 (49.6″)
Chuck Size	inch	12″	M:12″ S:8″	12″
Bar Capacity	mm(in)	Ø90 (3.5″)	M:Ø90 (3.5″) S:Ø65 (2.6″)	Ø90 (3.5″)
Sp. Speed	r/min	3,000 [3,300]	M:3,000 S:4,000	3,000 [3,500]
Sp. Power	kW(HP)	26/22 (35/30) [26.4/22 (35/30)]	M:26/22 (35/30) S:11/7.5 (15/10)	22/18.5 (30/25) [33.6/28 (45/38]
Travel (X/Z/B)	mm(in)	355/1,350 (14″/53.1″)	335/750/700 (13.2″/29.5″/27.6″)	335/1,350 (13.2″/53.1″)
No. of Tools	EA	12	12	12

[ ] : Option ● : SIEMENS

Heavy Duty Cutting CNC Turning Cetnrer

BOX Guideway

The L600,700,800 series features box guideways, which provide unsurpassed longterm rigidity and accuracy, even under the heaviest of cutting operations.
The merit of a box guideway is its capability to offset the vibration through the feed shaft during a heavy cutting operation, which makes highly accurate machining operations possible.

Gear Type Driven Main Spindle

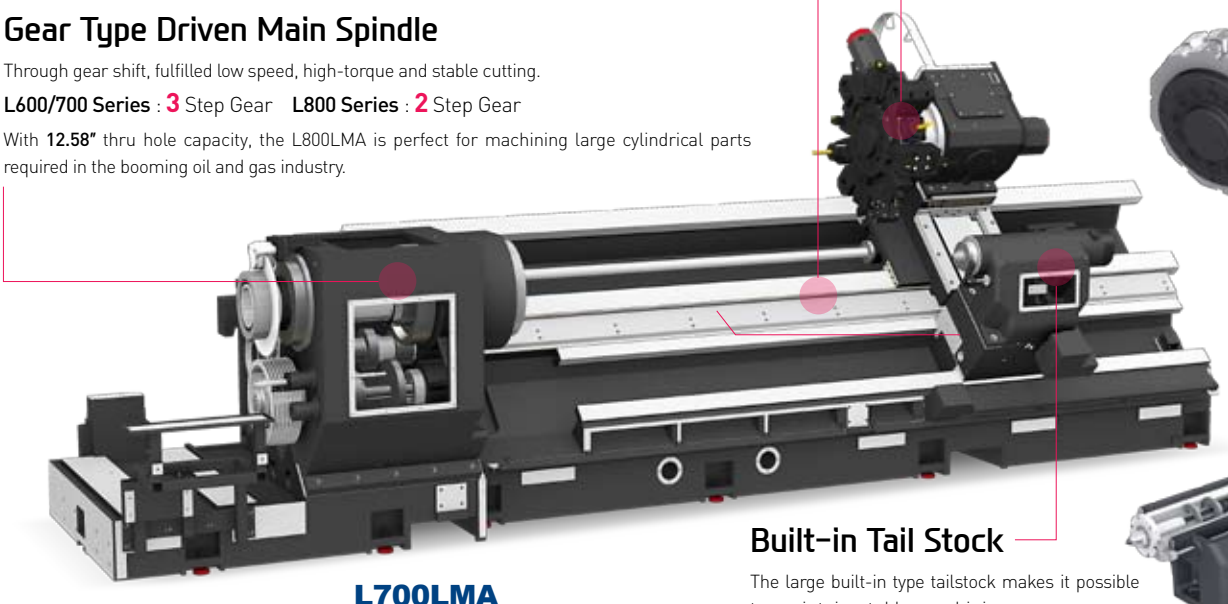
Through gear shift, fulfilled low speed, high-torque and stable cutting.

L600/700 Series : **3** Step Gear **L800 Series** : **2** Step Gear

With **12.58"** thru hole capacity, the L800LMA is perfect for machining large cylindrical parts required in the booming oil and gas industry.

Milling Tool Holder

The BMT turret, with 4 screws solidly fastening the holder, shows outstanding performance in powerful cutting and is capable of machining high-value products using rotation tools.



L700LMA

Built-in Tail Stock

The large built-in type tailstock makes it possible to maintain stable machining accuracy even during a powerful heavy-cutting operation.

Box Way CNC Turning Center

L400 Series

ITEM		L400A	L400MA	L400C
Max. Swing	mm(in)	Ø780 (30.7″)	Ø780 (30.7″)	Ø780 (30.7″)
Max. Turning Length	mm(in)	1,180 (46.5″)	1,180 (46.5″)	1,170 (46.1″)
Chuck Size	inch	12″	12″	15″
Bar Capacity	mm(in)	Ø90 (3.5″)	Ø90 (3.5″)	Ø117 (4.6″)
Sp. Speed	r/min	3,000	3,000	2,000
Sp. Power	kW(HP)	26/22 (35/30)	30/20 (40/26.8)	26/22 (35/30)
Travel (X/Z)	mm(in)	325/1,205 (12.8″/47.4″)	325/1,205 (12.8″/47.4″)	325/1,205 (12.8″/47.4″)
No. of Tools	EA	12	12	10

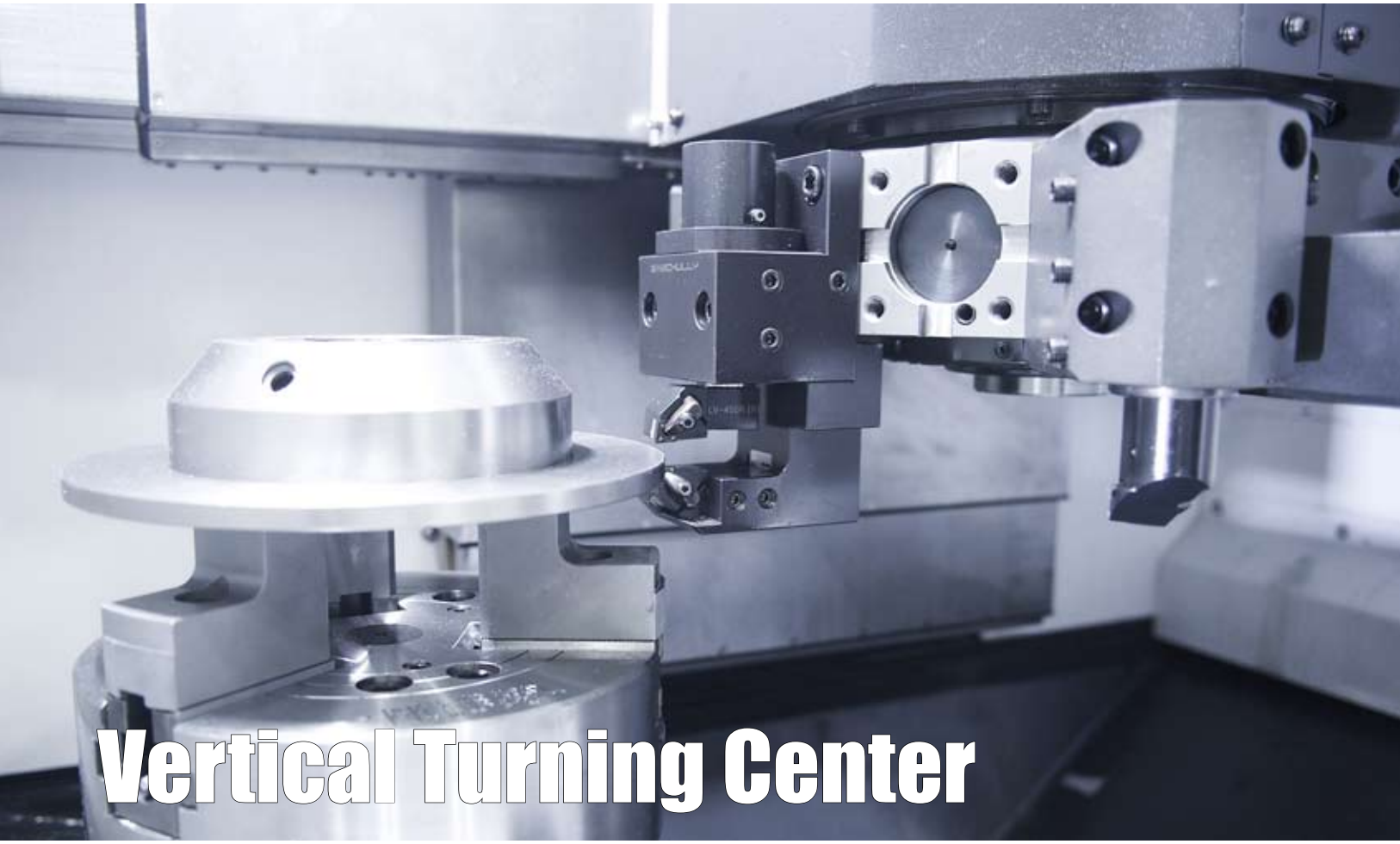
ITEM		L400MC	L400LC	L400LMC
Max. Swing	mm(in)	Ø780 (30.7″)	Ø725 (28.5″)	Ø725 (28.5″)
Max. Turning Length	mm(in)	1,180 (46.5″)	2,120 (83.5″)	2,100 (82.7″)
Chuck Size	inch	15″	15″	15″
Bar Capacity	mm(in)	Ø117 (4.6″)	Ø117 (4.6″)	Ø117 (4.6″)
Sp. Speed	r/min	2,000	2,000	2,000
Sp. Power	kW(HP)	37/30 (50/40)	37/30 (50/40)	37/30 (50/40)
Travel (X/Z)	mm(in)	320/1,200 (12.6″/47.2″)	320/2,200 (12.6″/86.6″)	320/2,200 (12.6″/86.6″)
No. of Tools	EA	12	10	12

Heavy Duty CNC Turning Center

L600/700/800 Series

ITEM		L600A/L600MA	L600LA/L600LMA	L700A/L700MA
Max. Swing	mm(in)	Ø1,050 (41.3″)	Ø1,050 (41.3″)	Ø1,050 (41.3″)
Max. Turning Length	mm(in)	1,650 (65″)	3,250 (128″)	1,650 (65″)
Chuck Size	inch	Opt. 21″/18″	Opt. 21″/18″	Opt. 24″
Bar Capacity	mm(in)	21″:Ø139 (5.5″)/18″:Ø117 (4.6″)	21″:Ø139 (5.5″)/18″:Ø117 (4.6″)	Ø165 (6.5″)
Sp. Speed	r/min	1,800	1,800	1,500
Sp. Power	kW(HP)	45/37 (60/50)	45/37 (60/50)	45/37 (60/50)
Travel (X/Z)	mm(in)	500/1,680 (19.7″/66.1″)	500/3,280 (19.7″/129.1″)	500/1,680 (19.7″/66.1″)
No. of Tools	EA	12	12	12

ITEM		L700LA/L700LMA	L800A/L800MA | L800D	L800LA/L800LMA
Max. Swing	mm(in)	Ø1,050 (41.3″)	Ø1,050 (41.3″)	Ø1,050 (41.3″)
Max. Turning Length	mm(in)	3,250 (128″)	1,650 (65″)	3,250 (128″)
Chuck Size	inch	Opt. 24″	Opt. 32″ | Opt. 34″ Air Chuck	Opt. 32″
Bar Capacity	mm(in)	Ø165 (6.5″)	Ø240 (9.4″)	Ø240 (9.4″)
Sp. Speed	r/min	1,500	700 | 500	700
Sp. Power	kW(HP)	45/37 (60/50)	45/37 (60/50) | 45/37 (60/50)	45/37 (60/50)
Travel (X/Z)	mm(in)	500/3,280 (19.7″/129.1″)	500/1,680 (19.7″/66.1″)	500/3,280 (19.7″/129.1″)
No. of Tools	EA	12	12	12



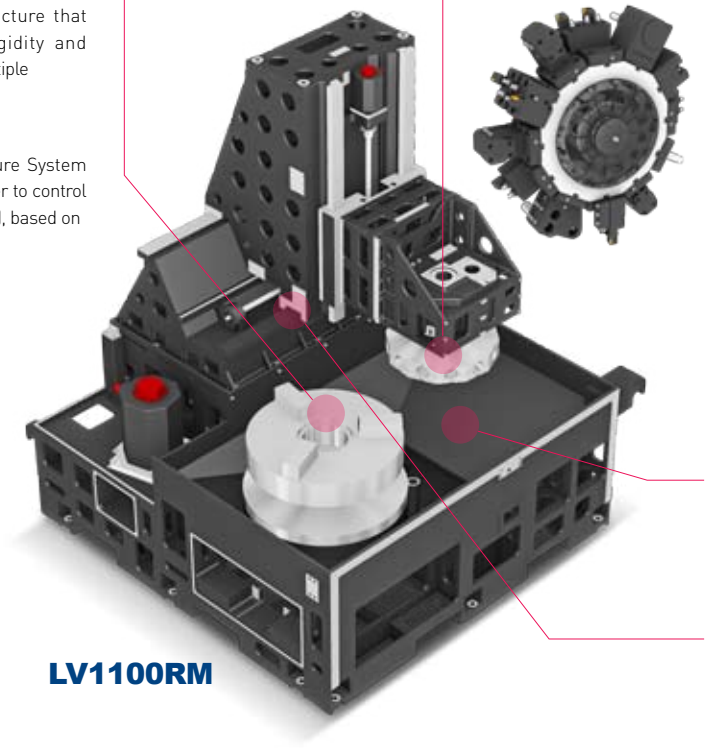
Vertical Turning Center

Main Spindle

Has been designed with structure that simultaneously improves rigidity and precision using high rigid of multiple row of roller bearing.

Hi-Low Chuck Pressure System

Optional Hi-Low Chuck Pressure System allows the operator/ programmer to control the pressure setting (high or low), based on each specific cutting situation.



LV1100RM

Milling Tool Holder

Machining capabilities have been increased with the addition of a Straight Milling Head, which can remove material from the side of the workpiece, and an Angular Milling Head, which can perform I.D. operations.

A wide variety of additional tool holders can further enhance the machines with capabilities that include drilling and tapping, among others.

Straight Milling Head	Angular Milling Head
	

Chute Structure

The slope type bed design improves chip flow and disposal of cutting fluids and minimizes thermal growth in the machine's base

Traveling Column Design

The LV1100RM features a traveling column to maintain superior accuracy when turning larger work pieces

Vertical CNC Turning Center

LV Series

ITEM		LV450RM	LV500R/L/RM/LM	LV800R/L/RM/LM
Max. Swing	mm(in)	Ø620 (24.4″)	Ø760 (29.9″)	Ø890 (35″)
Max. Turning Dia.	mm(in)	Ø465 (18.3″)	Ø550 (21.7″)	Ø800 (31.5″)
Max. Turning Length	mm(in)	465 (18.3″)	600 (23.6″)	800 (31.5″)
Chuck Size	inch	12″	15″ [18″]	18″ [20″, 24″]
Sp. Speed	r/min	3,000	2,000	2,000 [2,000]
Sp. Power (Max.)	kW(HP)	22 (30)	22 (30) [30 (40)] [30 (40)]	30 (40) [37 (50)] [37 (50)] [30 (40)]
Travel (X/Z)	mm(in)	310/495 (12.2″/19.5″)	325/625 (12.8″/24.6″)	440/800 (17.3″/31.5″)
No. of Tools	EA	12	8 / 12 (M Type)	12

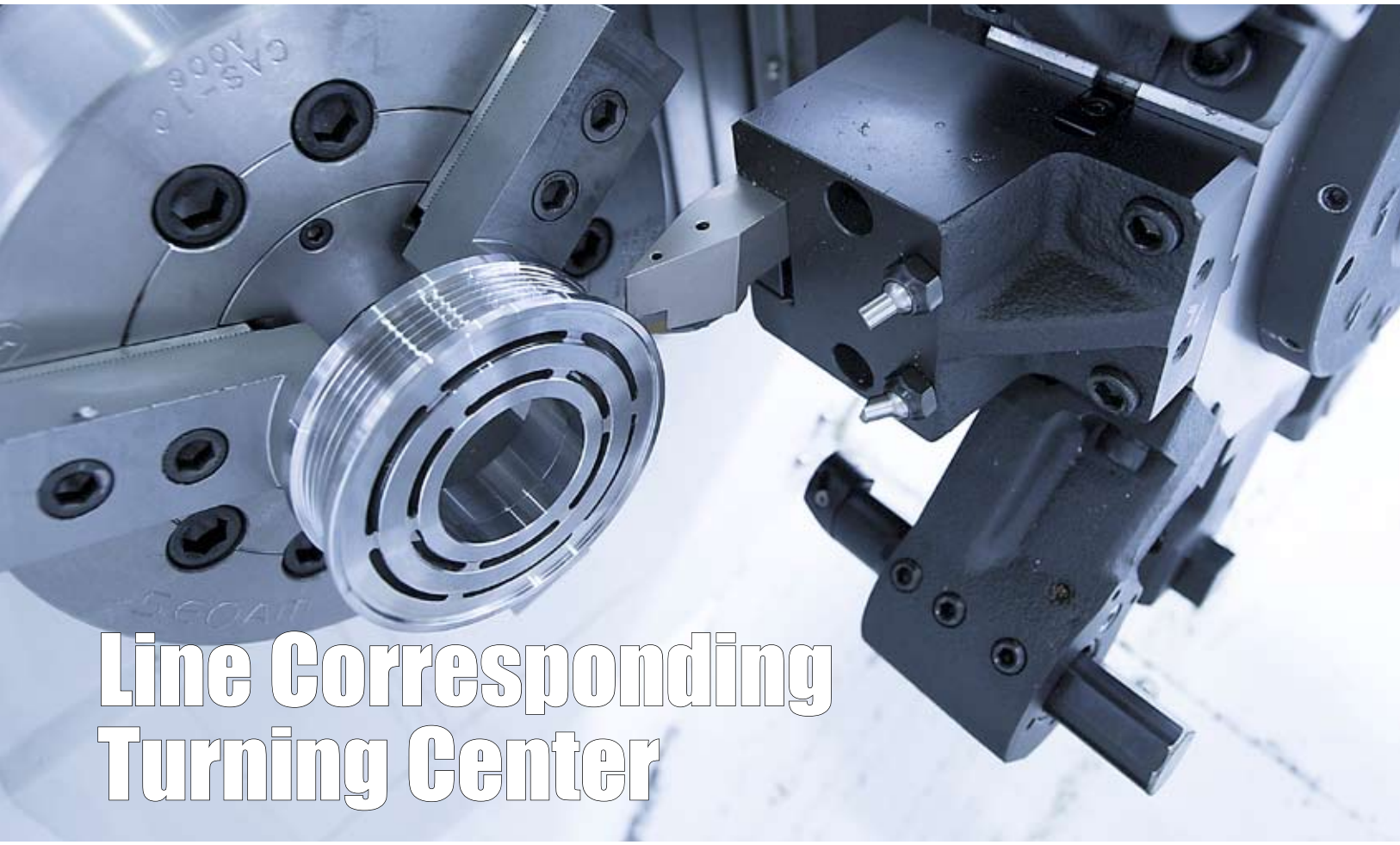
[ ] : Option ● : SIEMENS

ITEM		LV800RAW/LAW	LV1100R/RM
Max. Swing	mm(in)	Ø890 (35″)	Ø1,355 (53.3″)
Max. Turning Dia.	mm(in)	Ø800 (31.5″)	Ø1,160 (45.7″)
Max. Turning Length	mm(in)	800 (31.5″)	1,000 (39.4″)
Chuck Size	inch	Chuckless Type	40″ [32″]
Sp. Speed	r/min	2,000	800 [630]
Sp. Power (Max.)	kW(HP)	45/37 (60/50)	60/55/45 (80/73.7/60)
Travel (X/Z)	mm(in)	440/800 (17.3″/31.5″)	620/1,000 (24.4″/39.4″)
No. of Tools	EA	12	12

Ram Type Vertical CNC Turning Center

LV1400/LV2000MF

ITEM		LV1400	LV2000MF
Max. Swing	mm(in)	Ø1,450 (57.1″)	Ø2,050 (80.7″)
Max. Turning Dia.	mm(in)	Ø1,400 (55.1″)	Ø2,000 (78.7″)
Max. Turning Length	mm(in)	850 (33.5″)	900 (35.4″)
Table Size	mm(in)	Ø1,000 (39.4″) [Ø1,250 (49.2″)]	Ø1,600 (63″)
Max. Load Capacity	kg(lb)	6,000 (13,228)	10,000 (22,046)
Sp. Speed	r/min	500	250
Sp. Power	kW(HP)	37/30 (50/40)	37/30 (50/40)
Ram Size	mm(in)	200×200 (7.9″×7.9″)	240×240 (9.4″×9.4″)
Travel (X/Z)	mm(in)	−50~+1,100 (−2″~+43.3″) / 800 (31.5″)	−200~+1,580 (−7.9~+62.2″) / 900 (35.4″)

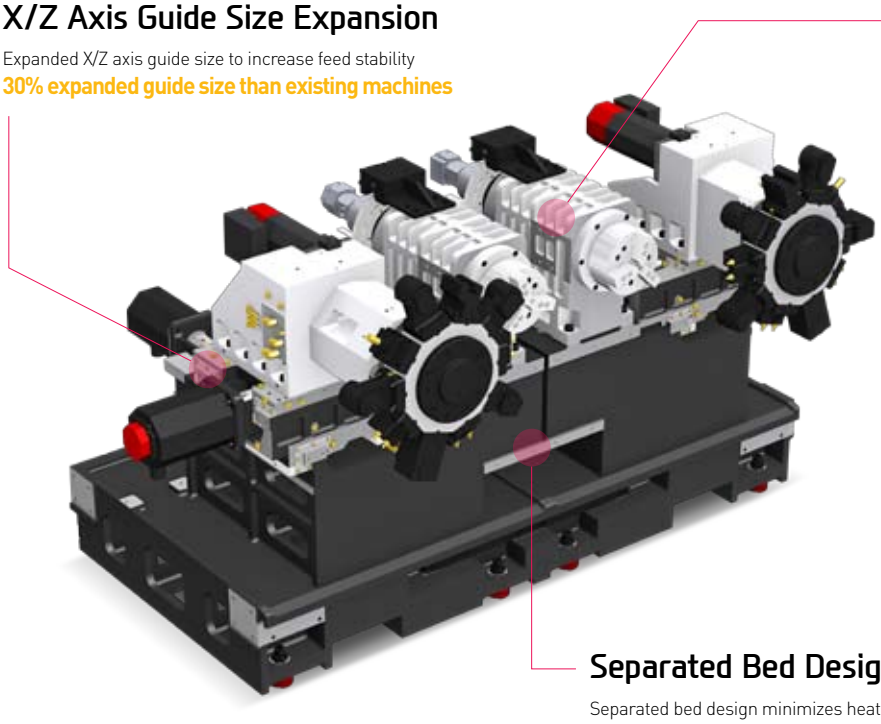


Line Corresponding Turning Center

X/Z Axis Guide Size Expansion

Expanded X/Z axis guide size to increase feed stability

30% expanded guide size than existing machines

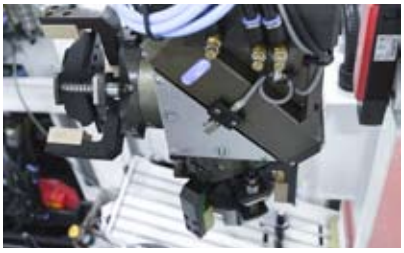


LF2100M/2SP

Spindle Structure

Excellent performance when heavy-duty cutting by adopting high output spidle motor.

Angular contact bearing is blended to minize heat distortion and to maintain high accuracy.



Gantry Loader System

High speed gantry loader and stacker are integrated into the LF Series creating a flexible and fully automated work cell, with a minimal footprint.

The integrated gantry loader design makes the LF Series perfect for high production applications and lean manufacturing environments.

Separated Bed Design

Separated bed design minimizes heat distortion and vibration to maintain stable cutting capacity. By collection disposed lubricant oil, it fosters pleasant work environment.

Front Loading CNC Turning Center

LF1600 Series

ITEM		LF1600/2SP I LF1600M/2SP
Max. Swing	mm(in)	Ø370 (14.6″)
Max. Turning Length	mm(in)	165 (6.5″)
Chuck Size	inch	6″
Bar Capacity	mm(in)	Ø45 (1.8″)
Sp. Speed	r/min	4,500
Sp. Power	kW(HP)	7.5/5.5 (10/7.4)
Travel (X/Z)	mm(in)	140/165 (5.5″/6.5″)
No. of Tools	EA	2×10

Front Loading CNC Turning Center

LF2000/2500 Series

ITEM		LF2000/2SP I LF2000M/2SP	LF2500/2SP I LF2500M/2SP
Max. Swing	mm(in)	Ø490 (19.3″)	Ø510 (Ø20.1″)
Max. Turning Length	mm(in)	150 (5.9″)	250 (9.8″)
Chuck Size	inch	8″	10″
Bar Capacity	mm(in)	Ø51 (2″)	Ø65 (2.6″)
Sp. Speed	r/min	4,500	3,600
Sp. Power	kW(HP)	15/11.7 (20/16)	36.2/28 (48.5/37.5)
Travel (X/Z)	mm(in)	200/250 (7.9″/9.8″) I 195/250 (7.7″/9.8″)	230/360 (9.1″/14.2″)
No. of Tools	EA	2×10	2×10

Front Loading CNC Turning Center

LF2100/2600 Series

ITEM		LF2100/2SP I LF2100M/2SP	LF2600/2SP I LF2600M/2SP
Max. Swing	mm(in)	Ø650 (25.6″)	Ø650 (25.6″)
Max. Turning Length	mm(in)	155 (6.1″)	170 (6.7″)
Chuck Size	inch	8″	10″
Bar Capacity	mm(in)	Ø65 (2.6″)	Ø76 (3″)
Sp. Speed	r/min	4,000	3,000
Sp. Power	kW(HP)	15/11 (20/15)	22/18.5 (30/25)
Travel (X/Z)	mm(in)	190/170 (7.5″/6.7″)	190/170 (7.5″/6.7″)
No. of Tools	EA	2×10	2×10

Y-Axis Turning Center

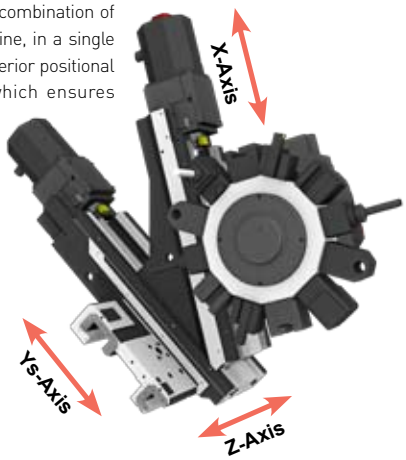
Main Spindle

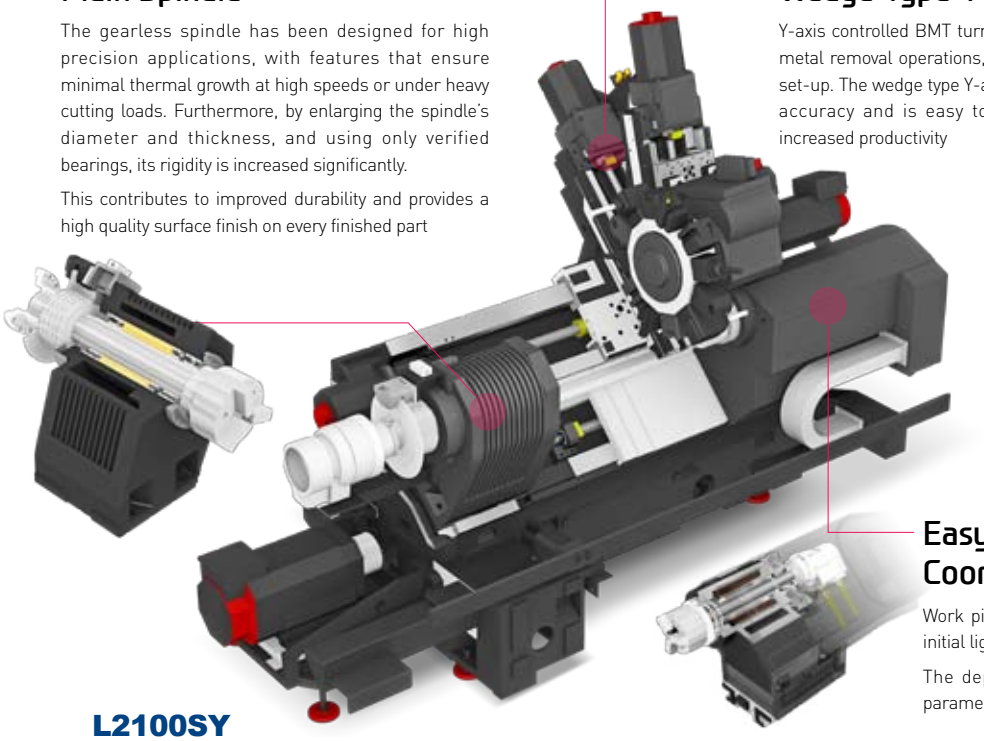
The gearless spindle has been designed for high precision applications, with features that ensure minimal thermal growth at high speeds or under heavy cutting loads. Furthermore, by enlarging the spindle's diameter and thickness, and using only verified bearings, its rigidity is increased significantly.

This contributes to improved durability and provides a high quality surface finish on every finished part

Wedge Type Y-axis (L2100SY)

Y-axis controlled BMT turret, enables a combination of metal removal operations, by one machine, in a single set-up. The wedge type Y-axis offers superior positional accuracy and is easy to program, which ensures increased productivity





L2100SY

Easy Set-up of Work Piece Coordinates

Work piece Coordinates are easily set-up by simply taking an initial light cut.

The depth is entered into the control auto-matically as a parameter, thus providing the coordinates.

Cross Type Y-Axis CNC Turning Center

LY Series

ITEM		L150Y	L150SY	L200Y
Max. Swing	mm(in)	Ø550 (21.7″)	Ø550 (21.7″)	Ø550 (21.7″)
Max. Turning Length	mm(in)	530 (20.9″)	530 (20.9″)	530 (20.9″)
Chuck Size	inch	6″	M:6″ S:5″	8″
Bar Capacity	mm(in)	Ø45 (1.8″)	M:Ø45 (1.8″) S:Ø33 (1.3″)	Ø65 (2.6″)
Sp. Speed	r/min	6,000	M:6,000 S:6,000	4,000 [4,000]
Sp. Power	kW(HP)	11/7.5 (15/10)	M:11/7.5 (15/10) S:3.7/2.2 (5/3)	15/11 (20/15) [22/18.5 (30/25)]
Travel (X/Y/Z/ZB)	mm(in)	220/80{±40}/550 (8.7″/3.1″/21.7″)	220/80{±40}/550/750 (8.7″/3.1″/21.7″/29.5″)	220/80{±40}/550 (8.7″/3.1″/21.7″)
No. of Tools	EA	12	12	12

ITEM		L200SY	L250Y	L250SY
Max. Swing	mm(in)	Ø550 (21.7″)	Ø620 (24.4″)	Ø620 (24.4″)
Max. Turning Length	mm(in)	530 (20.9″)	620 (24.4″)	620 (24.4″)
Chuck Size	inch	M:8″ S:5″	10″	M:10″ S:5″
Bar Capacity	mm(in)	M:Ø65 (2.6″) S:Ø33 (1.3″)	Ø76 (3″)	M:Ø76 (3″) S:Ø45 (1.8″)
Sp. Speed	r/min	M:4,000 S:6,000	3,500 [3,500]	M:3,500 [3,500] S:6,000 [6,000]
Sp. Power	kW(HP)	M:15 (20) S:3.7 (5)	22 (30) [22.2 (30)]	M:22 (30) [22.2 (30)] S:7.5 (10) [8.4 (11)]
Travel (X/Y/Z/ZB)	mm(in)	220/80{±40}/550/750 (8.7″/3.1″/21.7″/29.5″)	230/110{±55}/675 (9.1″/4.3″/26.6″)	230/110{±55}/675/700 (9.1″/4.3″/26.6″/27.6″)
No. of Tools	EA	12	12	12

[ ] : Option ● : SIEMENS

Wedge Type Y-Axis CNC Turning Center

L2100Y/SY

ITEM		L2100Y	L2100SY
Max. Swing	mm(in)	Ø630 (24.8″)	Ø630 (24.8″)
Max. Turning Length	mm(in)	455 (17.8″)	455 (17.8″)
Chuck Size	inch	8″	M:8″ S:6″
Bar Capacity	mm(in)	Ø65 (2.6″)	M:Ø65 (2.6″) S:Ø35 (1.4″)
Sp. Speed	r/min	4,500	M:4,500 S:6,000
Sp. Power	kW(HP)	15/11 (20/15)	M:15/11 (20/15) S:7.5/5.5 (10./7.4)
Travel (X/Y/Z/ZB)	mm(in)	210/100{±50}/540 (8.3″/3.9″/21.3″)	210/100{±50}/580/500 (8.3″/3.9″/22.8″/19.7″)
No. of Tools	EA	12	12

Multi Axis Turning Center

LM1600/1800TT Series

ITEM		LM1600TTS/TTMS/TTSY
Max. Swing	mm(in)	Ø290 (11.4″)
Max. Turning Length	mm(in)	705 (27.8″)
Chuck Size	inch	M:6″ S:6″
Bar Capacity	mm(in)	M:Ø51 (2″) S:Ø51 (2″)
Sp. Speed	r/min	M:6,000 S:6,000
Sp. Power	kW(HP)	M:15/11 (20/15) S:15/11 (20/15)
Travel	mm(in)	X1/X2/Z1/Z2/Y/ZB : 165/195/700/720/100{±50}/700 (6.5″/7.7″/27.6″/28.3″/3.9″/27.6″)
No. of Tools	EA	2×12 [2×24]

ITEM		LM1800TTS/TTMS/TTSY
Max. Swing	mm(in)	Ø290 (11.4″)
Max. Turning Length	mm(in)	673 (26.5″)
Chuck Size	inch	M:8″ S:8″
Bar Capacity	mm(in)	M:Ø65 (2.6″) S:Ø65 (2.6″)
Sp. Speed	r/min	M:5,000 S:5,000
Sp. Power	kW(HP)	M:22/11 (30/15) S:22/11 (30/15)
Travel	mm(in)	X1/X2/Z1/Z2/Y/ZB : 165/195/700/720/100{±50}/668 (6.5″/7.7″/27.6″/28.3″/3.9″/26.3″)
No. of Tools	EA	2×12 [2×24]

Multi Axis Turning Center

LM2500TT Series

ITEM		LM2500TT/TTM	LM2500TTS/TTMS	LM2500TTSY
Max. Swing	mm(in)	Ø780 (30.7″)	Ø780 (30.7″)	Ø780 (30.7″)
Max. Turning Length	mm(in)	900 (35.4″)	900 (35.4″)	900 (35.4″)
Chuck Size	inch	10″	M:10″ S:10″	M:10″ S:10″
Bar Capacity	mm(in)	Ø76 (3″)	M:Ø76 (3″) S:Ø76 (3″)	M:Ø76 (3″) S:Ø76 (3″)
Sp. Speed	r/min	4,000	M:4,000 S:4,000	M:4,000 S:4,000
Sp. Power	kW(HP)	26/15 (35/20)	M:26/15 (35/20) S:26/15 (35/20)	M:26/15 (35/20) S:26/15 (35/20)
Travel(X1/X2)	mm(in)	270/190 (10.6″/7.5″)	270/190 (10.6″/7.5″)	270/190 (10.6″/7.5″)
Travel(Z1/Z2)	mm(in)	920/920 (36.2″/36.2″)	920/920 (36.2″/36.2″)	920/920 (36.2″/36.2″)
Travel(Y)	mm(in)	–	–	120{±60} (4.7″)
Travel(ZB)	mm(in)	–	920 (36.2″)	920 (36.2″)
No. of Tools	EA	2×12	2×12	2×12

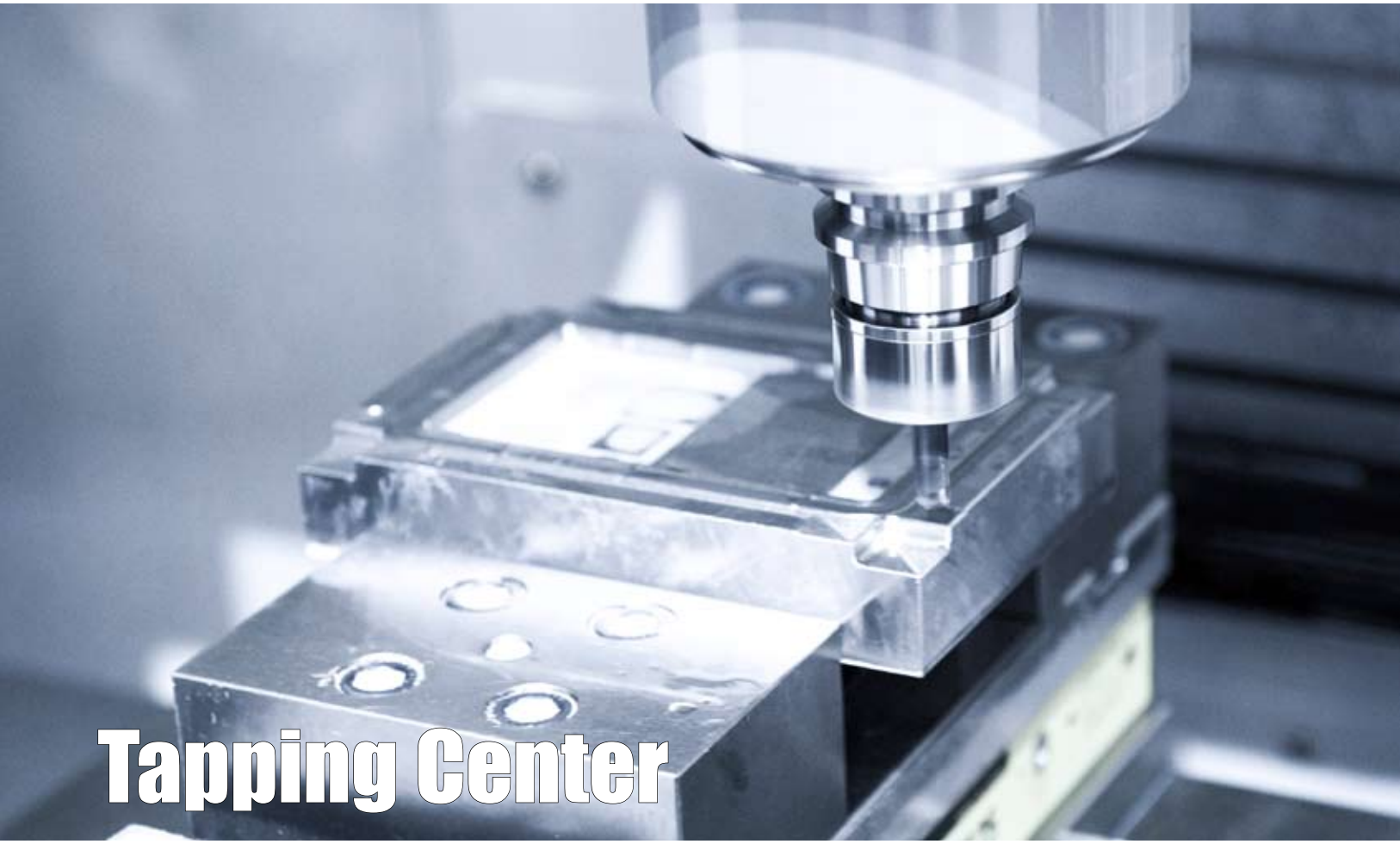
Aluminum Wheel Turning Center

- Maximum AL Wheel Processing Capability, 24″- L600AW
- Best in class work load capacity : Max. swing of 850mm (33.5″) - L600AW
- Efficient chip removing process by a large capacity shower coolant device
- Servo driven high speed turret
- Built-in Spindle **(L600AW MF Option)**

Aluminum Wheel Turning Center

L500/600AW Series

ITEM		L500AW	L600AW I L600AW MF
Max. Swing	mm(in)	Ø750 (29.5″)	Ø850 (33.5″)
Max. Turning Length	mm(in)	710 (28″)	710 (28″)
Chuck Size	inch	18″	21″
Bar Capacity	mm(in)	20″	24″
Sp. Speed	r/min	3,000	3,000
Sp. Power	kW(HP)	37/30 (50/40)	37/30 (50/40) I 30/22 (40/35)
Travel (X/Z)	mm(in)	355:65+290 (14″:2.6″+11.4″) / 720 (28.3″)	370:20+350 (14.6″:0.8″+13.8″) / 720 (28.3″)
No. of Tools	EA	12	12



Tapping Center

ATC & Magazine

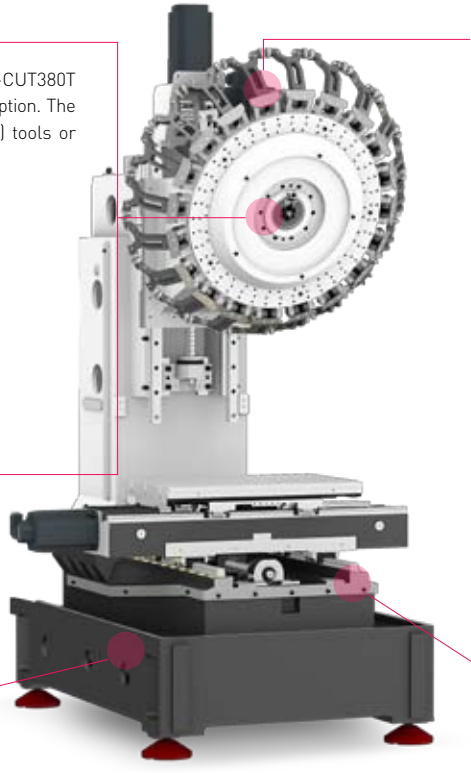
The 14 tool rotary ATC is standard on the i-CUT380T series. The double-arm ATC is offered as an option. The tool magazine has the option for twenty (20) tools or twenty four (24) tools.

Servo Type Driving Method ATC

Servo motor type driving method applied ATC offers quick tool selection. Also, a servo motor is used to improve tool position indexing with enhanced stability.

FEM Structure

By analyzing the structure, i-CUT Series weight has been reduced, but maintained the rigidity. Satisfies both cutting stability and productivity.



i-CUT380T

Spindle

For high speed spindle, it is designed as high-precision rapid angular ball bearing. Therefore, it exerts excellent performance by realizing rapid processing of Max. 12,000 rpm. Reverse rotation double speed reverse (Double Speed Return) has been reduced processing time.

Rigid Tapping

Rigid tapping is standard and eliminates the need for special tooling. Consistent and accurate tapping increases tap life and reduces the machining cycle time.

Spindle Taper

The Big Plus spindle system (BBT #30) provides dual contact between the spindle face and the flange face of the tool holder.

This greatly increase tool rigidity, reduces run out and adds significant productivity to your machining applications

High Speed LM Guide

Rapid High Speed axis movement is achieved by the use of linear motion guide ways.

This reduces non-cutting time and decreases machining time for greater productivity.

Tapping Center i-CUT T Series

ITEM		i-CUT380T	i-CUT380TD	i-CUT420T
Table Size	mm(in)	600×380 (23.6″×15″)	2–650×400 (2–23.6″×15.7″)	800×420 (31.5″×16.5″)
Max. Load Capacity	kg(lb)	200 (440.9)	2–250 (2–551.1)	200 (440.9)
Sp. Taper	–	BT30	BT30	BT30
Sp. Speed	r/min	12,000 [12,000]	12,000 [12,000]	12,000 [12,000]
Sp. Power	kW(HP)	7.5/5.5 (10/7.5) [6.6/4.1 (8.9/5.5)]	7.5/5.5 (10/7.5) [6.6/4.1 (8.9/5.5)]	7.5/5.5 (10/7.5) [6.6/4.1 (8.9/5.5)]
No. of Tools	EA	14 [20] [TwinArm:20, 24]	14 [TwinArm:20, 24]	14 [20] [TwinArm:20, 24]
Travel (X/Y/Z)	mm(in)	520/380/350 (20.5″/15″/13.8″)	520/360/350 (20.5″/14.2″/13.8″)	700/420/350 (27.6″/16.5″/13.8″)
Rapid Travel	m/min(ipm)	56/56/56 (2,205/2,205/2,205)	50/50/56 (1,969/1,969/2,205)	50/50/56 (1,969/1,969/2,205)

ITEM		i-CUT380Ti	i-CUT380TDi	i-CUT380Tec
Table Size	mm(in)	800×420 (31.5″×16.5″)	2–650×400 (2–23.6″×15.7″)	600×380 (70.9″×27.6″)
Max. Load Capacity	kg(lb)	200 (440.9)	2–250 (2–551.1)	200 (440.9)
Sp. Taper	–	BT30	BT30	BT30
Sp. Speed	r/min	12,000 [12,000]	12,000	12,000
Sp. Power	kW(HP)	7.5/5.5 (10/7.5) [6.6/4.1 (8.9/5.5)]	6.6/4.1 (8.9/5.5)	7.5/5.5 (10/7.5)
No. of Tools	EA	14 [20] [TwinArm:20, 24]	14 [TwinArm:20, 24]	14 [20] [TwinArm:20, 24]
Travel (X/Y/Z)	mm(in)	700/420/350 (27.6″/16.5″/13.8″)	520/360/350 (20.5″/14.2″/13.8″)	520/380/350 (20.5″/15″/13.8″)
Rapid Travel	m/min(ipm)	50/50/56 (1,969/1,969/2,205)	48/48/60 (1,890/1,890/2,362)	50/50/50 (1,969/1,969/1,969)

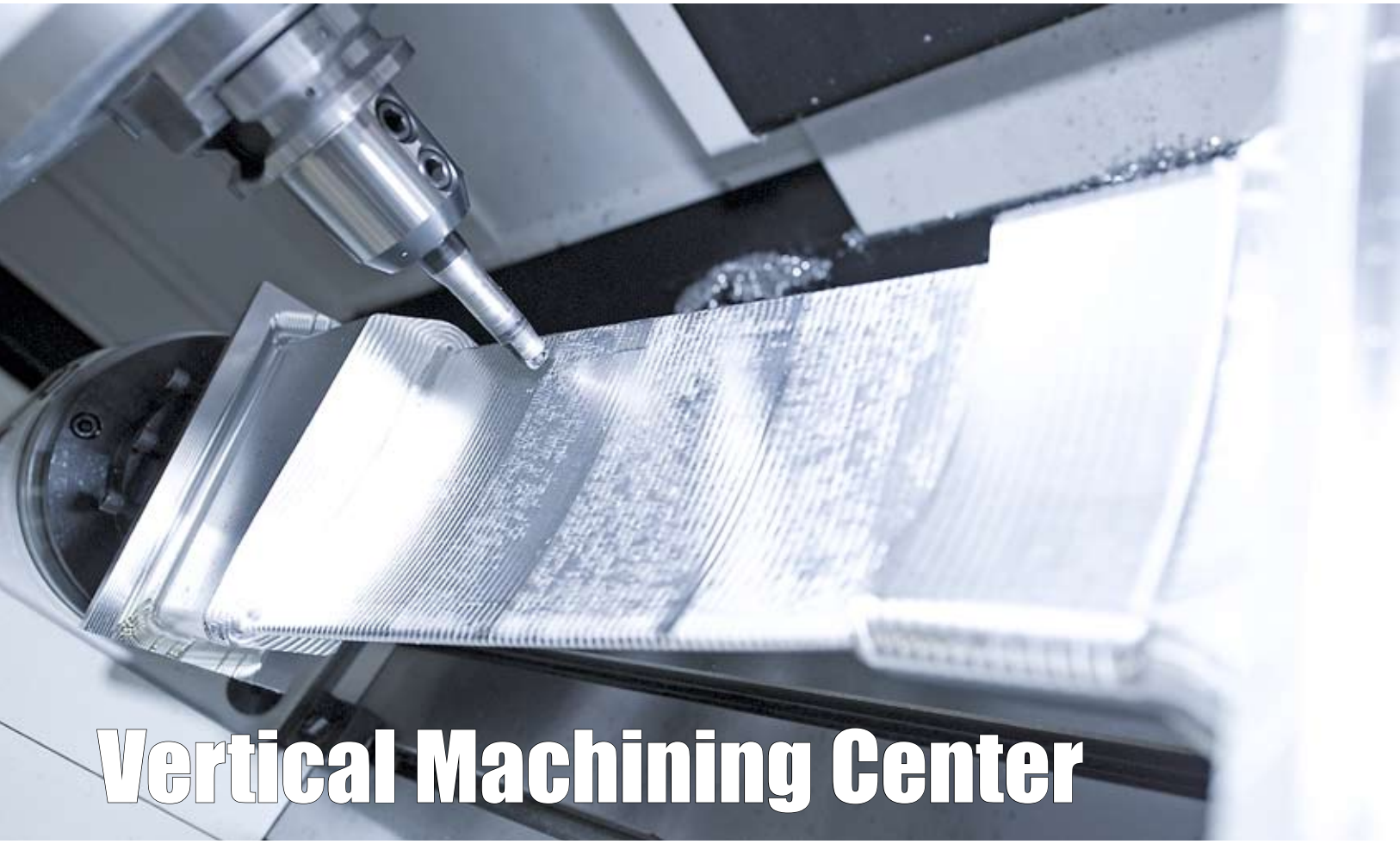
[ ] : Option ● : SIEMENS

Compact Vertical Machining Center i-CUT M Series

ITEM		i-CUT320M	i-CUT380M
Table Size	mm(in)	500×350 (19.7″×13.8″)	600×380 (23.6″×15″)
Max. Load Capacity	kg(lb)	150 (330.7)	200 (440.9)
Sp. Taper	–	BBT30	BBT30
Sp. Speed	r/min	24,000	24,000
Sp. Power	kW(HP)	10.5/8 (14/11)	10.5/8 (14/11)
No. of Tools	EA	20	20 [24]
Travel (X/Y/Z)	mm(in)	420/320/330 (16.5″/12.6″/13″)	520/380/480 (20.5″/15″/18.9″)
Rapid Travel	m/min(ipm)	56/56/56 (2,205/2,205/2,205)	56/56/56 (2,205/2,205/2,205)

ITEM		i-CUT380MD	i-CUT420M
Table Size	mm(in)	2–650×400 (2–25.6″×15.7″)	800×420 (31.5″×16.5″)
Max. Load Capacity	kg(lb)	2–250 (2–551.1)	200 (440.9)
Sp. Taper	–	BBT30	BBT30
Sp. Speed	r/min	24,000	24,000
Sp. Power	kW(HP)	10.5/8 (14/11)	10.5/8 (14/11)
No. of Tools	EA	20 [24]	20 [24]
Travel (X/Y/Z)	mm(in)	520/360/480 (20.5″/14.2″/18.9″)	700/420/480 (27.6″/15″/16.5″)
Rapid Travel	m/min(ipm)	50/50/56 (1,969/1,969/2,205)	50/50/56 (1,969/1,969/2,205)

[ ] : Option



Vertical Machining Center

ATC & Magazine

The tool magazine holds twenty four (24) tools as standard and thirty (30) tools as an option.

Random access allows for pre-staging of tools for faster tool changes and increased productivity.

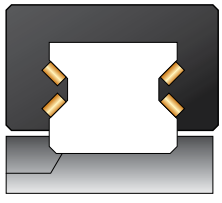
The Double Arm ATC provides fast and reliable tool changes to help reduce machining cycle times.

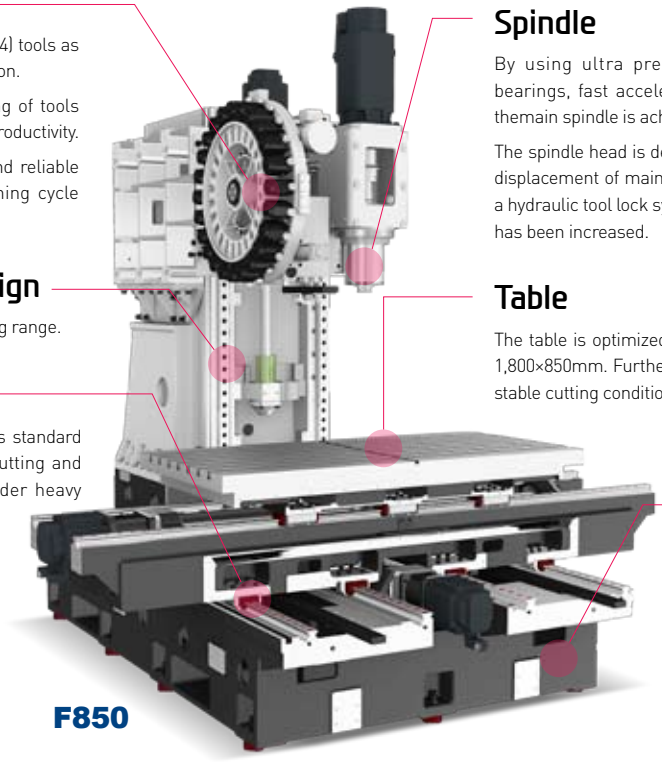
Expanded Y-axis Design

Y-axis stroke of 850mm toextend cutting range.

Roller Guide

Y-axis 4-way roller guide is applied as standard which, by design, maintains stable cutting and highly accurate processing even under heavy cutting loads.





F850

Spindle

By using ultra precision class angular ball bearings, fast acceleration and deceleration of themain spindle is achieved.

The spindle head is designed to minimize the heat displacement of main spindle, and with the use of a hydraulic tool lock system the machining stability has been increased.

Table

The table is optimized to cut large sized panels by expanding its size to 1,800×850mm. Furthermore, the table can load upto 1,000kg to maintain stable cutting condition.

FEM Structure Interpretation

The Finite Element Analysis Method (FEA) is used during machine development in order to increase rigidity and decrease both heat growth and vibration in the casting.

This ensures the machine remains stable even under the heaviest cutting conditions.

Advanced Technology Vertical Machining Center

F400/500/650

ITEM		F400	F500/500plus
Table Size	mm(in)	1,000×460 (39.4″×18.1″)	1,200×500 (47.2″×19.7″)
Max. Load Capacity	kg(lb)	600 (1,323)	800 (1,764)
Sp. Taper	–	CAT40/BT40 [BCV40/BBT40]	BCV40/BBT40
Sp. Speed	r/min	12,000 [8,000] [8,000] [8,000] [12,000]	10,000 [8,000] [8,000] | 10,000 [8,000]
Sp. Power (Max.)	kW(HP)	11 (150) [15 (20)] [15 (20)] [16 (21)] [13.5 (18)]	18.5 (25) [15 (20)] [28 (37.5)] | 18.5 (25) [15 (20)]
No. of Tools	EA	24 [30]	24 [30] | 30
Travel (X/Y/Z)	mm(in)	800/460/520 (31.5″/18.1″/20.5″)	1,060/510/635 (41.7″/20.1″/25″)
Rapid Travel	m/min(ipm)	32/32/32 (1,260/1,260/1,260)	36/36/30 (1,417/1,417/1,181)

ITEM		F650/650 Plus	F500/50	F650/50
Table Size	mm(in)	1,600×650 (63″×25.6″)	1,200×500 (47.2″×19.7″)	1,600×650 (63″×25.6″)
Max. Load Capacity	kg(lb)	1,300 (2,866)	800 (1,764)	1,300 (2,866)
Sp. Taper	–	BCV40/BBT40	CAT50/BT50 [BCV50/BBT50]	CAT50/BT50 [BCV50/BBT50]
Sp. Speed	r/min	10,000 [8,000] [8,000] | 10,000 [8,000]	6,000	6,000
Sp. Power (Max.)	kW(HP)	18.5 (25) [15 (20)] [28 (37.5)] | 18.5 (25) [15 (20)]	15 (20)	15 (20)
No. of Tools	EA	24 [30] | 30	24	24
Travel (X/Y/Z)	mm(in)	1,400/660/635 (55.1″/26″/25″)	1,100/510/635 (43.3″/20.1″/25″)	1,400/660/635 (55.1″/26″/25″)
Rapid Travel	m/min(ipm)	36/36/30 (1,417/1,417/1,181)	36/36/30 (1,417/1,417/1,181)	36/36/30 (1,417/1,417/1,181)

[ ] : Option ● : SIEMENS

Economy Type Vertical Machining Center

F400/500/650VM

ITEM		F400VM	F500VM	F6500VM
Table Size	mm(in)	1,000×460 (39.4″×18.1″)	1,200×550 (47.2″×21.6″)	1,400×670 (55.1″×26.4″)
Max. Load Capacity	kg(lb)	600 (1,322)	800 (1,764)	1,000 (2,204)
Sp. Taper	–	BCV40/BBT40	BCV40/BBT40	BCV40/BBT40
Sp. Speed	r/min	10,000 [8,000] [8,000] [10,000]	10,000 [8,000] [8,000] [10,000] [8,000] [10,000]	8,000
Sp. Power (Max.)	kW(HP)	11 (15) [15 (20)] [23.5 (31.5)] [23.5 (31.5)]	11 (15) [15 (20)] [1 1(15)] [15 (20)] [23.5 (31.5)] [23.5 (31.5)]	18.5 (25)
No. of Tools	EA	30 [24]	24 [30, 40]	30 [24]
Travel (X/Y/Z)	mm(in)	800/460/520 (31.5″/18.1″/20.5″)	1,100/550/520 (43.3″/21.7″/20.5″)	1,300/670/635 (51.2″/26.4″/25″)
Rapid Travel	m/min(ipm)	36/36/30 (1,417/1,417/1,181)	36/36/30 (1,417/1,417/1,181)	36/36/30 (1,417/1,417/1,181)

[ ] : Option ● : SIEMENS

High Speed Vertical Machining Center

F510M/550M/660M

ITEM		F510M	F550M	F660M
Table Size	mm(in)	1,200×500 (47.2″×19.7″))	1,200×550 (47.2″×21.7″)	1,600×650 (63″×25.6″)
Max. Load Capacity	kg(lb)	800 (1,764)	800 (1,764)	1,300 (2,866)
Sp. Taper	–	BCV40/BBT40	BCV40/BBT40	BCV40/BBT40
Sp. Speed	r/min	15,000 [15,000]	15,000	15,000 [15,000]
Sp. Power	kW(HP)	25/22 (33.5/30) [26/26 (35/35)]	25/22 (33.5/30)	25/22 (33.5/30) [26/26 (35/35)]
No. of Tools	EA	30 [24]	30 [24]	30 [24]
Travel (X/Y/Z)	mm(in)	1,060/510/635 (41.7″/20.1″/25″)	1,100/550/520 (43.3″/21.7″/20.5″)	1,400/660/635 (55.1″/26″/25″)
Rapid Travel	m/min(ipm)	36/36/30 (1,417/1,417/1,181)	36/36/36 (1,417/1,417/1,417)	36/36/30 (1,417/1,417/1,181)

[ ] : Option ● : SIEMENS

Dual Table Type Vertical Machining Center

F410D/500D/600D

ITEM		F410D	F500D	F600D
Table Size	mm(in)	2–650×410 (2–25.6″×16.1″)	2–700×500 (2–27.6″×19.7″)	2–900×650 (2–35.4″×25.6″)
Max. Load Capacity	kg(lb)	2–250 (2–551.2)	2–350 (2–771.6)	2–400 (2–881.8)
Sp. Taper	–	CAT40/BT40	CAT40/BT40	CAT40/BT40
Sp. Speed	r/min	10,000 [8,000]	10,000 [8,000] [8,000] [12,000]	8,000 [12,000]
Sp. Power	kW(HP)	18.5/15 (25/20) [18/12 (25/16)]	5/11 (20/15) [15/11 (20/15)] [43/18.5 (57.7/25)] [11/7.5 (15/10)]	15/11 (20/15) [11/7.5 (15/10)]
No. of Tools	EA	30 [24]	30 [24]	30 [24]
Travel (X/Y/Z)	mm(in)	570/410/580 (22.4″/16.1″/22.8″)	600/460/570 (23.6″/18.1″/22.4″)	800/600/600 (31.5″/23.6″/23.6″)
Rapid Travel	m/min(ipm)	36/36/30 (1,417/1,417/1,181)	40/40/30 (1,575/1,575/1,181)	42/42/42 (1,654/1,654/1,654)

[ ] : Option ● : SIEMENS

Vertical Machining Center

F850

ITEM		F850
Table Size	mm(in)	1,800×850 (70.9″×33.5″)
Max. Load Capacity	kg(lb)	1,000 (2,204)
Sp. Taper	–	CAT40/BT40
Sp. Speed	r/min	12,000
Sp. Power	kW(HP)	25/10.5 (33.5/14.1)
No. of Tools	EA	30 [24]
Travel (X/Y/Z)	mm(in)	1,600/850/580 (63″/33.5″/22.8″)
Rapid Travel	m/min(ipm)	36/36/36 (1,417/1,417/1,417)

[ ] : Option ● : SIEMENS

Box Way Vertical Machining Center

F510B/600B

ITEM		F510B	F600B
Table Size	mm(in)	1,200×500 (47.2″×19.7″)	1,600×600 (63″×23.6″)
Max. Load Capacity	kg(lb)	800 (1,764)	1,000 (2,205)
Sp. Taper	–	CAT40/BT40	CAT50/BT50
Sp. Speed	r/min	8,000 [8,000]	4,500 [4500] [8,000] [8,000]
Sp. Power	kW(HP)	15/11 (20/15) [15/11 (20/15)]	15/11 (20/15) [18.5/15 (25/20)] [15/11 (20/15)] [18.5/15 (25/20)]
No. of Tools	EA	24 [30]	30 [20]
Travel (X/Y/Z)	mm(in)	1,100/510/635 (43.3″/20.1″/25″)	1,150/600/600 (45.3″/23.6″/23.6″)
Rapid Travel	m/min(ipm)	30/30/24 (1,181/1,181/945)	24/24/24 (945/945/945)

[ ] : Option

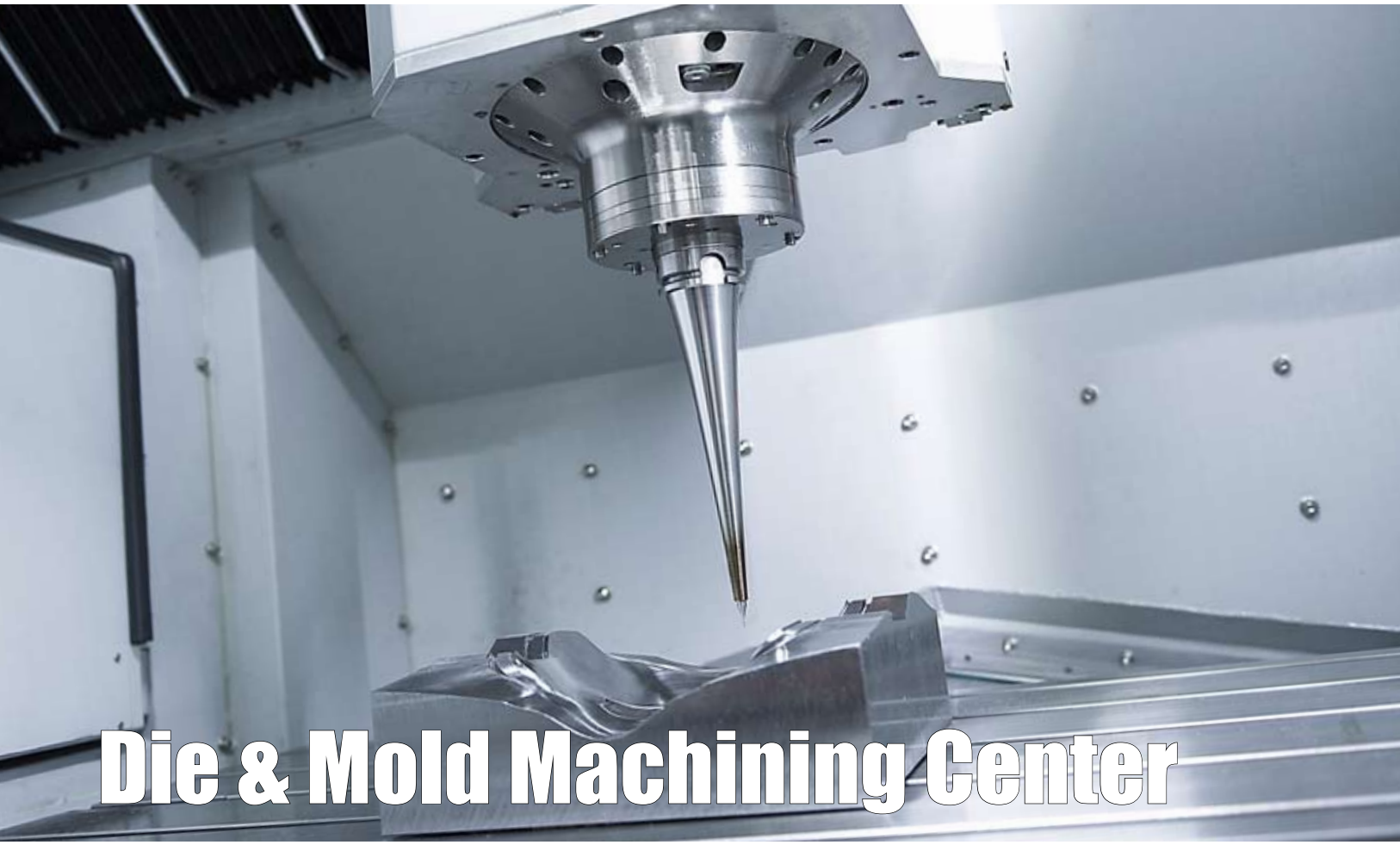
Heavy Duty Vertical Machining Center

F750B/960B

ITEM		F750B
Table Size	mm(in)	1,800×700 (70.9″×27.6″)
Max. Load Capacity	kg(lb)	2,000 (4,409)
Sp. Taper	–	CAT50/BT50 [BCV50/BBT50]
Sp. Speed	r/min	4,500 [8,000] [12,000] [4,500] [8,000]
Sp. Power	kW(HP)	18.5/15 (25/20) [18.5/15 (25/20)] [30/25 (40/33.5)] [30/20 (40/26.8)] [30/20 (40/26.8)]
No. of Tools	EA	30 [20]
Travel (X/Y/Z)	mm(in)	1,550/750/720 (61″/29.5″/28.3″)
Rapid Travel	m/min(ipm)	16/16/12 (630/630/472)

ITEM		F960B
Table Size	mm(in)	2,700×950 (106.3″×37.4″)
Max. Load Capacity	kg(lb)	4,500 (9,921)
Sp. Taper	–	CAT50/BT50 [BCV50/BBT50]
Sp. Speed	r/min	8,000 [8,000]
Sp. Power	kW(HP)	22/18.5 (30/25) [27.8/18.5 (37/25)]
No. of Tools	EA	30 [20, 40]
Travel (X/Y/Z)	mm(in)	2,450/960/850 (96.5″/37.8″/33.5″)
Rapid Travel	m/min(ipm)	16/16/20 (630/630/787)

[ ] : Option ● : SIEMENS



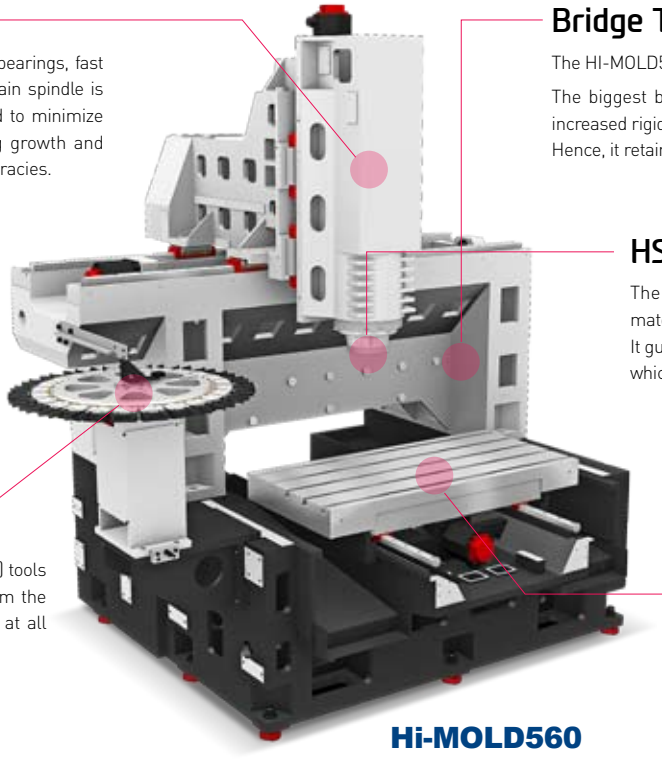
Die & Mold Machining Center

Spindle

By using ultra precision class angular bearings, fast acceleration and deceleration of the main spindle is achieved. The spindle head is designed to minimize heat displacement therefore reducing growth and making it possible to maintain high accuracies.

Magazine

The tool magazine holds twenty four (24) tools as standard. Tools are stored away from the cutting area to ensure they stay clean at all times.



Hi-MOLD560

Bridge Type Structure

The HI-MOLD560/5A has built upon a bridge type frame.

The biggest benefit of a bridge type machining center is the increased rigidity and less heat generated.
Hence, it retains accuracy and repeatability at the highest levels.

HSK Tool Holder

The HSK spindle offers users the fastest possible material removal rates, highest accuracy, and rigidity. It guarantees stability when run at high spindle speeds which is excellent for mold manufacturing.

Table

Compared to competitive machines, the Hi-Mold series has a large work envelop making setup and use easy and convenient for the operator.

Precision Mold Vertical Machining Center

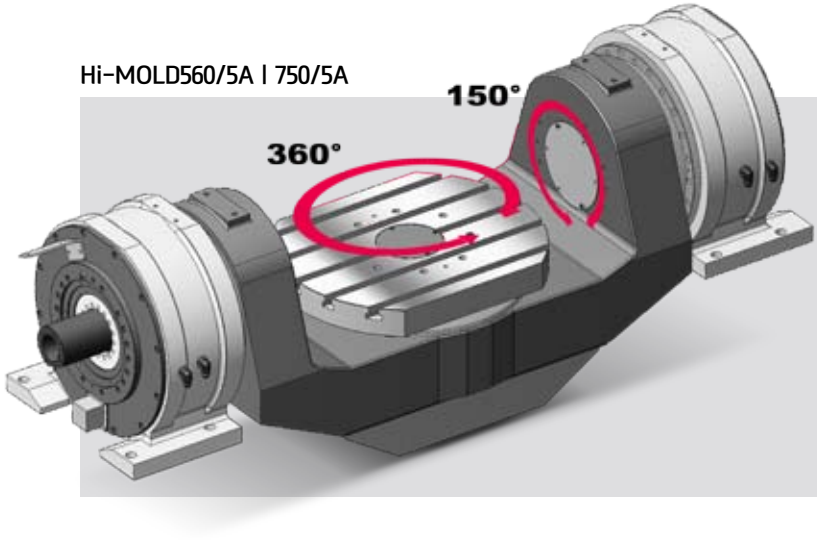
Hi-MOLD Series

ITEM		Hi-MOLD450	Hi-MOLD560	Hi-MOLD560/5A
Table Size	mm(in)	850×500 (33.46″×15.69″)	1,250×600 (49.21″×23.62″)	Ø500×270 (19.68″×10.6″)
Max. Load Capacity	kg(lb)	300 (660)	800 (1,760)	250 (550)
Sp. Taper	–	HSK-A63 [HSK-E40]	HSK-A63 [HSK-E40]	HSK-A63 [HSK-E40]
Sp. Speed	r/min	24,000 [40,000]	24,000 [40,000]	24,000 [40,000]
Sp. Power	kW(HP)	33/25 (44/33) [26/18 (35/24)]	33/25 (44/33) [26/18 (35/24)]	33/25 (44/33) [26/18 (35/24)]
No. of Tools	EA	24	24 [40]	24
Travel (X/Y/Z)	mm(in)	600/450/450 (23.6″/17.7″/17.7″)	1,000/560/450 (39.3″/22″/17.7″)	1,000/560/450 (39.3″/22″/17.7″)
Rapid Travel	m/min(ipm)	50/50/50 (1,969/1,969/1,969)	50/50/50 (1,969/1,969/1,969)	50/50/50 (1,969/1,969/1,969)

[ ] : Option ● : SIEMENS

ITEM		Hi-MOLD750/5A	Hi-MOLD6500
Table Size	mm(in)	Ø630×500 (24.8″×19.7″)	1,200×650 (47.2″×25.6″)
Max. Load Capacity	kg(lb)	500 (1,102)	1,000 (3.9″)
Sp. Taper	–	HSK-A63	BCV40/BBT40
Sp. Speed	r/min	15,000	20,000 [24,000]
Sp. Power	kW(HP)	25/22 (33/29)	22/18.5 (30/25) [22/18.5 (30/25)]
No. of Tools	EA	30	30
Travel (X/Y/Z)	mm(in)	650/765/510 (25.6″/30.1″/20″)	1,100/650/550 (43.3″/25.6/21.7″)
Rapid Travel	m/min(ipm)	50/50/50 (1,969/1,969/1,969)	40/40/40 (1,575/1,575/1,575)

Hi-MOLD560/5A I 750/5A



Built-in A and C Axis Table

The built in rotary table allows the users to produce a wide range of complicated work pieces. The 'C' axis has full 360° rotation and the 'A' axis has 150° rotation. It is possible to clamp each axis for extra rigidity and accuracy when machining.

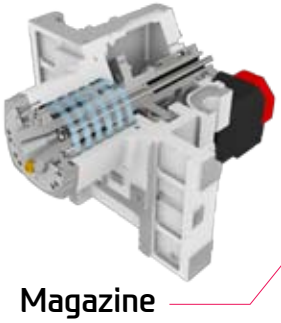
Hi-MOLD560/5A

Max. number of rotation	A-axis – 70r/min, C-axis – 150r/min
Tilting angle	+30 ° ~ –120 °
Rotation angle	360 °
Min. directive angle	0.001 °
Max. loading weight	250kg (551.1lbs)

KH Series
Horizontal Machining Center

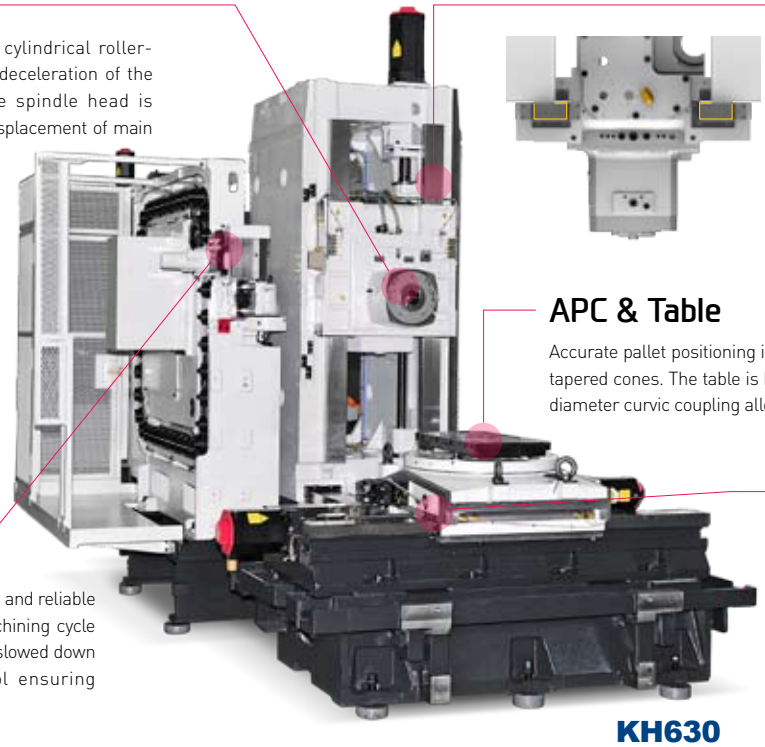
Spindle

By using ultra precision class cylindrical roller-bearings, fast acceleration and deceleration of the main spindle is achieved. The spindle head is designed to minimize the heat displacement of main spindle, and with the use of a hydraulic tool lock system the machining stability has been increased.



Magazine

The Double Arm ATC provides fast and reliable tool changes to help reduce machining cycle times In addition the ATC can be slowed down to accommodate a heavy tool ensuring smooth operation.



KH630

Y axis Guide Surface for 8 Faces Restriction

The Y axis guide way has been developed using a unique design by Hyundai Wia Corporation.
This new method allows cutting forces generated by the spindle head to be absorbed by the Y axis box ways which improve heavy cutting, long-term high accuracy, and superior surface finishes.

APC & Table

Accurate pallet positioning is achieved by the use of 4 precision ground tapered cones. The table is hydraulically clamped in position by a large diameter curvic coupling allowing for increased machining capabilities.

Air Semi-Rising Slide Way

By adapting the "semi-rising sliding ways" the load on the Z axis slide way is decreased.
By dramatically decreasing the slide way load the Z axis is able to hold tolerance and repeatability over longer cycle times.

Heavy Duty Horizontal Machining Center

KH50G/63G

ITEM		KH50G	KH63G
Pallet Size	mm(in)	2-500×500 (2-19.7″×19.7″)	2-630×630 (2-24.8″×24.8″)
Max. Load Capacity	kg(lb)	2-800 (2-1,764)	2-1,000 (2-2,205)
Sp. Taper	-	CAT50/BT50 [BCV50/BBT50]	CAT50/BT50 [BCV50/BBT50]
Sp. Speed	r/min	4,500 [8,000] [8,000]	4,500 [8,000] [4,500]
Sp. Power	kW(HP)	18.5/15 (25/20) [22/18.5 (30/25)] [18.5/15 (25/20)]	22/18.5 (30/25) [26/22 (35/30)] [22/18.5 (30/25)]
No. of Tools	EA	90 [40, 60, 120]	90 [40, 60, 120]
Travel (X/Y/Z)	mm(in)	760/705/650 (29.9″/27.8″/25.6″)	950/825/760 (37.4″/32.5″/29.9″)
Rapid Travel	m/min(ipm)	20/20/20 (787/787/787)	20/20/20 (787/787/787)

[ ] : Option ● : SIEMENS

Heavy Duty Horizontal Machining Center

KH80G

ITEM		KH80G
Pallet Size	mm(in)	2×800×800 (2×31.5″×31.5″)
Max. Load Capacity	kg(lb)	2-2,200 (2-4,850)
Sp. Taper	-	CAT50/BT50 [BCV50/BBT50/HSK-A100]
Sp. Speed	r/min	4,500 [6,000]
Sp. Power	kW(HP)	26/22 (35/30) [26/22 (35/30)]
No. of Tools	EA	80 [40, 120]
Travel (X/Y/Z)	mm(in)	1,250/1,000/850 (49.2″/39.4″/33.5″)
Rapid Travel	m/min(ipm)	18/18/18 (709/709/709)

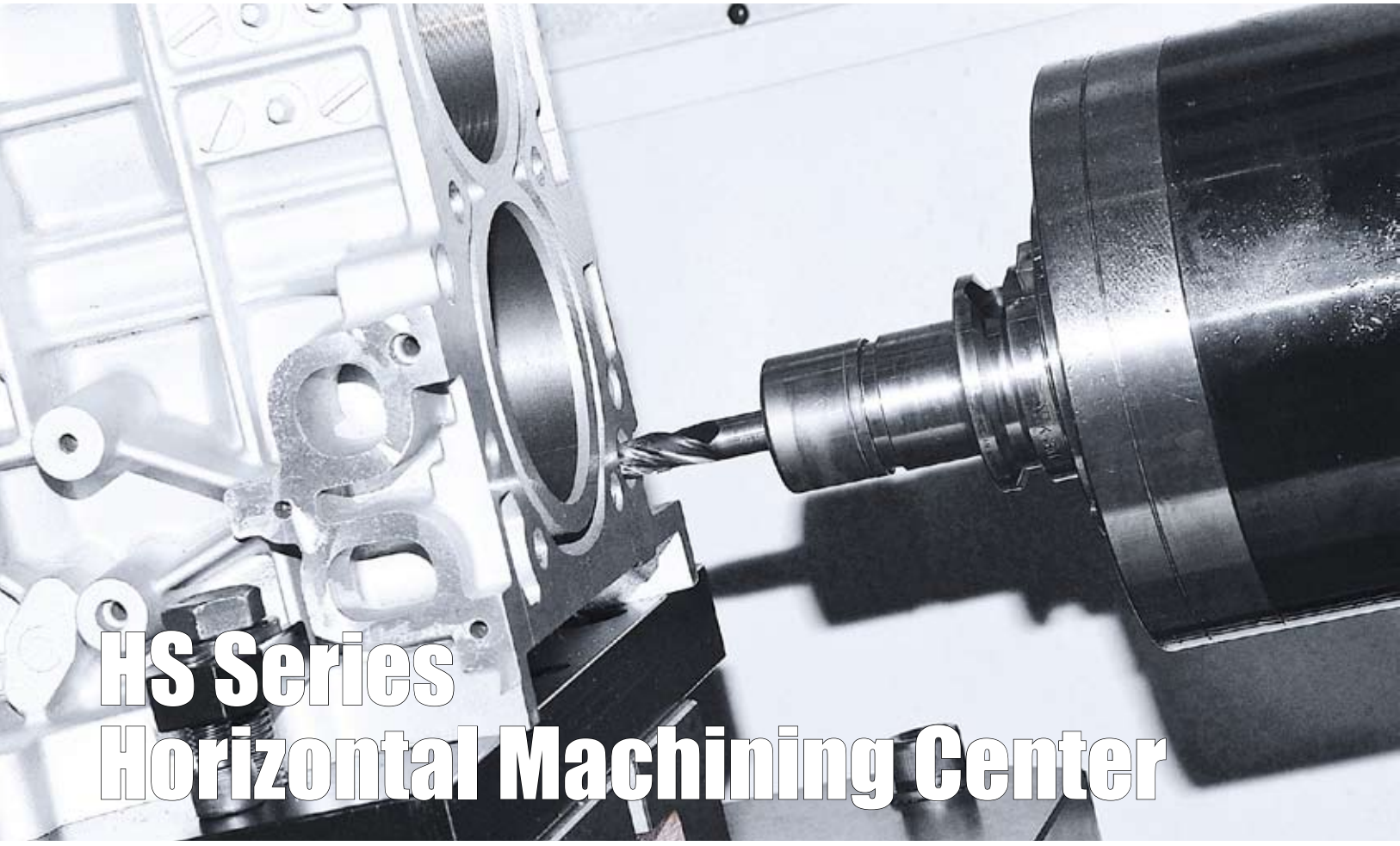
[ ] : Option

Heavy Duty Horizontal Machining Center

KH1000

ITEM		KH1000
Pallet Size	mm(in)	2-1,000×1,000 (39.4″×39.4″)
Max. Load Capacity	kg(lb)	2-3,000 (2-6,614)
Sp. Taper	-	CAT50/BT50 [BCV50/BBT50]
Sp. Speed	r/min	8,000 [4,500]
Sp. Power	kW(HP)	26/22 (34.8/29.5) [26/22 (34.8/29.5)]
No. of Tools	EA	90 [60, 120]
Travel (X/Y/Z)	mm(in)	2,100/1,350/1,400 (82.7″/53.1″/55.1″)
Rapid Travel	m/min(ipm)	20/20/20 (787/787/787)

[ ] : Option



HS Series
Horizontal Machining Center

ATC & Magazine

The tool magazine holds 40 tools as standard with up to 120 tools as an option depending on machine model.

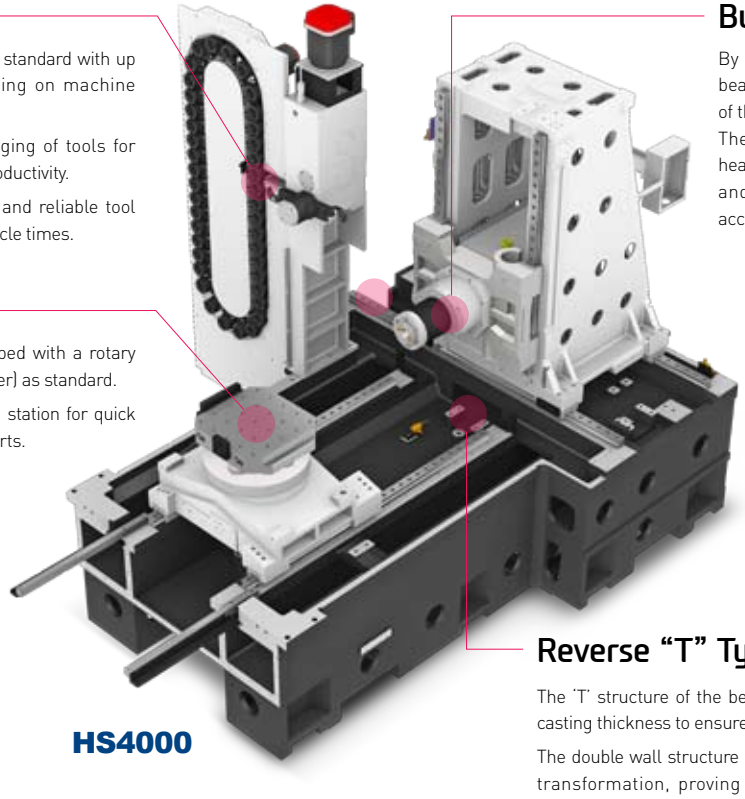
Random access allows for pre-staging of tools for faster tool changes and increased productivity.

The Double Arm ATC provides fast and reliable tool changes to help reduce machining cycle times.

APC & Table

The HS Series machines are equipped with a rotary shuttle APC (Automatic Pallet Changer) as standard.

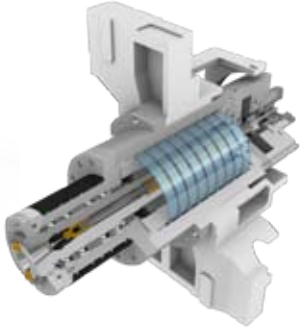
The pallet can be rotated in the load station for quick and easy load/unload of machined parts.



HS4000

Built-in Spinlde

By using ultra precision class angular ball bearings, fast acceleration and deceleration of the main spindle is achieved.
The spindle head is designed to minimize heat displacement therefore reducing growth and making it possible to maintain high accuracies.



Reverse “T” Type Bed Structure

The ‘T’ structure of the bed is designed with ample bed height and casting thickness to ensure the optimal level of rigidity.

The double wall structure of the column is designed to prevent heat transformation, proving excellent in cutting performance and accuracy.

GOOD DESIGN

High Speed Horizontal Machining Center

HS4000/5000

ITEM		HS4000/4000M	HS5000	HS5000/50 I HS5000M/50
Pallet Size	mm(in)	2–400×400 (2–15.8″×15.8″)	2–500×500 (2–19.7″×19.7″)	2–500×500 (2–19.7″×19.7″)
Max. Load Capacity	kg(lb)	2–500 (2–1,102)	2–500 (2–1,102)	2–800 (2–1,764)
Sp. Taper	–	BCV40/BBT40 [HSK–A63]	BCV40/BBT40 [HSK–A63]	BCV50/BBT50 [HSK–A100]
Sp. Speed	r/min	15,000	15,000	12,000 I 6,000
Sp. Power	kW(HP)	25/22 (33.5/30)	25/22 (33.5/30)	30/25 (40/33.5)
No. of Tools	EA	80 [40, 60, 120]	80 [40, 60, 120]	60 [40]
Travel (X/Y/Z)	mm(in)	620/560/650 (24.4″/22″/25.6″)	850/700/750 (33.5″/27.6″/29.5″)	850/700/750 (33.5″/27.6″/29.5″)
Rapid Travel	m/min(ipm)	60/60/60 (2,362/2,362/2,362)	60/60/60 (2,362/2,362/2,362)	50/50/50 (1,969/1,969/1,969) I 60/60/60 (2,362/2,362/2,362)

[ ] : Option

HS4000i/5000i

ITEM		HS4000i	HS5000i
Pallet Size	mm(in)	2–400×400 (2–15.8″×15.8″)	2–500×500 (2–19.7″×19.7″)
Max. Load Capacity	kg(lb)	2–500 (2–1,102)	2–500 (2–1,102)
Sp. Taper	–	BCV40/BBT40 [HSK–A63]	BCV40/BBT40 [HSK–A63]
Sp. Speed	r/min	12,000	12,000 [10,000] [12,000]
Sp. Power	kW(HP)	25/22 (33.5/30)	25/22 (33.5/30) [38/25 (51/33.5)] [26/26 (35/35)]
No. of Tools	EA	80 [40, 60, 120]	80 [40, 60, 120]
Travel (X/Y/Z)	mm(in)	620/560/650 (24.4″/22″/25.6″)	850/700/750 (33.5″/27.6″/29.5″)
Rapid Travel	m/min(ipm)	50/50/50 (1,969/1,969/1,969)	50/50/50 (1,969/1,969/1,969)

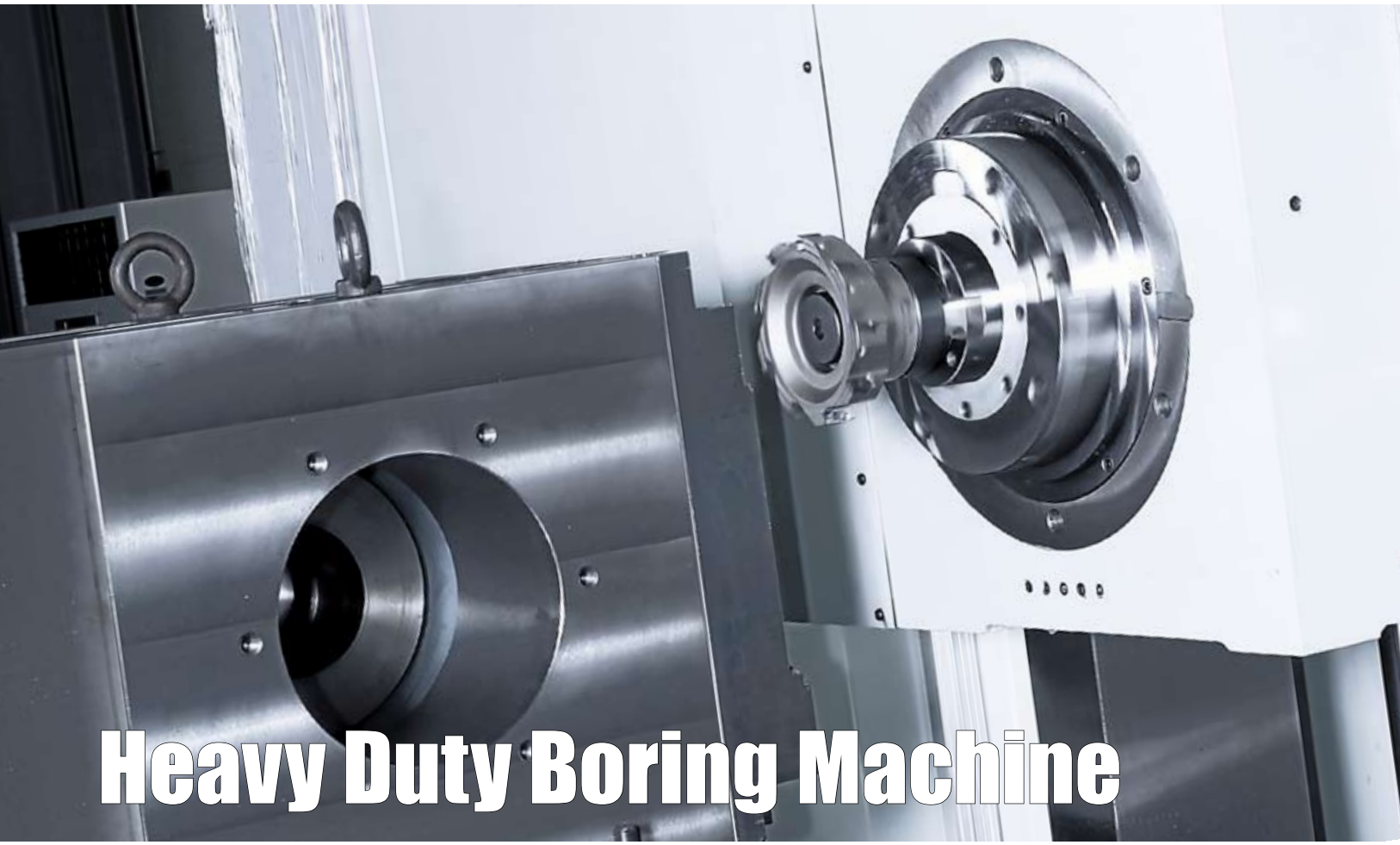
[ ] : Option ● : SIEMENS

Heavy Duty Horizontal Machining Center

HS6300/8000

ITEM		HS6300	HS8000
Pallet Size	mm(in)	2–630×630 (2–24.8″×24.8″)	2–800×800 (2–31.5″×31.5″)
Max. Load Capacity	kg(lb)	2–1,200 (2–2,646)	2–1,600 (2–3,527)
Sp. Taper	–	BCV50/BBT50 [HSK–A100]	BCV50/BBT50 [HSK–A100]
Sp. Speed	r/min	8,000 [8,000] [12,000]	8,000 [8,000] [12,000]
Sp. Power	kW(HP)	22/18.5 (30/25) [26/22 (35/30)] [30/25 (40/33.5)]	22/18.5 (30/25) [26/22 (35/30)] [30/25 (40/33.5)]
No. of Tools	EA	90 [40, 60, 120]	90 [40, 60, 120]
Travel (X/Y/Z)	mm(in)	1,050/875/875 (41.3″/34.4″/34.4″)	1,050/875/875 (41.3″/34.4″/34.4″)
Rapid Travel	m/min(ipm)	50/50/50 (1,969/1,969/1,969)	50/50/50 (1,969/1,969/1,969)

[ ] : Option



Heavy Duty Boring Machine

ATC &Magazine

Tool magazines can be supplied to hold 40, 60, 90 or 120 tools. Each magazine uses the fixed address method for easy loading convenience. As servo motor is used to guarantee quick tool selection.

The Double Arm ATC provides fast and reliable tool changes to help reduce machining cycle times

B-Axis Spur Gear

The B-Axis is driven by a Spur Gear to improve productivity, and increase the table positioning speed.

KBN135C

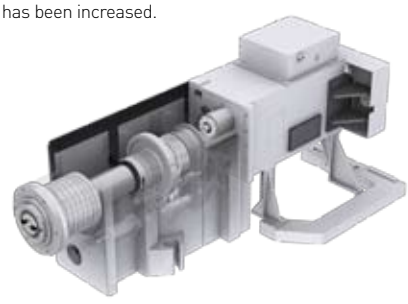
Table

The B-Axis rotary encoder has been applied as standard equipment allowing the table to be positioned between 0.001° and 90°.

Spinlde

By using ultra precision class cylindrical roller-bearings, fast acceleration and deceleration of the main spindle is achieved.

The spindle head is designed to minimize the heat displacement of main spindle, and with the use of a hydraulic tool lock system the machining stability has been increased.



The KBN135 Series is designed with a 3-step gear drive, providing both high spindle speed and high low end torque.

Box Guide Way

All Guideways are hardened and ground box type for long-term rigidity and accuracy.

Table Moving Type Boring Machine KBM135

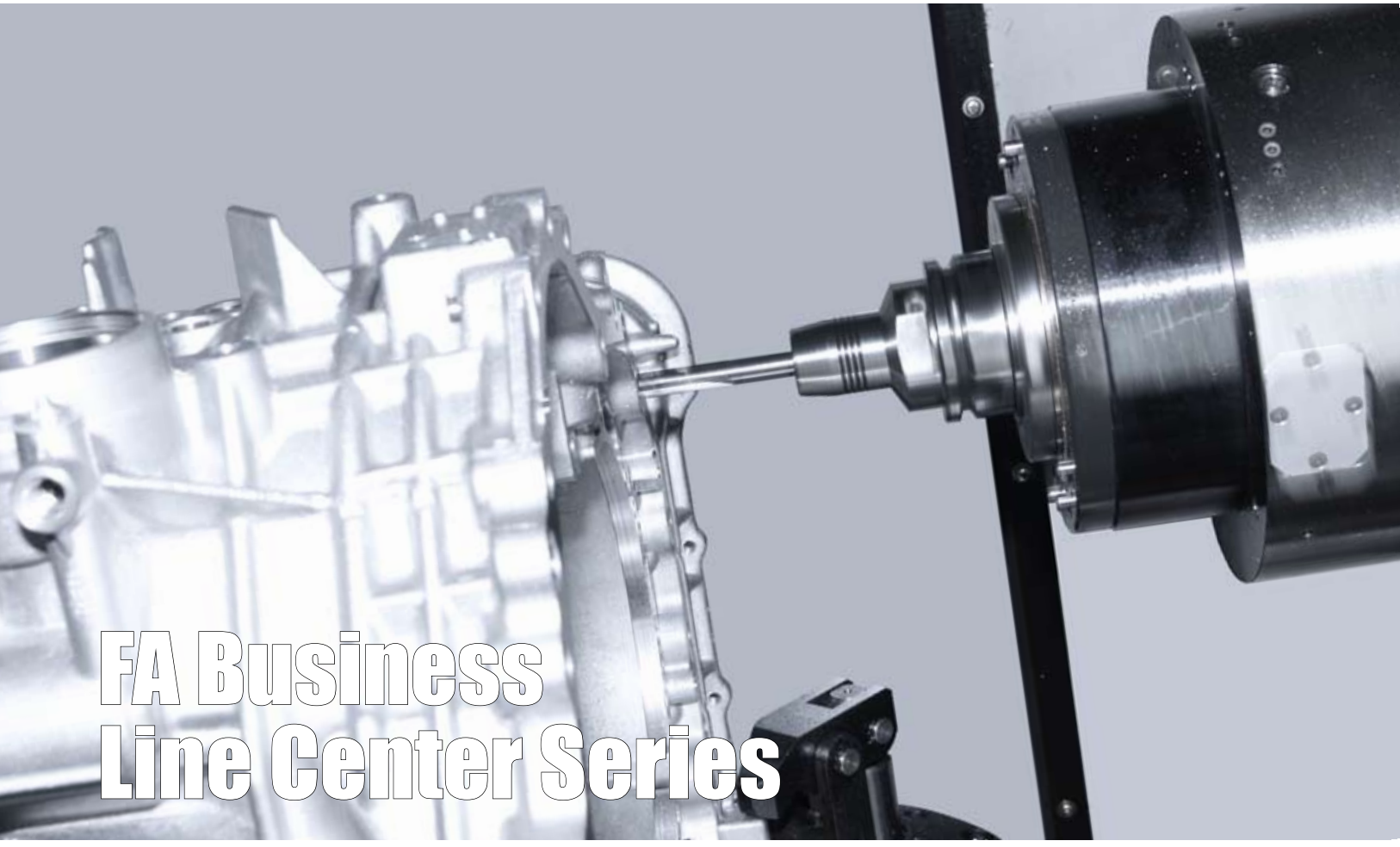
ITEM		KBM135	KBM135 (Option)
Pallet Size	mm(in)	2,000×1,800 (78.7″×70.9″)	2,000×1,800 (78.7″×70.9″)
Max. Load Capacity	kg(lb)	10,000 (22,046)	10,000 (22,046)
Min. Indexing Angle	deg	0.001° / 90° (LOCATING PIN)	0.001° / 90° (LOCATING PIN)
Sp. Quill Dia.	mm(in)	Ø135 (5.3″)	Ø135 (5.3″)
Sp. Taper	–	CAT50/BT50	CAT50/BT50
Sp. Speed	r/min	2,500 [2,500]	2,500 [2,500]
Sp. Power	kW(HP)	22/18.5 (30/25) [26/22 (35/30)]	22/18.5 (30/25) [26/22 (35/30)]
Sp. Driving Method	–	3 Step Gear	3 Step Gear
No. of Tools	EA	60 [40, 90, 120]	60 [40, 90, 120]
Travel (X/Y/Z/W)	mm(in)	3,000/2,000/1,600/700 (118.1″/78.7″/63″/27.6″)	4,000/2,500/1,600/700 (157.5″/98.4″/63″/27.6″)
Rapid Travel	m/min(ipm)	8/8/8/8 (315/315/315)	8/8/8/8 (315/315/315)

[ ] : Option

Column Moving Type Boring Machine KBM135C

ITEM		KBM135C	KBM135C (Option)
Pallet Size	mm(in)	2,000×1,800 (78.7″×70.9″)	2,000×1,800 (78.7″×70.9″)
Max. Load Capacity	kg(lb)	15,000 (33,069)	15,000 (33,069) [20,000 (44,093)]
Min. Indexing Angle	deg	0.001° / 90° (LOCATING PIN)	0.001° / 90° (LOCATING PIN)
Sp. Quill Dia.	mm(in)	Ø135 (5.3″)	Ø135 (5.3″)
Sp. Taper	–	CAT50/BT50	CAT50/BT50
Sp. Speed	r/min	2,500 [2,500]	2,500 [2,500]
Sp. Power	kW(HP)	22/18.5 (30/25) [26/22 (35/30)]	22/18.5 (30/25) [26/22 (35/30)]
Sp. Driving Method	–	3 Step Gear	3 Step Gear
No. of Tools	EA	60 [40, 90, 120]	60 [40, 90, 120]
Travel (X/Y/Z/W)	mm(in)	3,000/2,000/1,600/700 (118.1″/78.7″/63″/27.6″)	4,000/2,500/2,000/700 (157.5″/98.4″/78.7″/27.6″)
Rapid Travel	m/min	10/10/10/8 (394/394/394/315)	7/10/10/8 (276/394/394/315)

[ ] : Option



FA Business Line Center Series

Spinlde

15,000 rpm built-in spidle is applied to minimize vibration and heat distortion and fulfilled variable speed High-accuracy P4 level bearings secure stable accuracy and demonstrates superior ability when cutting power train parts.

WH100TM

Bed

Line Center Series are designed as all in one bed type of high stiffness casting and it is able to maintain high precision by absorbing the vibration on the powerful cutting.

Double Anchored Ball Screw

In order to remove the expansion and backlash of transmission axis occurred due to temperature increases when ball screw is transmitted, the bisection has been fixed with the precise 4 column of angular thrust bearing and the pressure applied. In addition, it makes precise axis transmission possible as it is directly connected to servo motor.

HSK Tool Holder

The HSK spindle offers users the fastest possible material removal rates, highest accuracy, and rigidity. It guarantees stability when run at high spindle speeds which is excellent for mold manufacturing.

Optimized Line Center for Power Train

WH63TM/63TMB/100TM

ITEM		WH63TM WH63TMB	WH100TM
Pallet Size	mm(in)	Ø530 (Ø20.9″)	Ø630 (Ø24.8″)
Max. Load Capacity	kg(lb)	650 (1,433)	1,000 (2,204)
Max. Working Size	mm(in)	Ø800×H800 (Ø31.5″×H31.5″)	Ø800×H800 (Ø31.5″×H31.5″)
Sp. Taper	–	HSK-A63 | HSK-A100	HSK-A100
Sp. Speed	r/min	16,000 | 10,000	6,000
Sp. Power	kW(HP)	28 (37.5) | 26 (35)	29.3 (39.3)
No. of Tools	EA	30 [40] | 20 [30]	20 [30, 60]
Travel (X/Y/Z)	mm(in)	630/630/800 [1000] (24.8″/24.8″/31.5″ [39.4″])	800/630/1,000 (31.5″/24.8″/39.3″)
Rapid Travel	m/min(ipm)	60/60/60 (2,362/2,362/2,362)	60/60/60 (2,362/2,362/2,362)

[ ] : Option

Optimized Line Center for Power Train

WH50TFR/50TFC/1000

ITEM		WH50TFC	WH50TFR
Pallet Size	mm(in)	Ø500 (Ø19.7″)	Ø530 (20.8″)
Max. Load Capacity	kg(lb)	900 (1,984)	700 (1,543)
Max. Working Size	mm(in)	Ø1,000×H900 (Ø39.4″×H35.4″)	Ø530×H750 (Ø20.8″xH29.5″)
Sp. Taper	–	HSK-A63	HSK-A63
Sp. Speed	r/min	15,000	15,000
Sp. Power	kW(HP)	26 (35)	26 (35)
No. of Tools	EA	24 [40]	24 [40]
Travel (X/Y/Z)	mm(in)	630 [700]/560/560 [800] (24.8″ [27.6″]/22″/22″ [31.5″])	500/500/500 (19.7″/19.7″/19.7″)
Rapid Travel	m/min(ipm)	60/60/60 (2,362/2,362/2,362)	60/60/60 (2,362/2,362/2,362)

ITEM		WH1000
Pallet Size	mm(in)	Customers request
Max. Load Capacity	kg(lb)	3,000 (6,613)
Max. Working Size	mm(in)	Ø1,400×H1,300 (Ø55″×H51″)
Sp. Taper	–	HSK-A100
Sp. Speed	r/min	4,500
Sp. Power	kW(HP)	37/30 (50/40)
No. of Tools	EA	40
Travel (X/Y/Z)	mm(in)	1,400/1,100/1,150 (55.1″/43.3″/45.2″)
Rapid Travel	m/min(ipm)	40/40/40 (1,575/1,575/1,575)

[ ] : Option



RAUNHEIM
SERVICE CENTER

HYUNDAI WIA EUROPE

BEIJING OFFICE

SHENYANG OFFICE

QINGDAO OFFICE

HEAD OFFICE

SHANDONG HYUNDAI WIA

JIANGSU HYUNDAI WIA

WUHAN OFFICE

HYUNDAI WIA MACHINE
TOOLS CO. LTD

CHENGDU OFFICE

GUANGZHOU OFFICE






Head Office & Factory

153, Jeongdong-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do,
Korea (Zip Code : 642-110)
TEL : +82 55 280 9114 FAX : +82 55 282 9680

Overseas Office

HYUNDAI-WIA Machine America Corp.
265, Spring Lake Drive, Itasca, IL, 60143
TEL : +1 201 489 2887 FAX : +1 201 489 2723

L.A Office
11155 Knott Ave, STE B/C, Cypress, CA 90630, U.S.A
TEL : +1 714 373 5480 FAX : +1 714 373 5485

HYUNDAI WIA America Technical Center
39205 Country Club Drive Suite C-9, Farmington Hills, MI 48310
TEL : +1 248 324 1056 FAX : +1 248 324 0989

HYUNDAI-KIA EUROPE GmbH
Kaiserleipromenade 5, D-63067 Offenbach, Germany
TEL : +49 69271 472 701 FAX : +49 69271 472 719

Raunheim Service Center
Kelsterbacher Strasse 51, 65479 Raunheim, Germany
TEL : +49 6142 9256 0 FAX : +49 6142 834 100

INDIA Chennai Office
48, Sur. No78-08. Kandamangalam Village, Sengadu Post,
Sriperumbudur Taluk, Kancheepuram, Tamilnadu-602 105, India
TEL : +91 44 3717 6333 FAX : +91 44 3717 6363

Jiangsu HYUNDAI WIA
Company No.6 Fenghuang Road, Fenghuang Town,
Zhangjjagang City, Jiangsu province, China
TEL : +86 512 5672 6808 FAX : +86 512 5671 6960

Shandong HYUNDAI WIA
Company No.188 Shanghai Road, Rizhao City, Shandong Province, China
TEL : +86 633 229 9031/5910 FAX : +86 633 229 9191/9199

China Sales Company
1-3F, Bldg6, No.1535 Hongmei Road, Xuhui District, Shanghai,
China, 200233
TEL : +86 21 6427 9885 FAX : +86 21 3431 0376

CHINA Beiging Office
Room 908, Hyundai Motor Building, No.38 Xiaoyun Road, Chaoyang
District, Beijing, China 100027
TEL : +86 10 8453 9850~2 FAX : +86 10 8453 9853

CHINA Guangzhou Office
Room 609, No.1 Yingbin Building 1# Yingbin Blvd (Dashi Section)
Panyu District Guangzhou Ctiy, Guangdong, China 511431
TEL : +86 20 8550 6595~6, FAX : +86 20 8550 6597

CHINA Chengdu Office
Room 2103, Block A, Times Plaza, No.2 Zongfu Road, Jinjiang District,
Chengdu, China
TEL : +86 28 8665 5550 FAX : +86 28 8666 2985

CHINA Wuhan Office
Room 302, B tower, Donghe Center, Dongfeng three road, Zhuankou,
Wuhan, Hubei, China
TEL : +86 27 5956 3256~7 FAX : +86 27 5952 3258

CHINA Qingdao Office
Room 1207, ZhaoYin Building, 36HongKong Middle Road,
Qingdao 266071, PRChina
TEL : +86 532 8667 9333~5 FAX : +86 532 8667 9338

CHINA SHENYANG Office
Room 1304, NO.53 Beizhan Road, Shenhe District, Shenyang,
China 110013
TEL : +86 24 3228 6640 FAX : +86 24 3228 6642

HYUNDAI WIA

www.wiamachine.co.kr