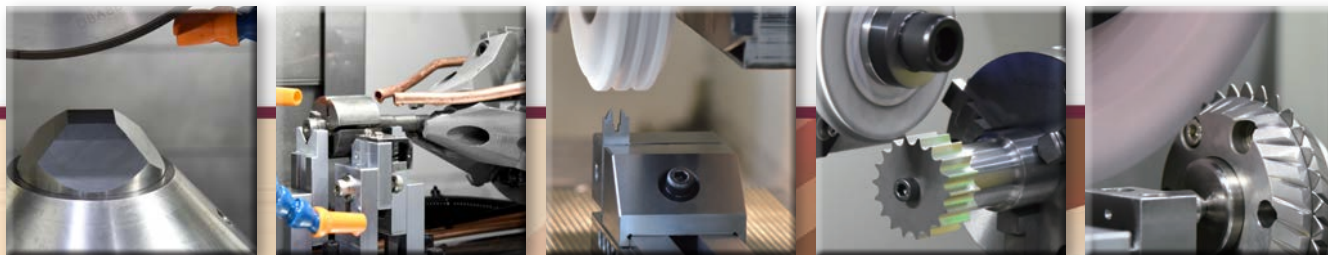


# CHEVALIER®

Grinding / Turning / Milling



## SMART-III Series Multi-Function CNC Surface Grinder

SMART-H/B818 • 1224 • 1640III  
SMART-H/B2440 • 2460 • 2480III



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## SMART-III Series

### Maximizes High-Precision Grinding with Ease of Operation

**Multi-Functional CNC Surface Grinder** - Many SMART users in various industries, such as medical, automotive, mining, semiconductor, aerospace and job shops, have experienced a dramatic increase in reliability and productivity.

The SMART-III Series is capable of producing "mirror" finishes on highly accurate workpieces, which produce microfinishes of 5 RMS or better. The positioning accuracy 0.004 mm (0.00015") to 0.006 mm (0.00023") and the repeatability is 0.003 mm (0.00012") to 0.006 mm (0.00023"). The SMART-III's movements are programmable in increments of 0.001 mm (0.0001"). The SMART-III's PC-based control, combined with a user-friendly conversational function, makes it easy to learn and operate.

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#### SMART-H 818 • 1224 • 1640 • 2440 • 2460 • 2480III

Conversational Smart Control (PC Based)

Table Size : Up to 600 mm W x 2,000 mm L (24"W x 80"L)

Ballscrew and Servo Motor Drive : 2-Axes

X-Axis : Hydraulic Driven

Spindle Motor : Up to 18 kW (25 HP)

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#### SMART-B 818 • 1224 • 1640 • 2440 • 2460 • 2480III

Conversational Smart Control (PC Based)

Table Size : Up to 600 mm W x 2,000 mm L (24"W x 80"L)

Ballscrew and Servo Motor Drive : 3-Axes

Spindle Motor : Up to 18 kW (25 HP)



Machine image includes optional accessories

# SMART-III Series

## Control

With over 30 years of grinder manufacturing and application experience, Chevalier is now introducing the latest innovation of Multi-Functional SMART-III CNC grinder. SMART-III's control is easy to learn, easy to operate, and maintain. People without programming experience are still able to operate this CNC grinder. Chevalier also provides optional accessories, such as different dressing tools, electric chucks and rotary tables.

SMART-III's new TaskLink feature has the capability to take different conversational programs and link them together to grind almost anything imaginable. And with our new dress function you can take initial dress time from hours to minutes.

Chevalier has also re-designed the operation panel by arranging the keys in an ergonomically effective pattern. The buttons and switches have bright lights or LEDs to allow the operator to monitor the machine status.

### Features

1. Microsoft Win CE 6.0 platform with 10.4" LCD color screen.
2. Data transfer is simplified by using a USB data port.
3. Graphic conversational surface/plunge/criss-cross/profile grinding and dressing modes.
4. Easy operating TaskLink function: User can link several conversational graphic programs together.
5. Highly efficient constant-contact auto dressing function.
6. Automatic dressing with compensation during grinding cycle.
7. During grind and/or dress simulation; program is advanced, reversed, or halted by turning the MPG.
8. Wheel manager function.
9. SMART-III control is compatible with FANUC control.
10. Energy saving function.

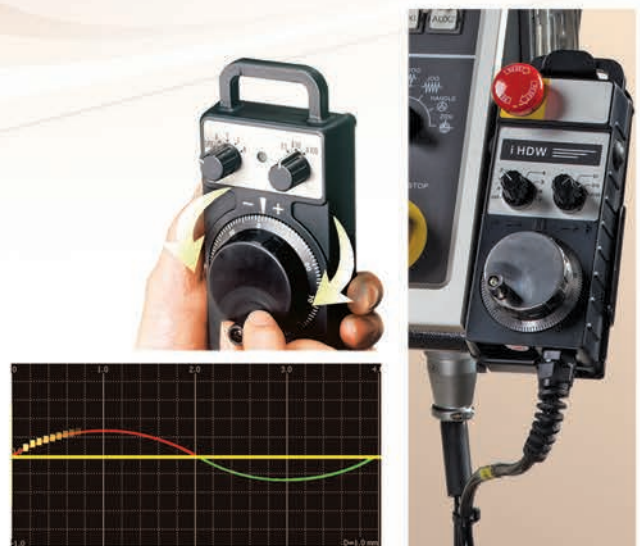


A light has been added to ensure ease of spindle speed monitoring at 100% spindle override position.

### Simulation Mode

Simulate your program using the simulation mode. Turn the MPG hand wheel clockwise to advance the program and counter clockwise to reverse the program. The faster you turn the electronic hand wheel, the faster the program executes. Once you stop cranking the hand wheel, the program pauses.

- Simulation mode reduces the need for single block and dry runs
- Avoids crashing while test-running new programs
- Greatly reduces setup time





### USB Device

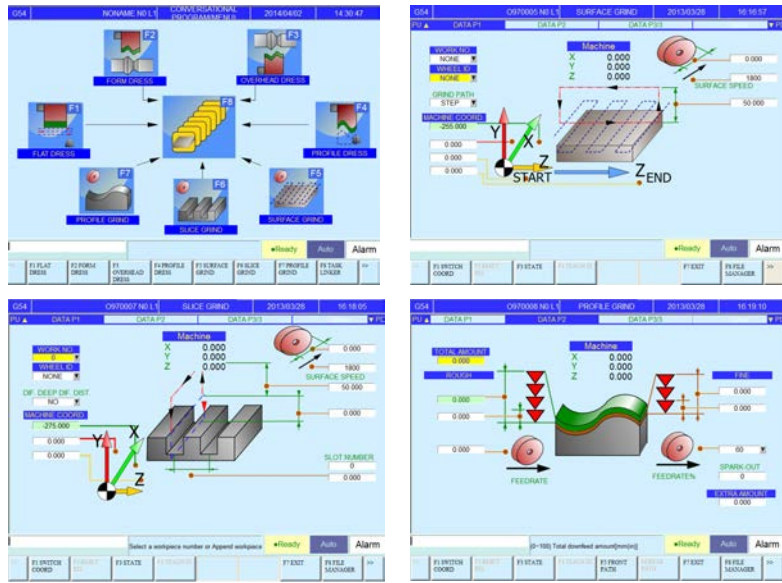
Users can import and export programs and files through a USB device. Uploading or downloading programs are now more convenient.



# SMART-III Series Control

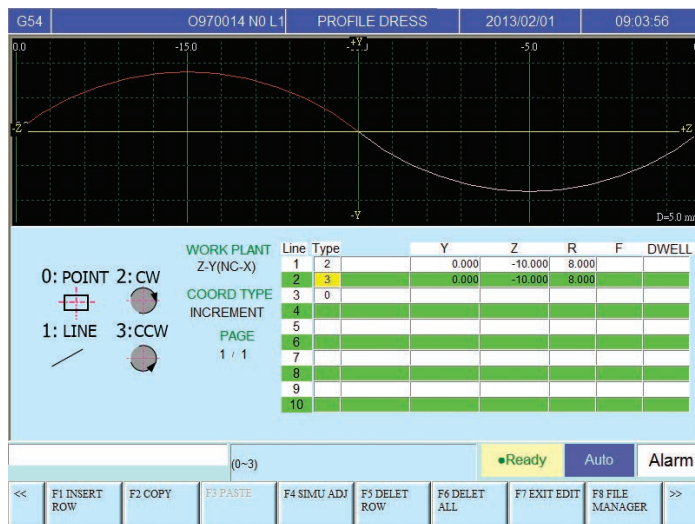
## Interface Design

The three-dimensional graphic image display minimizes text descriptions and looks very similar to the actual work pieces.



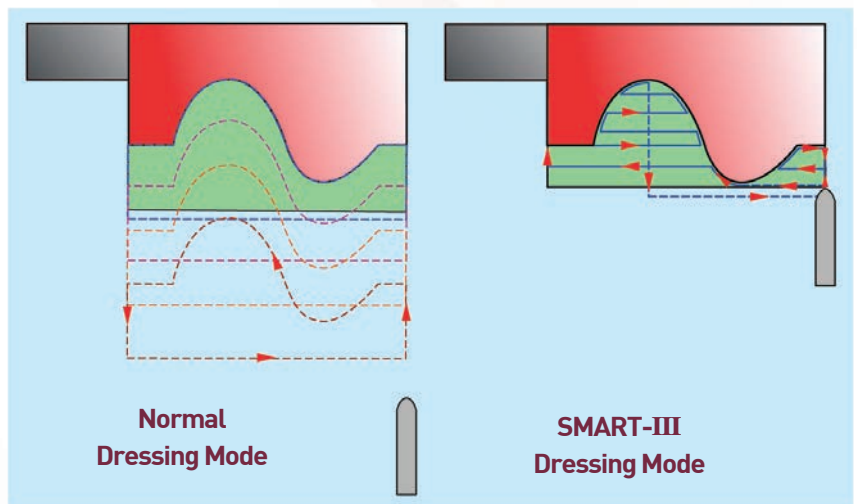
## Dressing Path Display

SMART-III's new dressing path editor is simple to navigate. It allows users to directly input and modify data for dress path form. This new software function allows users to easily edit by offering: delete blocks, delete all, cancel, copy and recover functions.



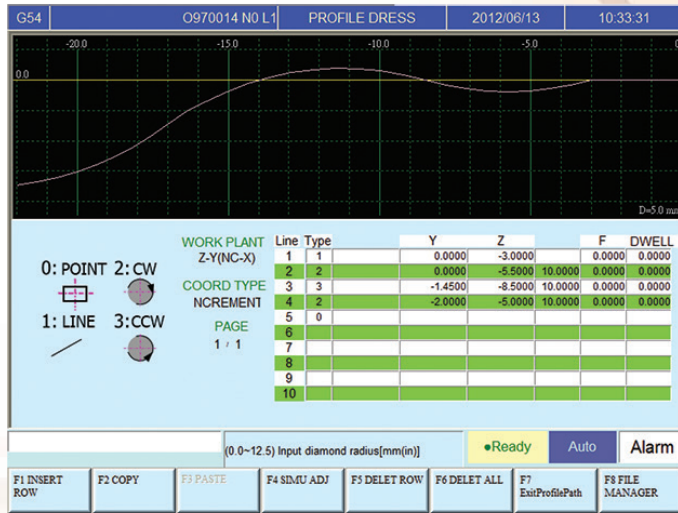
## Constant-Contact Dressing Mode

Normal Dressing Mode wastes time cutting in the air. The SMART-III Dressing Mode minimizes dress time by keeping the diamond in constant contact with the wheel and never cuts air.



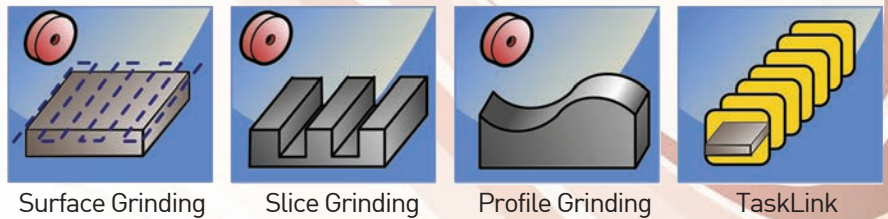
### Auto Compensation

After dressing, the SMART-III will automatically compensate for the dress amount and then continue the next grinding action.



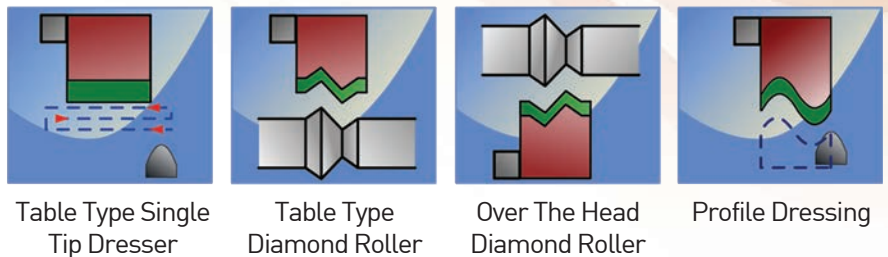
### Auto Grinding Modes

SMART-III has four types of graphic conversational grinding modes. The new TaskLink mode enables the user to complete complex grinding tasks in one cycle.



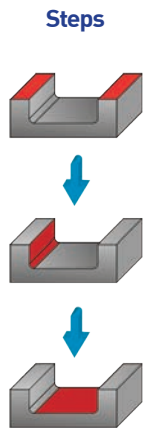
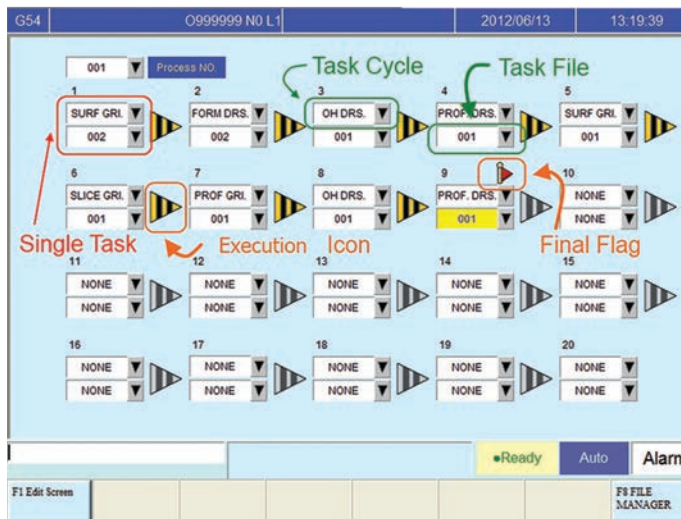
### Auto Dressing Modes

Conversational graphic automatic wheel dressing modes can be linked with any or all grinding modes.



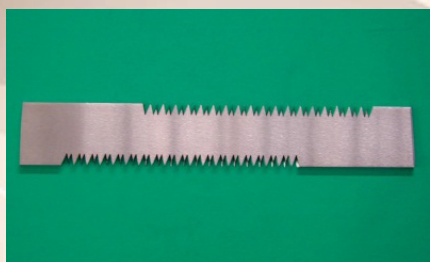
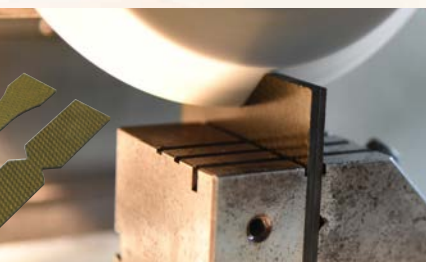
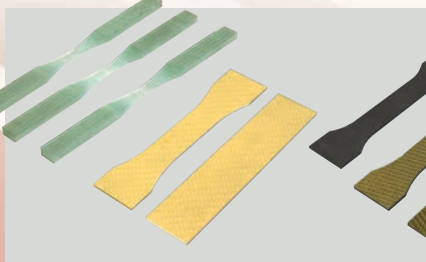
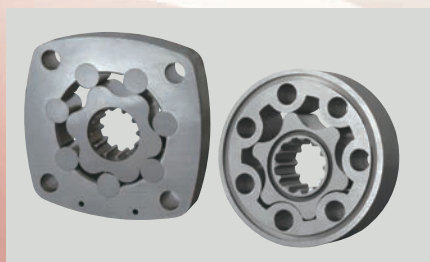
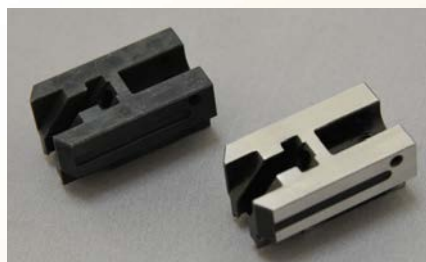
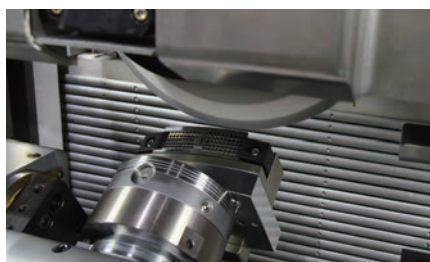
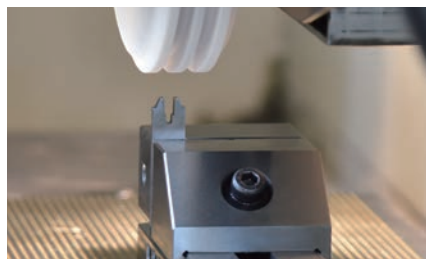
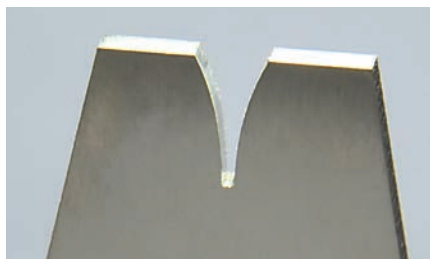
### NEW TaskLink Function

The new TaskLink function increases production efficiency by allowing the user to create their own grinding programs to achieve complex grinding tasks with only one cycle.



# SMART-III Series

## Applications



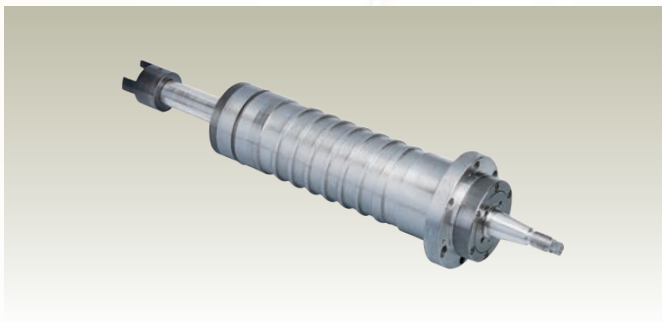


# SMART-H/B818III Series

## Machine Construction



Machine image includes optional accessories



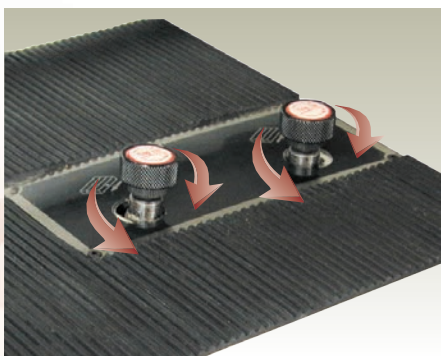
### Spindle

The spindle is supported by four pieces of Class 7 (P4) super-precision, angular-contact ball bearings and directly coupled with low-vibration, Class V3 spindle motor. Air-purged spindle available upon request.



### Elevating Mechanism

The wheelhead elevation accuracy is designed with a counterweight balance system to ensure micro downfeed accuracy.



### Hydraulic table Speed Control

The table longitudinal speed can be adjusted independently by turning the two knobs either right or left. (For the H type model only)



### Double "V" ways for Table and Saddle

The hand-scraped, Turcite-B longitudinal ways between table and saddle are a double "V" design, which is ideal for side grinding operations.

- SMART-H type grinder (2-axis CNC control), with hydraulic cylinder longitudinal movement.
- SMART-B type grinder (3-axis CNC control), with ballscrew longitudinal movement.



### Base and Saddle

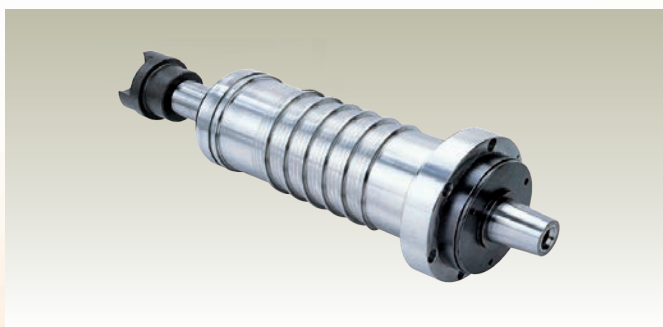
Specially designed, one-piece, T-shaped base casting offers superior rigidity. Hand-scraped, Turcite-B crossfeed guideways between base and saddle have a double "V" design, providing support for full table travel and prevents table overhang.

# SMART-H/B1224 • 1640III Series

## Machine Construction

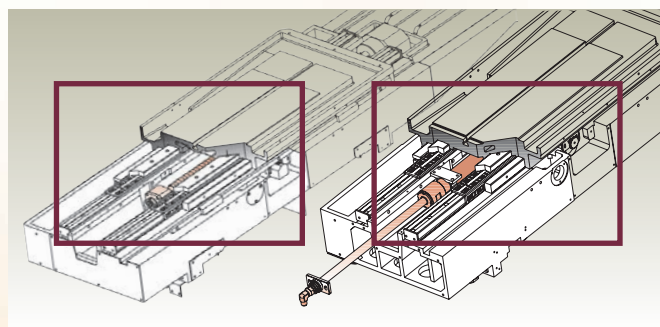


Machine image includes optional accessories



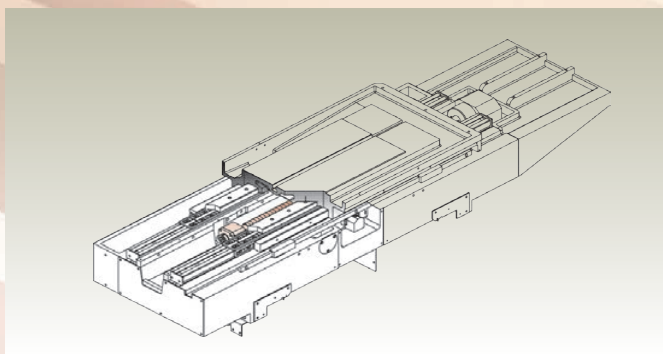
### Spindle

The spindle is supported by four Class 7 (P4), super-precision, angular contact ball bearings that are permanently lubricated. The new spindle design includes circulation grooves on the spindle for air cooling.



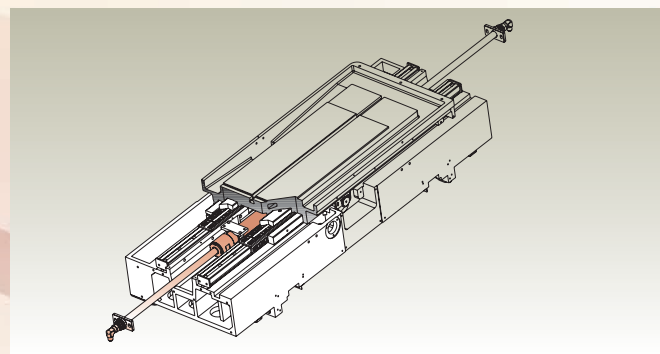
### Table Guide Way System

Hardened and ground table guide way system with precision-needle roller bearings provide stick-slip-free movement when cutting or rapid traverse.



### SMART-III B Type Grinders • 3-Axis CNC Control

The X-axis for B type grinders utilize servo driven ballscrews for precise positioning and can achieve speeds 0-20 m/min (0-65.6 fpm).



### SMART-III H Type Grinders • 2-Axis CNC Control

The H type grinders use hydraulics to travel from 5-25 m/min (16-82 fpm).

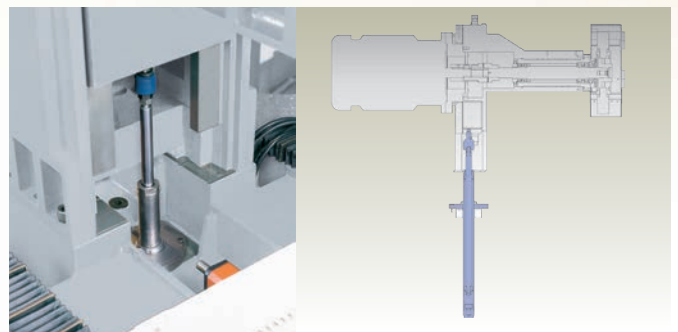


Machine image includes optional accessories



### Heavy-Duty Needle Roller Bearings Ways

Ultra-low friction improves accuracy and lowers maintenance costs.



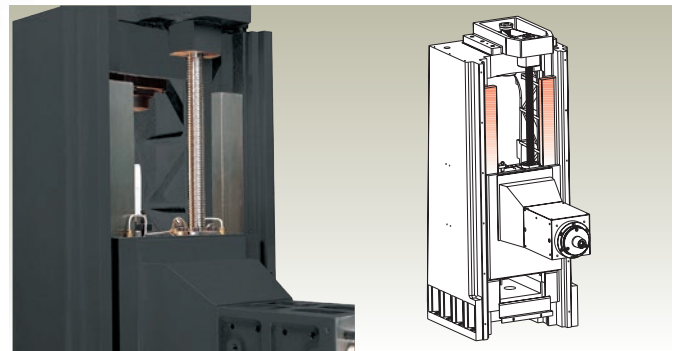
### Counterbalance System

An air-cylinder balance system in the spindle vertical drive prolongs ballscrew life and improves downfeed accuracy.



### Base and Saddle Guideway System

The base and saddle guideway systems use needle roller bearings running on heavy-duty slide rails. The one-piece base casting has been stress relieved and finite element analyzed.



### Wheelhead Guideways

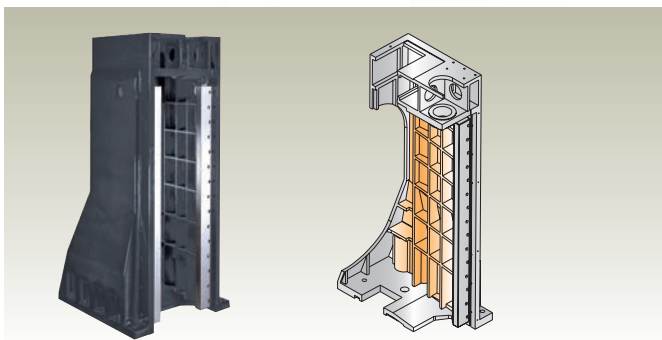
Wheelhead guideways are hardened and laminated with Turcite-B anti-friction materials.

# SMART-H/B2440 • 2460 • 2480III Series

## Machine Construction

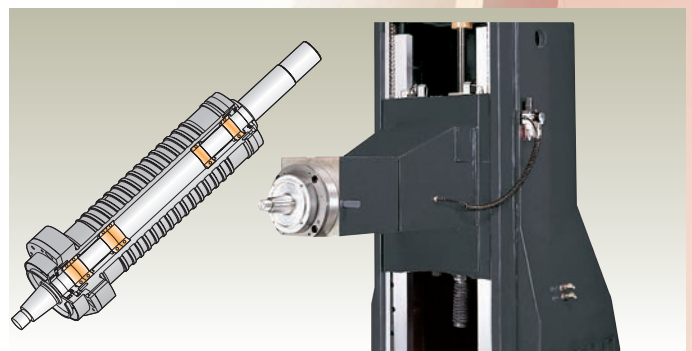


Machine image includes optional accessories



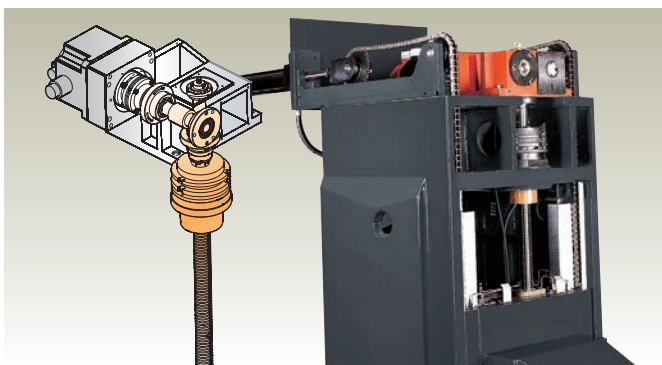
### Column

The column is made of high-grade, dense cast iron, which has been stress relieved. The computer-aided design features a ribbed, honeycombed structure that resists flexing and vibration during heavy-duty machining. The spindle travels on hardened and ground square ways.



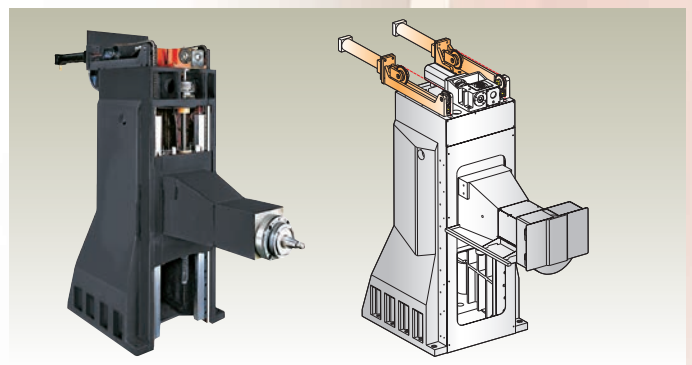
### High-Precision Heavy-Duty Spindle Design

These machines use a large diameter, cartridge-type spindle that is air-cooled, precisely balanced and totally enclosed spindle motor. Six pieces of Class 7 (P4) permanently lubricated, angular-contact ball bearings provide maximum support to the spindle. This spindle design ensures an extremely smooth surface finish and consistent accuracy.



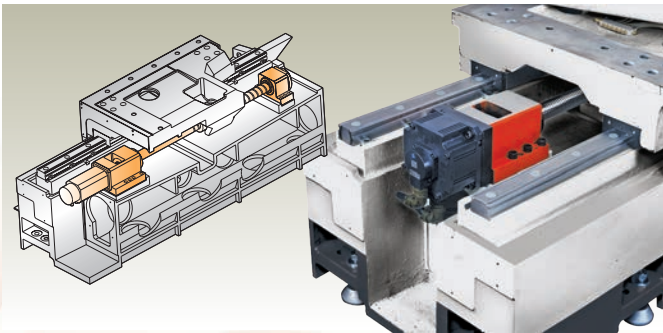
### Smooth and Accurate Wheelhead Movement

The wheelhead is positioned with a C3-grade ballscrew driven by a servo motor. The wheelhead guideways are laminated with Turcite-B anti-friction materials and then precisely hand scraped. The downfeed accuracy can be 0.002 mm (0.00008").



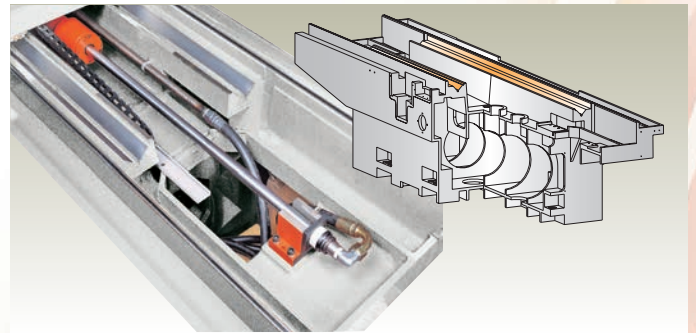
### Spindle Head Counterweight Balance System

Pneumatic counterweights are installed in the spindle to eliminate backlash and prevent the premature wear of the elevating screws.



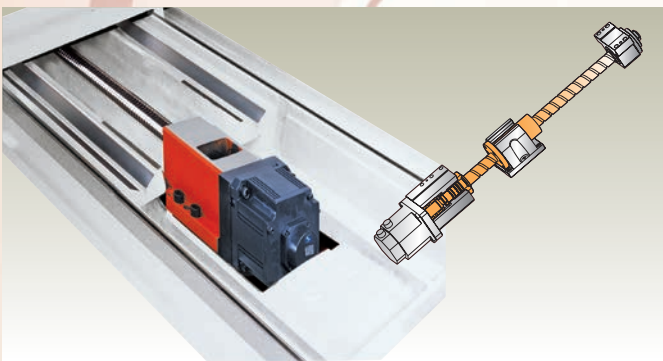
### Stable Feed, Superior Accuracy

The crossfeed slideway system features a perfect mating of linear slideways, precision ballscrews and a servo motor that provides high torque, speed and accurate positioning with a minimum increment of 0.001 mm (0.0001").



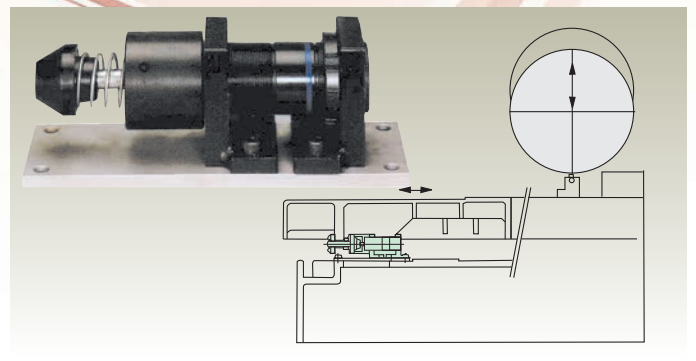
### Longitudinal Slideways

The longitudinal slideways feature double "V" configuration instead of the usual "V" and flat design. The double "V" design improves the structural rigidity and stability of the front base. With Turcite-B anti-friction material lamination of the slideways, smooth and stable travel is consistently maintained during all kinds of machining conditions.



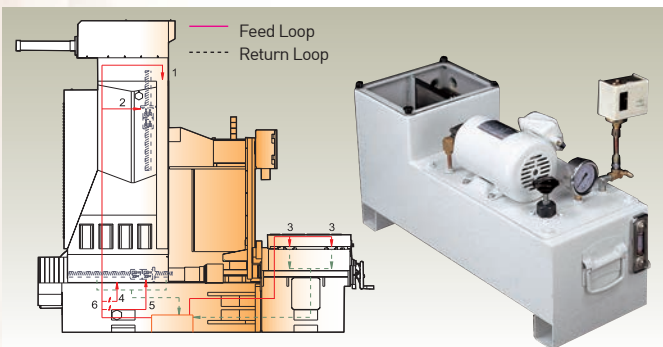
### Longitudinal Ballscrew Drive Construction (B-Type)

Table is driven by AC servo motor and positioned with a high-precision ballscrew, maximizing the control of table speed and position.



### Automatic Wheel Dressing with Compensation (H-Type)

Automatic wheel dressing with compensation feature dresses the wheel automatically during rough and/or fine grinding and again at the end of rough grinding. The enables the machine to run unattended for hours, making it ideal for high-volume production runs, while reducing machining costs and increasing line productivity.



### Automatic Lubrication System


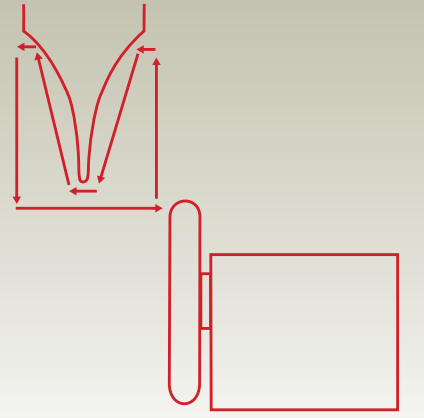
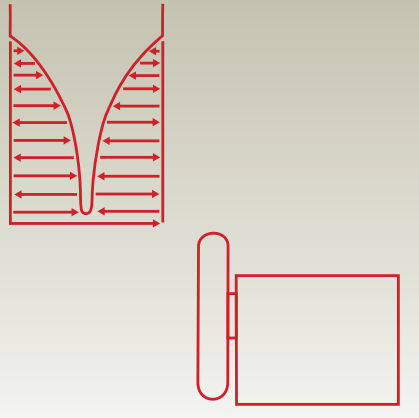
An automatic lubrication system is standard on all machines. The system uses a pressure sensor to monitor lubrication pressure. The machine shuts down automatically when the pressure drops below a preset level.


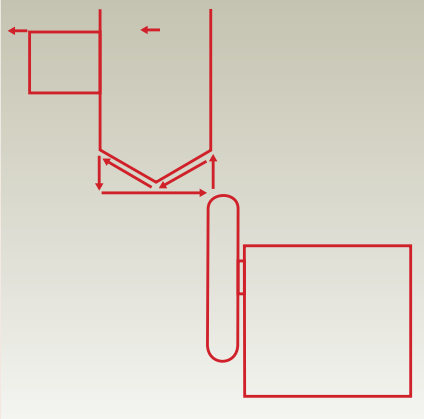
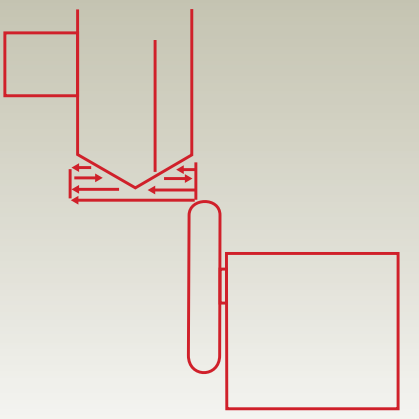
- |                        |                        |
|------------------------|------------------------|
| 1. Elevating Leadscrew | 4. Crossfeed Ballscrew |
| 2. Column Slideways    | 5. Flow Divider        |
| 3. Table Guideways     | 6. Lubricator          |

# SMART-III Series

## Wheel Dressing

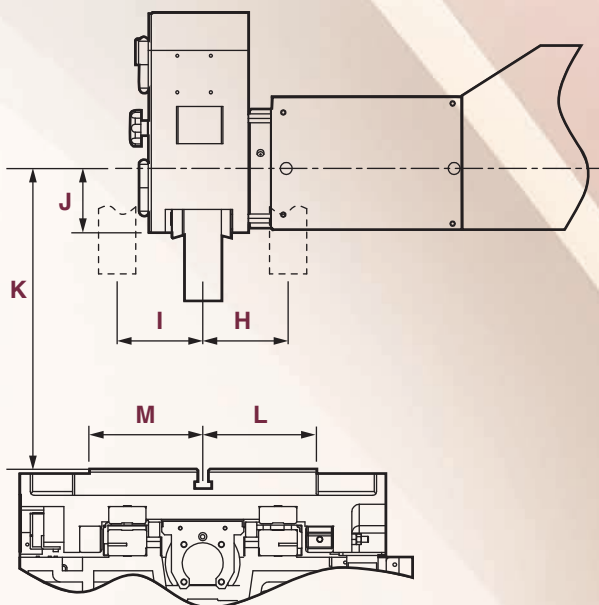
Depending on the shape, high efficiency SMART-III dressing may be more than 10 times faster than standard dressing.

Application Example	Standard	SMART-III
		
W-SHAPE DIE EFFICIENCY	CYCLE TIME : 2:37:30	CYCLE TIME : 52:30
	SMART-III EFFICIENCY INCREASED BY 300%	

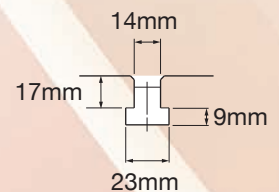
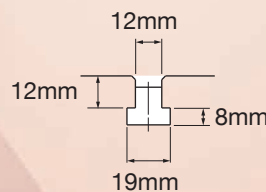
Application Example	Standard	SMART-III
		
V-SHAPE WORKPIECE EFFICIENCY	CYCLE TIME : 2:19:30	CYCLE TIME : 51:40
	SMART-III EFFICIENCY INCREASED BY 270%	

## Dimensional Drawings

UNIT : mm (\*)



T-SLOTS	SMART-B818III	SMART-12 • 16 • 24III
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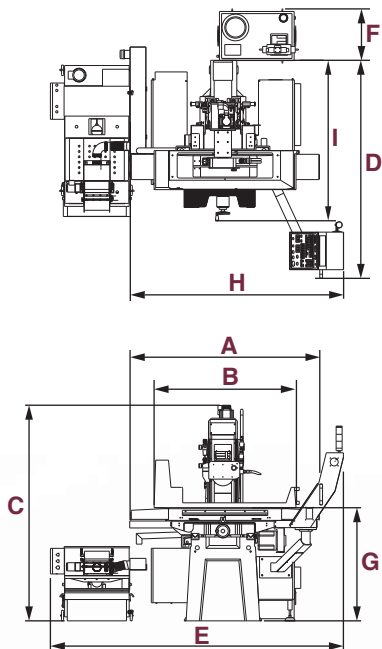


	H/B 818III	H/B 1224III
<b>J</b>	60 (2.4)	82 (3.22)
<b>K</b>	445 (17.5)	600 (23.6)
<b>I</b>	110 (4.33)	167.5 (6.6)
<b>H</b>	110 (4.33)	182.5 (7.2)
<b>L</b>	100 (4)	152.5 (6)
<b>M</b>	100 (4)	152.5 (6)

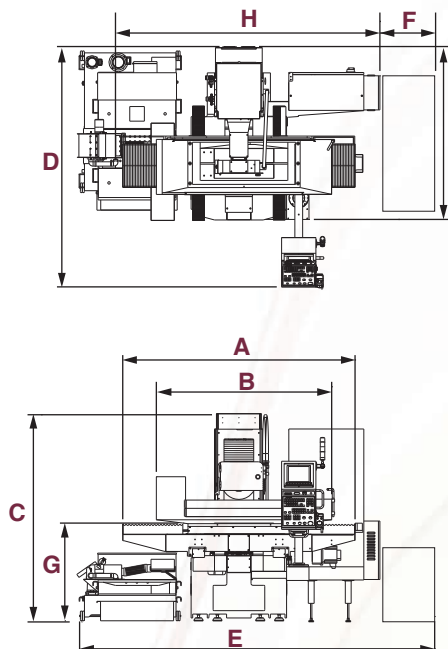
# SMART-III Series

## Dimensional Drawings

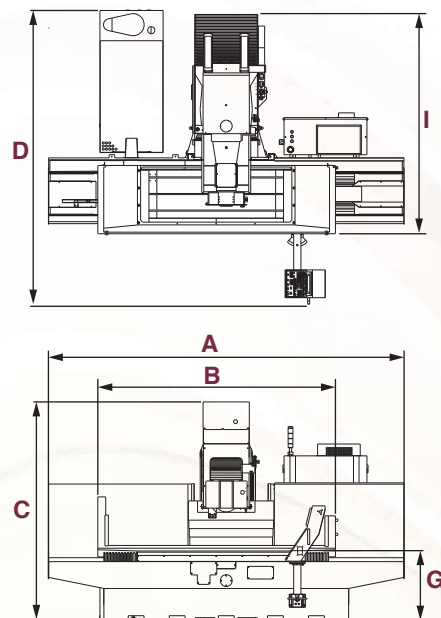
SMART-H/B818III



SMART-H/B12 • 16III

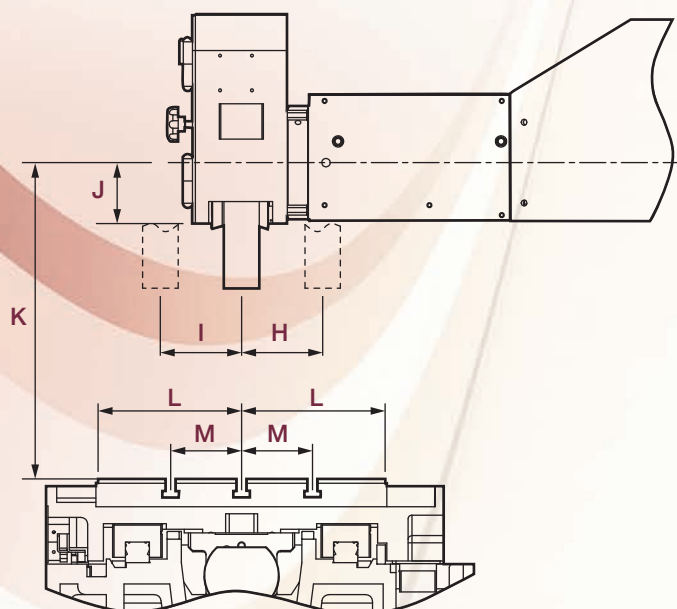


SMART-H/B24III



UNIT : mm (")

	H818III	B818III	H1224III	B1224III	H1640III	B1640III	H/B2440III	H/B2460III	H/B2480III
<b>A</b>	1,760 (69.3)		2,385 (93.9)		3,304 (130.1)		3,550 (139.8)	5,000 (196.9)	6,010 (236.6)
<b>B</b>	1,330 (52.4)		1,798 (70.8)		2,634 (103.7)		2,100 (82.7)	3,100 (122)	4,100 (161.4)
<b>C</b>	2,020 (79.5)		2,090 (82.3)		2,090 (82.3)			2,850 (112.2)	
<b>D</b>	2,015 (79.3)		2,560 (100.8)		2,560 (100.8)			3,600 (141.7)	
<b>E</b>	2,490 (98)		3,350 (131.9)	2,850 (112.2)	3,919 (154.3)	3,419 (134.6)		N/A	
<b>F</b>	500 (19.7)	N/A	500 (19.7)	N/A	500 (19.7)	N/A		N/A	
<b>G</b>	1,015(40)	1,060(41.7)	970 (38.2)		975 (38.4)			880 (34.6)	
<b>H</b>	1,940 (76.4)		2,630 (103.5)		3,291 (129.6)			N/A	
<b>I</b>	1,340 (52.8)		1,855 (73)		1,883 (74.1)			N/A	



UNIT : mm (")

	H/B 1640III	H/B 24III
<b>J</b>	86 (3.4)	110 (4.33)
<b>K</b>	600 (23.6)	850 (33.4)
<b>I</b>	222.5 (8.8)	325 (12.8)
<b>H</b>	227.5 (9)	325 (12.8)
<b>L</b>	202.5 (8)	305 (12)
<b>M</b>	100 (4)	210 (8)

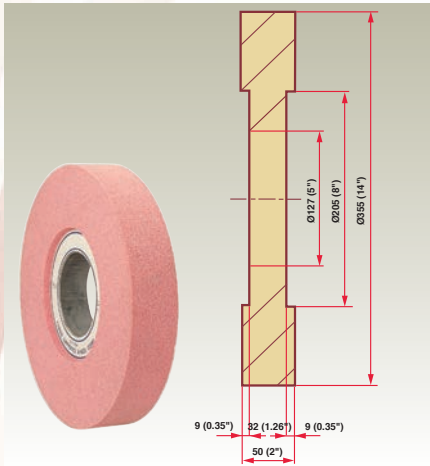
# SMART-III Series

## Standard Accessories

1. Balancing Arbor
2. Wheel Mounting/Dismounting Tools
3. Hole Plugs

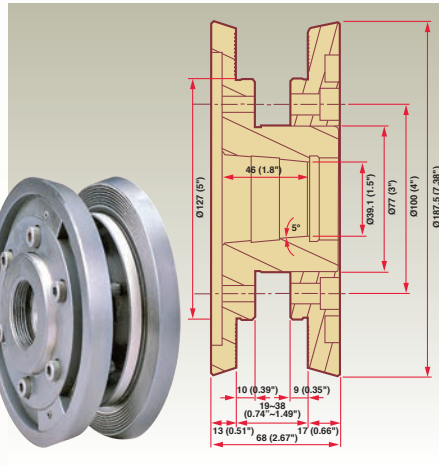
5. Tool Box
6. Leveling Pad
7. Leveling Screws And Nuts

9. Table Splash Guard
10. Hex Head Wrench
11. Heat Exchanger



4. Grinding Wheel
  - SMART-818  
 $\text{Ø}203 \times 12.7 \times \text{Ø}31.75 \text{ mm}$   
 $(\text{Ø}8" \times 1/2" \times \text{Ø}1 \ 1/4")$
  - SMART-1224/1640  
 $\text{Ø}355 \times 50 \times \text{Ø}127 \text{ mm}$   
 $(\text{Ø}14" \times 2" \times \text{Ø}5")$
  - SMART-2440 • 2460 • 2480  
 $\text{Ø}406 \times 75 \times \text{Ø}127 \text{ mm}$   
 $(\text{Ø}16" \times 3" \times \text{Ø}5")$

Note : The drawing is 12/16 Series



8. Wheel Flange
  - SMART-818  
 Clamping Width  
 $6.3\text{--}19 \text{ mm}$   $(1/4" \sim 3/4")$
  - SMART-1224 • 1640  
 Clamping Width  
 $19\text{--}38 \text{ mm}$   $(3/4" \sim 1 \ 1/2")$
  - SMART-2440 • 2460 • 2480  
 Clamping Width  
 $32\text{--}50 \text{ mm}$   $(1 \ 1/4" \sim 2")$

Note : The drawing is 12/16 Series



12. Oil Chiller (24 Series only)  
 Standard on H models. Minimizes thermal expansion and maintains consistency accuracy and repeatability during heavy-duty machining conditions.
13. Frequency Converter



# SMART-III Series

## Optional Accessories

### Grinding Wheel Dynamic Balancer



- Various sizes available

### Roller Balancing Stand



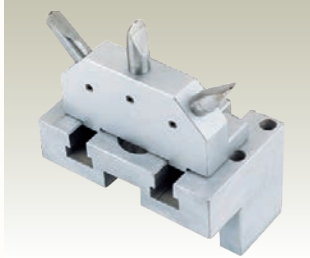
- Max. Wheel Dia.: 508 mm (20")

### CNC Rotary Table



- Various sizes available
- High accuracy.

### Three Point Diamond Dresser



- Enable to be clamped on different positions of the table or at X-axis zero return position.
- Enable to dress three faces of grinding wheels

### Single Disc Dresser



- **SMART-818**  
Spindle Speed : 2,000 rpm  
Shaft Dia : Ø25.4 mm (1")
- **SMART-1224/1640**  
Spindle Speed : 2,000 rpm  
Shaft Dia : Ø35 mm (1.38")  
Ø45 mm (1.77"),  
Ø52 mm (2.05")  
OD : Ø140 mm (5.51")  
Width : 35 mm (1.38")
- **SMART-2440 • 2460 • 2480**  
Spindle Speed : 2,000 rpm  
Shaft Dia : Ø45 mm (1.77")  
Ø52 mm (2.05")  
OD : Ø140 mm (5.51")  
Width : 35 mm (1.38")

### Dual Support Rolling Type Wheel Dresser



- **SMART-1224**  
Spindle Speed : 2,000 rpm  
Shaft Dia : Ø45 mm (1.77")  
Ø52 mm (2.05")
- **SMART-1640**  
Spindle Speed : 2,000 rpm  
Shaft Dia : Ø45 mm (1.77")  
Ø52 mm (2.05")  
OD : Ø140 mm (5.51")  
Width : 35 mm (1.38")
- **SMART-2440 • 2460 • 2480**  
Spindle Speed : 2,000 rpm  
Shaft Dia : Ø45 mm (1.77")  
Ø52 mm (2.05")  
OD : Ø140 mm (5.51")  
Width : 35 mm (1.38")

### Additional Grinding Wheel



NOTE : See Page 16  
For Grinding Wheel Dimensions

- **SMART-818**  
Ø203 x 12.7 x Ø31.75 mm  
(Ø8" x 1/2" x Ø1 1/4")
- **SMART-1224 • 1640**  
Ø355 x 50 x Ø127 mm  
(Ø14" x 2" x Ø5")
- **SMART-2440 • 2460 • 2480**  
Ø406 x 75 x Ø127 mm  
(Ø16" x 3" x Ø5")

### Additional Wheel Flange



NOTE : See Page 16  
For Wheel Flange Dimensions

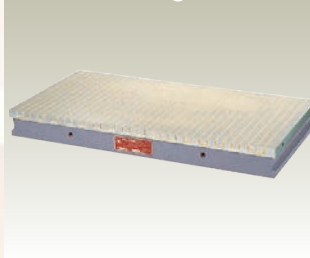
- **SMART-818**  
Clamping Width  
6.3~19 mm (1/4" ~ 3/4")
- **SMART-1224 • 1640**  
Clamping Width  
19~38 mm (3/4" ~ 1 1/2")
- **SMART-2440 • 2460 • 2480**  
Clamping Width  
32~50 mm (1 1/4" ~ 2")

### Chuck Control



- Input : 135V AC
- Output : 90 ~ 110V DC

### Electro-Magnetic Chuck



- Various sizes available  
(Must order chuck control with this optional accessory)

# SMART-III Series

## Specifications

DESCRIPTION		H818III	B818III	H1224III	B1224III
<b>Capacity</b>	Max. Grinding Length	460 mm (18")		610 mm (24")	
	Max. Grinding Width	200 mm (8")		305 mm (12")	
	Max. Distance From Table Surface To Spindle Center	445 mm (17.5")	395 mm (15.6")	600 mm (24")	
	Max. Workpiece Weight	210 kg (462 lb)		420 kg (923 lb)	
<b>Table</b>	Table Size	200 x 460 mm (8" x 18")		300 x 600 mm (12" x 24")	
	T Slot (Size x Quantity)	12 mm x 1		14 mm x 1	
	Distance Between Table And Ground	1,015 mm (40")	1,060 mm (41.7")	970 mm (38")	
<b>Longitudinal Transverse Travel</b>	Rapid	0.1~25 m/min (0.33~82 fpm)	0~20 m/min (0~65.6 fpm)	5~25 m/min (16~82 fpm)	0~20 m/min (0~65.6 fpm)
	Max. Travel	510 mm (20")		700 mm (28")	
<b>Cross Transverse Travel</b>	Max. Travel	220 mm (8 3/4")		350 mm (14")	
	Rapid	0~3 m/min (0~10 fpm)		0~3 m/min (0~10 fpm)	
	Least Increment Input	0.001 mm (0.0001")			
<b>Wheel head Elevation</b>	Max. Travel	340 mm (13.4")	290 mm (11.4")	440 mm (17.3")	
	Rapid	0~3 m/min (0~10 fpm)			
	Least Increment Input	0.001 mm (0.0001")			
<b>Spindle</b>	Spindle rpm	1,000~7,000 rpm		600~2,500 rpm	
<b>Grinding Wheel</b>	OD x Width x Bore	Ø203 x 12.7 x Ø31.75 mm (Ø8" x 1/2" x Ø1 1/4")		Ø355 x 50 x Ø127 mm (Ø14" x 2" x Ø5") Double recess	
<b>Servo Motor</b>	Spindle Motor	3 kW (4 HP)		11 kW (15 HP)	
	Servo (X, Y, Z)	(Y/Z) 850 kW (1.1 HP)	(X) 1.8 kW (2.4 HP), (Y/Z) 850 W (1.1 HP)	(Y/Z) 1 kW (1.3 HP)	(X) 3 kW (4 HP), (Y/Z) 1 kW (1.3 HP)
	Lubrication Pump	25 W		25 W	
	Hydraulic Pump	0.75 kW (1 HP)	-	1.5 kW (2 HP)	-
<b>Power</b>	Power Consumption	11 kVA		22 kVA	
	Air Pressure	4 kg/cm <sup>2</sup> (57 psi)		5 kg/cm <sup>2</sup> (71 psi)	
<b>Tank Capacity</b>	Hydraulic Tank	90 L (23 gal.)	-	150 L (39 gal.)	-
	Lubrication Tank	20 L (5 gal.)		10 L (2.6 gal.)	
<b>Machine Size</b>	Length x Width x Height	1,940 x 2,515 x 2,020 mm (76.4" x 99" x 79.5")	1,940 x 2,015 x 2,020 mm (76.4" x 79.3" x 79.5")	3,130 x 2,560 x 2,090 mm (123.2" x 100.8" x 82.3")	2,630 x 2,560 x 2,090 mm (103.5" x 100.8" x 82.3")
	Net Weight	1,550 kg (3,410 lb)		3,200 kg (7,074 lb)	
<b>Accuracy</b>	Positioning Accuracy	0.004 mm (0.00015")		0.005 mm (0.0002")	
	Repeatability	0.003 mm (0.00012")		0.003 mm (0.00012")	
	Manufactory Standard	ISO 1986-1			
<b>Floor Space</b>	(W x D x H)	3,120 x 2,515 x 2,020 mm (122.8" x 99" x 79.5")	2,920 x 2,015 x 2,020 mm (115" x 99" x 79.5")	3,350 x 3,200 x 2,090 mm (131.9" x 126" x 82.3")	2,850 x 3,200 x 2,090 mm (112.2" x 126" x 82.3")

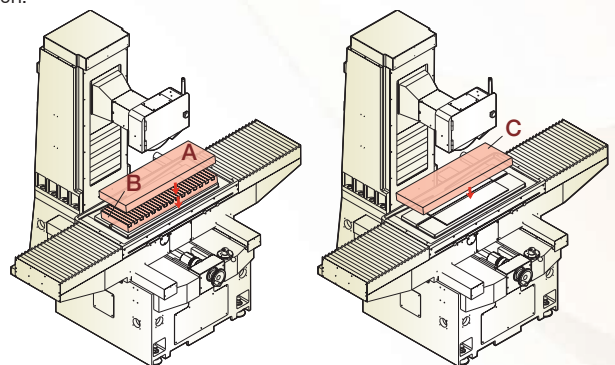
\*All content is for reference only and may be subject to change without notice or obligation.

### SMART-H/B818 • 1224 • 1640III Max. Loading Capacity

The suggested maximum table loads are shown below.

A=Workpiece, B=Chuck, C=A+B

	H/B818III	H/B1224III	H/B1640III
<b>A</b> kg (lb)	175 (385)	314 (690)	423 (930)
<b>B</b> kg (lb)	35 (77)	106 (233)	247 (543)
<b>C</b> kg (lb)	210 (462)	420 (923)	670 (1,473)



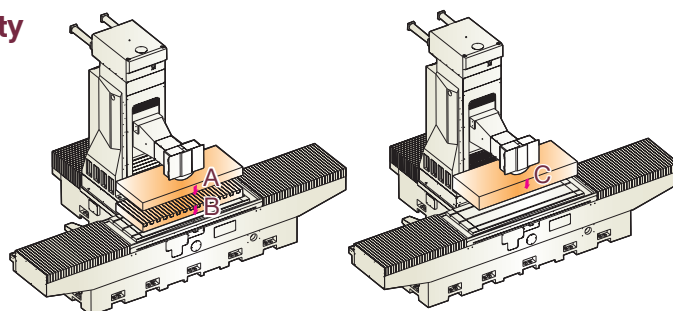
H1640III	B1640III	H2440III	B2440III	H2460III	B2460III	H2480III	B2480III
1,000 mm (40")				1,500 mm (60")		2,000 mm (80")	
405 mm (16")		600 mm (24")					
600 mm (24")		850 mm (33")					
670 kg (1,473 lb)		1,500 kg (3,300 lb)		1,815 kg (3,993 lb)		2,000 kg (4,400 lb)	
400 x 1,000 mm (16" x 40")		600 x 1,000 mm (24" x 40")		600 x 1,500 mm (24" x 60")		600 x 2,000 mm (24" x 80")	
14 mm x 3							
975 mm (38.3")		880 mm (35")					
5~25 m/min (16~82 fpm)	0~20 m/min (0~65.6 fpm)	5~30 m/min (16~98.4 fpm)	0~20 m/min (0~65.6 fpm)	5~30 m/min (16~98.4 fpm)	0~20 m/min (0~65.6 fpm)	5~30 m/min (16~98.4 fpm)	0~20 m/min (0~65.6 fpm)
1,100 mm (43")		1,100 mm (43")		1,600 mm (63")		2,100 mm (82.6")	
450 mm (17.7")		650 mm (25.6")					
0~3 m/min (0~10 fpm)		0~5 m/min (0~16.4 fpm)					
0.001 mm (0.0001")							
450 mm (17.7")		650 mm (25.6")					
0~3 m/min (0~10 fpm)		0~2 m/min (0~6.56 fpm)					
0.001 mm (0.0001")							
600~2,500 rpm		600~2,500 rpm					
Ø355 x 50 x Ø127 mm (Ø14" x 2" x Ø5") Double recess		Ø406 x 75 x Ø127 mm (Ø16" x 3" x Ø5") Double recess					
11 kW (15 HP)							
(Y/Z)1 kW (1.3 HP)	(X) 3 kW (4 HP) (Y/Z)1kW (1.3HP)	(Y/Z) 3 kW (4 HP)	(X) 7.5 kW(10 HP) (Y/Z) 3 kW (4 HP)	(Y/Z) 3 kW (4 HP)	(X) 7.5 kW (10 HP) (Y/Z) 3 kW (4 HP)	(Y/Z) 3 kW (4 HP)	(X) 7.5 kW (10 HP) (Y/Z) 3 kW (4 HP)
25 W		180 W					
2.25 kW (3 HP)	-	3.75 kW (5 HP)	-	5.63 kW (7.5 HP)	-	5.63 kW (7.5 HP)	-
25 kVA		37 kVA					
5 kg/cm <sup>2</sup> (71 psi)							
150 L (40 gal.)	-	250 L (66 gal.)					
10 L (2.6 gal.)	-	23 L (6.08 gal.)	23 L (6.08 gal.)	-	23 L (6.08 gal.)	-	-
3,791x2,560x2,090mm (149.1"x100.8"x82.3")	3,291x2,560x2,090mm (129.6"x100.8"x82.3")	4,600x3,600x2,850mm (181.1"x141.7"x112.2")	3,550x3,600x2,850mm (139.8"x141.7"x112.2")	5,000 x 3,600 x 2,850 mm (196.9" x 141.7" x 112.2")		6,010 x 3,600 x 2,850 mm (236.6" x 141.7" x 112.2")	
4,200 kg (9,240 lb)		8,400 kg (18,480 lb)		8,800 kg (19,360 lb)		9,600 kg (21,120 lb)	
0.005 mm (0.0002")		0.006 mm (0.00023")					
Y/Z : 0.003 mm (0.00012") X : 0.006 mm (0.00023")		0.004 mm (0.00015")		Y/Z : 0.004 mm (0.00015") X : 0.006 mm (0.00023")		Y/Z : 0.004 mm (0.00015") X : 0.006 mm (0.00023")	
ISO 1986-1							
4,419x3,200x2,090mm (174"x126"x82.3")	3,919x3,200x2,090mm (154.3"x126"x82.3")	4,600x3,600x2,850mm (181.1"x141.7"x112.2")	3,550x3,600x2,850mm (139.8"x141.7"x112.2")	5,000 x 3,600 x 2,850 mm (196.9" x 141.7" x 112.2")		6,010 x 3,600 x 2,850 mm (236.6" x 141.7" x 112.2")	

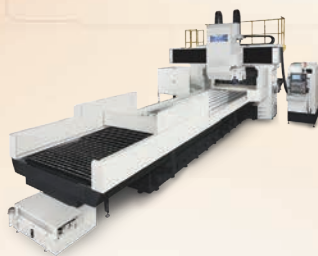
### SMART-H/B2440 • 2460 • 2480III Max. Loading Capacity

The suggested maximum table loads are shown below.

A=Workpiece, B=Chuck, C=A+B

	H/B2440III	H/B2460III	H/B2480III
<b>A</b> kg (lb)	1,120 (2,464)	1,320 (2,904)	1,240 (2,728)
<b>B</b> kg (lb)	380 (836)	495 (1,089)	760 (1,672)
<b>C</b> kg (lb)	1,500 (3,300)	1,815 (3,993)	2,000 (4,400)





Grinding Machine



Grinding Machine



Turning Machine



Milling Machine

**Headquarters**

**FALCON MACHINE TOOLS CO., LTD.**

No. 34, Hsing Kong Road, Shang Kang, Chang Hua  
TAIWAN 50971

Tel: +886 4 799 1126 Fax: +886 4 798 0011

[www.chevalier.com.tw](http://www.chevalier.com.tw)

[overseas@chevalier.com.tw](mailto:overseas@chevalier.com.tw)

**U.S.A. Headquarters**

**CHEVALIER MACHINERY INC.**

9925 Tabor Place, Santa Fe Springs, CA 90670 U.S.A.

Tel: (562) 903 1929 Fax: (562) 903 3959

[www.chevalierusa.com](http://www.chevalierusa.com)

[info@chevalierusa.com](mailto:info@chevalierusa.com)