



SMART-III Series

Multi-Function CNC
Surface Grinder

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



SMART-III Series

Maximizes High-Precision Grinding With Ease Of Operation

Multi-Functional CNC Surface Grinder - Many SMART users in various industries, including the 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 0.004mm (0.00015") to 0.006mm (0.00023") and the repeatability is 0.003mm (0.00012") to 0.006mm (0.00023"). The SMART-III's movements are programmable in increments of 0.001mm (0.0001"). The SMART-III's PC-based control, combined with a user-friendly conversational function, makes it easy to learn and operate.

SMART-H 818 · 1224 · 1640 · 2440 2460 · 2480III

Conversational Smart Control (PC Based)

Table Size: Up to 600mm W x 2000mm L (24"W x 80"L)

Ballscrew And Servo Motor Drive: 2-Axes

X-Axis: Hydraulic Driven

Spindle Motor: Up to 18kW (25 HP)

SMART-B 818 · 1224 · 1640 · 2440 2460 · 2480III

Conversational Smart Control (PC Based)

Table Size: Up to 600mm W x 2000mm L (24"W x 80"L)

Ballscrew And Servo Motor Drive: 3-Axes

Spindle Motor: Up to 18kW (25 HP)



SMART-III Control

Based on 30 years of grinder manufacturing and application experience, Chevalier is now introducing the latest innovation of Multi-Function SMART-III CNC grinder. SMART-III's control is easy to learn, easy to operate, and easy to maintain. People without programming experience are still able to operate this CNC grinder. According to customers' requirements, 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. Push 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 or Ethernet connection
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 or dress simulation; program is advanced 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. If you have doubts, stop cranking and the program pauses.

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





USB Device and CF Card Function

Users can import and export programs and files with either a USB device or a CF card. Uploading or downloading programs are now more convenient.



SMART-III Control

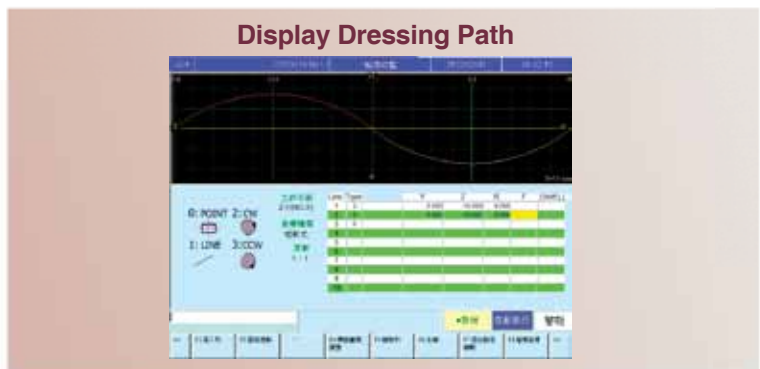
Interface Design

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



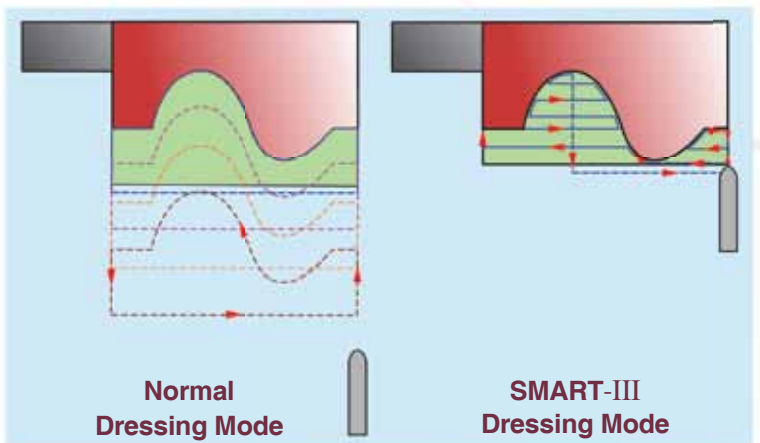
Dressing Path Display

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



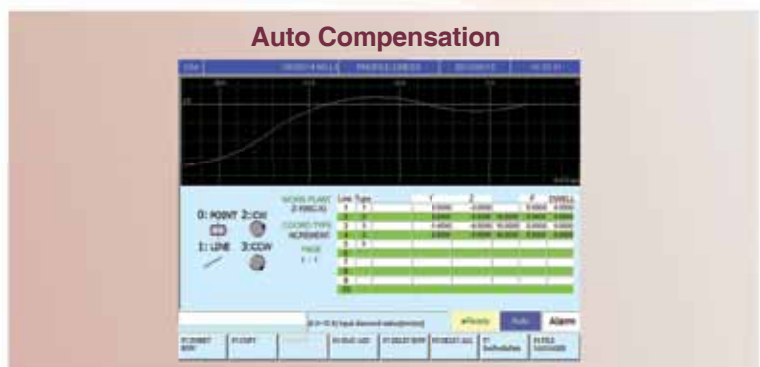
Constant-Contact Dressing Mode

Normal Dressing Mode wastes time cutting air. The SMART-III Dressing Mode minimizes dress time by keeping the diamond in constant contact with the wheel and not cutting air.



Auto Compensation

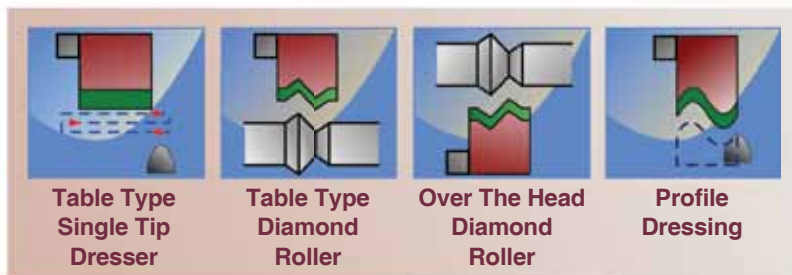
After dressing the SMART-III will automatically compensate for the dress amount and then continue the next grinding action.





Auto Grinding Modes

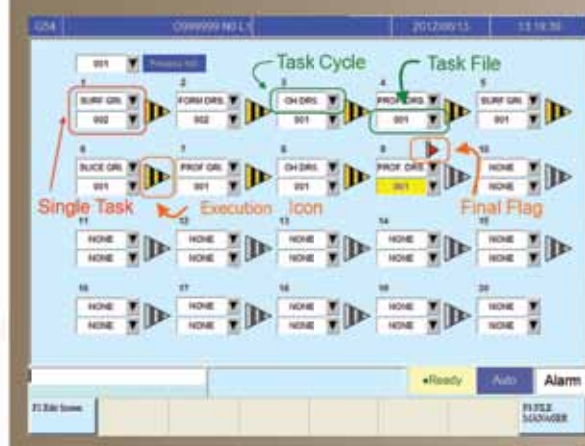
SMART-III has four types of graphic conversational grinding modes. The new *TaskLink* mode enables the user to complete complex grinding tasks in one cycle.



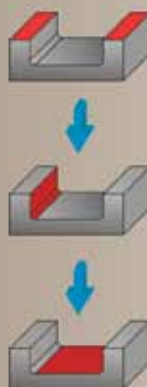
Auto Dressing Modes

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

NEW TaskLink Function



Steps



TaskLink

The new *TaskLink* function allows users to make their own grinding programs to achieve complex grinding tasks with only one cycle and increasing production efficiency.

SMART-III Applications



SMART-H/B818III Series



Machine image includes optional accessories

Machine Construction



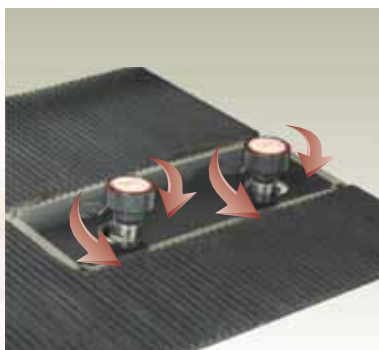
SPINDLE

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 CREEP FEED FUNCTION

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 and wears evenly.

- **SMART-H** type grinder (2-axis CNC control), with hydraulic table and longitudinal movement.
- **SMART-B** type grinder (3-axis CNC control), with ballscrew for table 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 preventing table overhang.

SMART-H/B1224/1640III Series



Machine image includes optional accessories

Machine Construction



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.

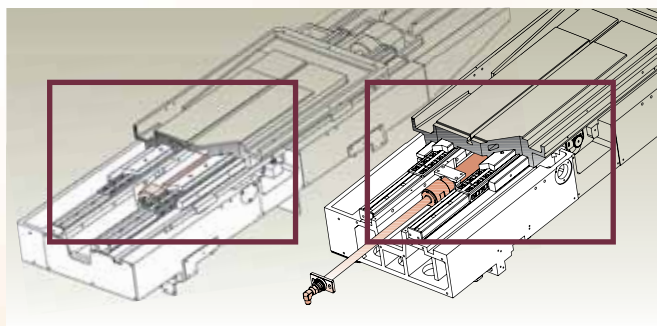
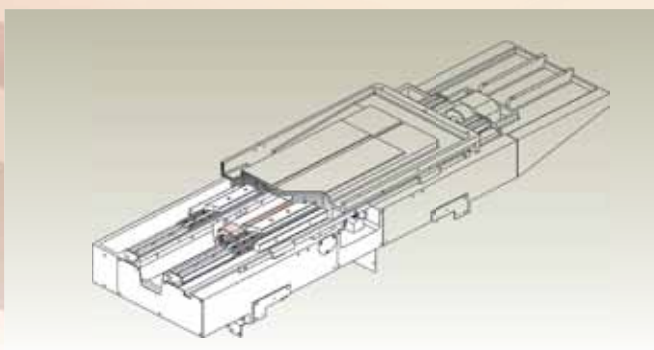


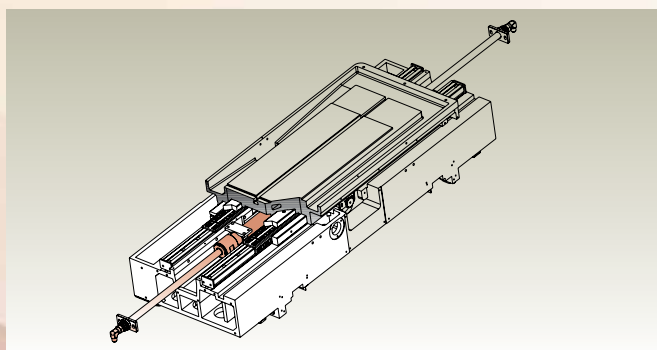
TABLE GUIDE WAY SYSTEM

Hardened and ground table guide way system with precision-needle roller bearings provides 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 - 20m/min (0 - 65.6fpm).



SMART-III H TYPE GRINDERS • 2-AXIS CNC CONTROL

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



Machine image includes optional accessories

Machine Construction



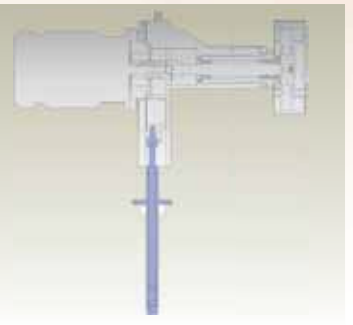
HEAVY-DUTY NEEDLE ROLLER BEARINGS WAYS

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.



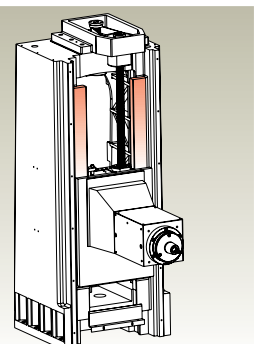
BASE AND SADDLE GUIDEWAY SYSTEM

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.

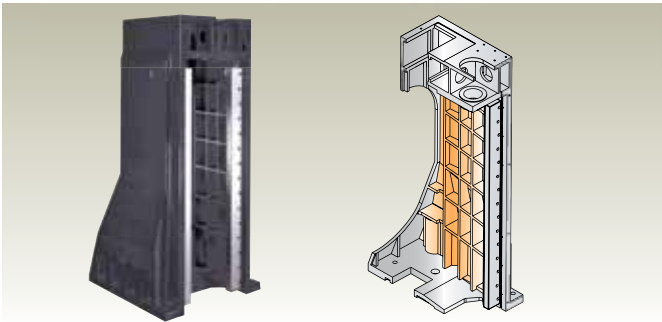


SMART-H/B2440/60/80III Series



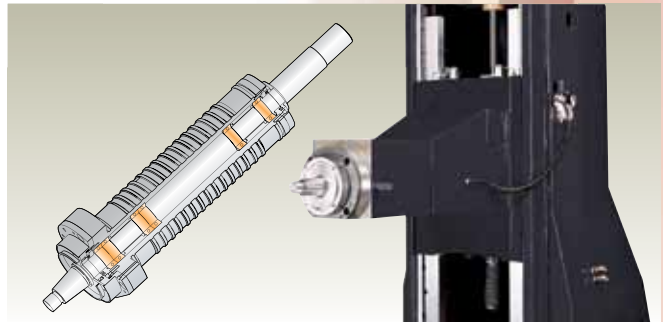
Machine image includes optional accessories

Machine Construction



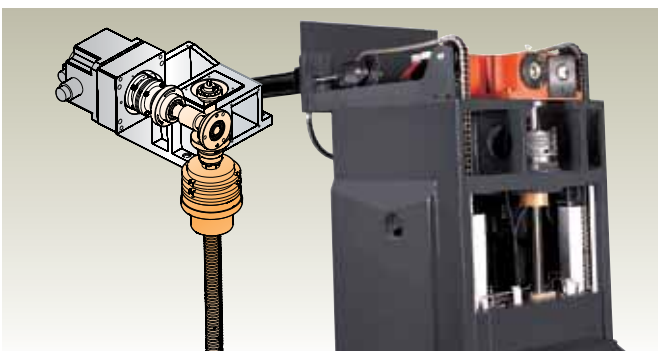
COLUMN

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.



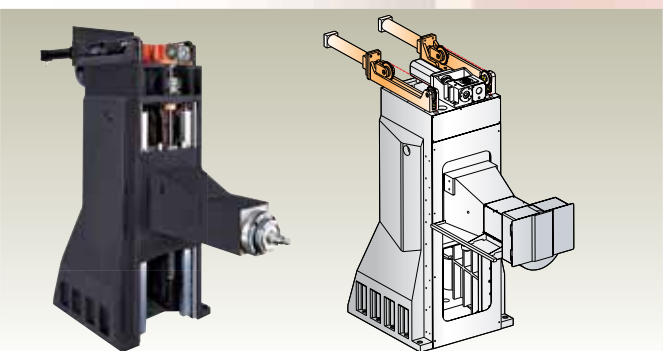
HIGH-PRECISION HEAVY-DUTY SPINDLE DESIGN

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



SMOOTH AND ACCURATE WHEELHEAD MOVEMENT

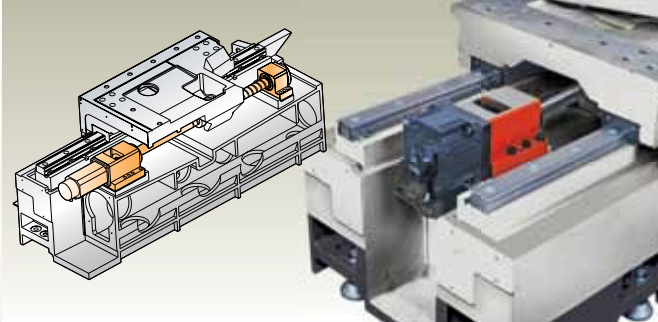
The wheelhead is positioned with a C3-grade ballscrew driven by a Mitsubishi servo motor. The wheelhead guideways are laminated with Turcite-B anti-friction materials and then precisely hand scraped. The downfeed accuracy can be 0.002mm (0.00008").



SPINDLE HEAD COUNTERWEIGHT BALANCE SYSTEM

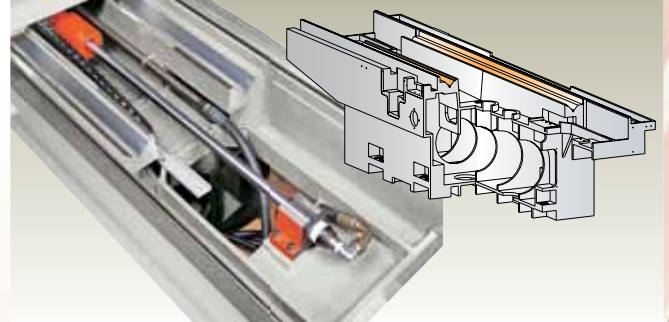
Pneumatic counterweights are installed in the spindle to eliminate backlash and prevent the premature wear of the elevating screws.

Machine Construction *(continued)*



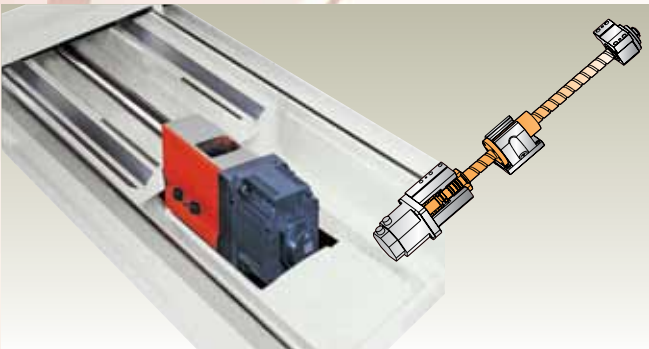
STABLE FEED, SUPERIOR ACCURACY

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



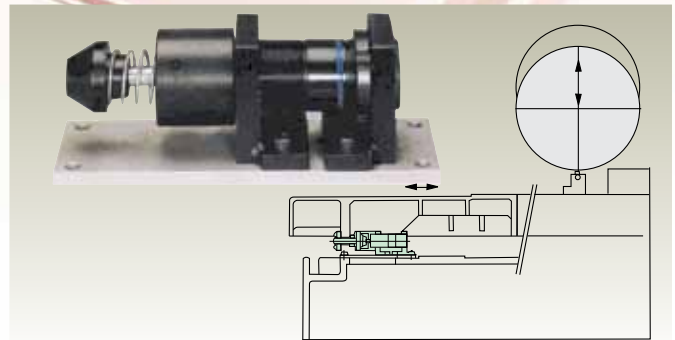
LONGITUDINAL SLIDEWAYS

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.



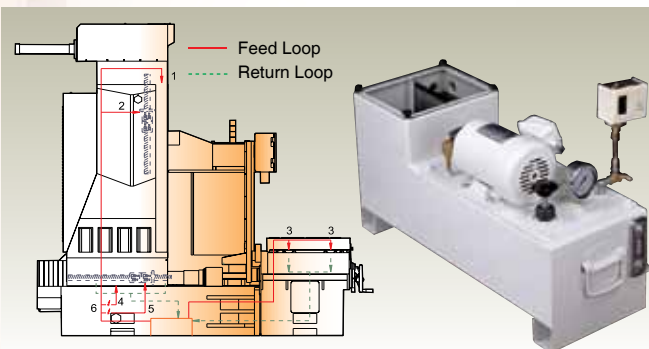
LONGITUDINAL BALLSCREW DRIVE CONSTRUCTION (B-TYPE)

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 at the end of rough grinding. This enables the machine to run unattended for hours, making it ideal for high-volume production runs, while reducing machining costs and increasing line productivity.




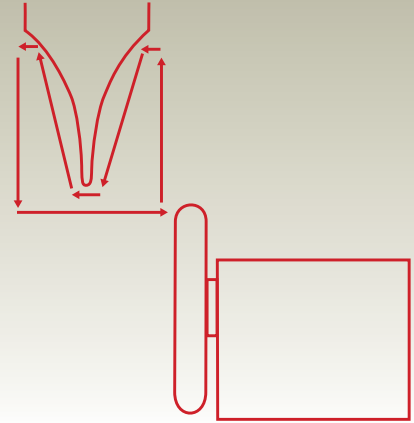
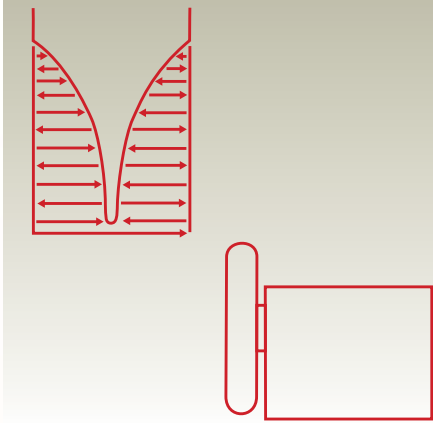
AUTOMATIC LUBRICATION SYSTEM


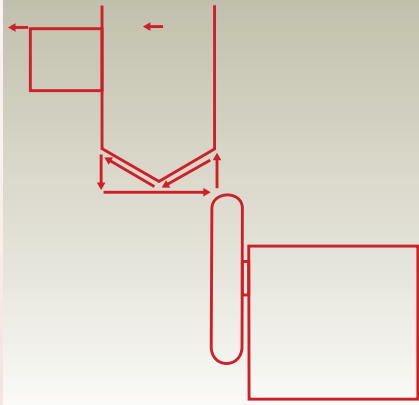
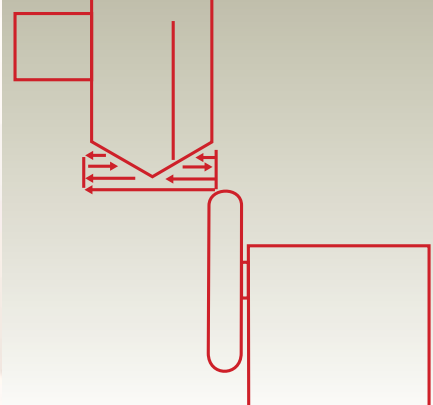
An automatic lubrication system is standard on all machines. The system uses a pressure sensor to monitor lubrication pressure. The machine shuts down automatically when the pressure drops below a preset level.

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

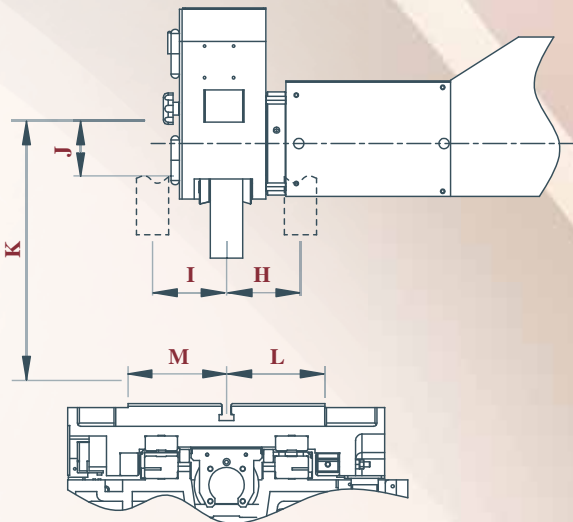
SMART-III Series Wheel Dressing

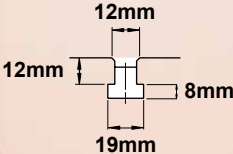
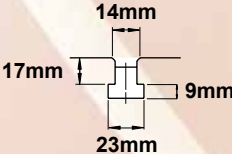
Depending on the shape, high efficiency SMART-III dressing may be more than 10 times faster than standard dressing.

APPLICATION EXAMPLE	STANDARD	SMART-III
		
W-SHAPE DIE	CYCLE TIME: 2:37:30	CYCLE TIME: 52:30
EFFICIENCY	SMART-III EFFICIENCY INCREASED BY 300%	

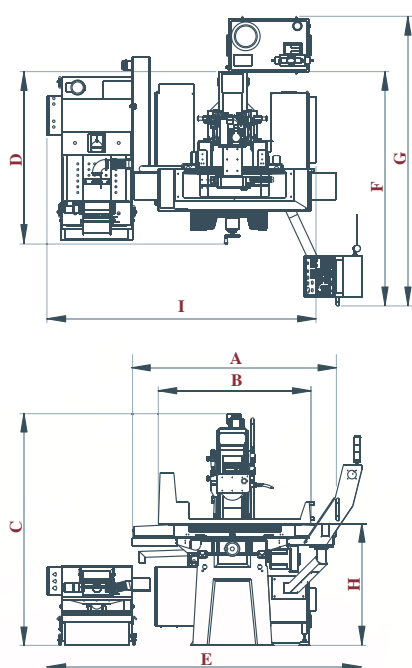
APPLICATION EXAMPLE	STANDARD	SMART-III
		
V-SHAPE WORKPIECE	CYCLE TIME: 2:19:30	CYCLE TIME: 51:40
EFFICIENCY	SMART-III EFFICIENCY INCREASED BY 270%	

SMART-III Series Dimensions

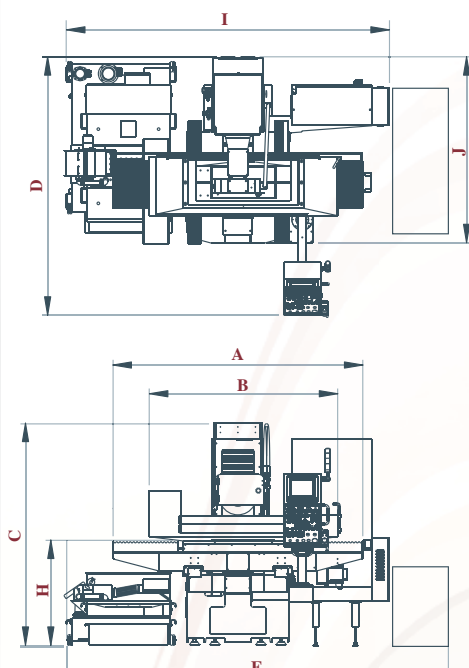


UNIT : mm (")		
T-SLOTS	SIZE 12	SIZE 14
		
	H/B 818III	H/B 1224III
J	60 (2.4")	82 (3.22")
K	457 (18")	620 (24.4")
I	110 (4.33")	180 (7")
H	110 (4.33")	180 (7")
L	100 (4")	152.5 (6")
M	100 (4")	152.5 (6")

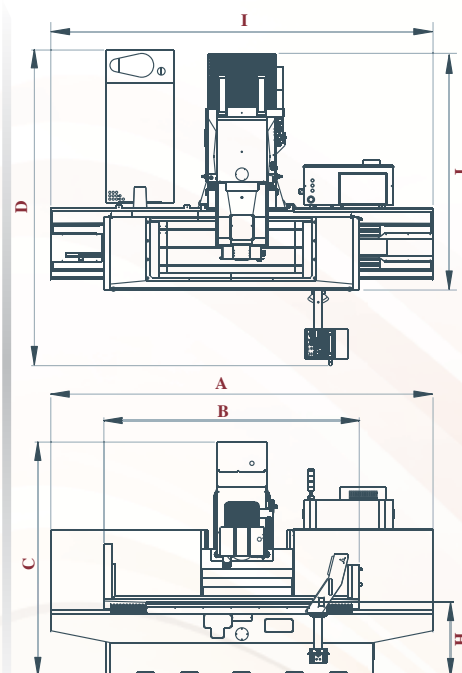
SMART-III Series Dimensions



SMART-H/B818III



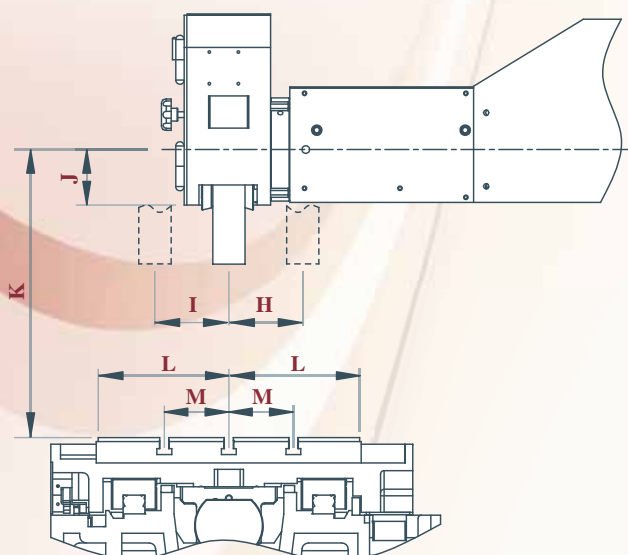
SMART-H/B12/16III



SMART-H/B24III

UNIT : mm (")

	H/B818III	H/B1224III	H/B1640III	H/B2440III	H/B246III	H/B2480 III
A	1,757 (69")	2,376 (93.5")	3,493 (137.5")	3,926 (154.5")	4,926 (194")	6,080 mm (239 3/8")
B	1,330 (52")	1,150 (45.2")	1,445 (57.5")	2,100 (82.7")	3,100 (122")	4,100 mm (161.4")
C	2,021 (80")	2,113 (83")	2,133 (83")	2,780 (109.4")		
D	1,504 (59")	2,625 (103.3")	2,822 (111.1")	3,842 (151.3")		
E	2,746 (108")	3,200 (126")	4,165 (164")	N / A		
F	2,043 (80")	N / A	N / A	N / A		
G	2,527 (100")	N / A	N / A	N / A		
H	1,062 (42")	970 (38.1")	975 (38.3")	880 (34.6")		
I	2,346 (92")	2,650 (104.3")	3,614 (142.3")	3,500 (137.8")	4,500 (177.1")	6,000 (236.2")
J	N / A	1,855 (73")	2,052 (80.8")	N / A		



UNIT : mm (")

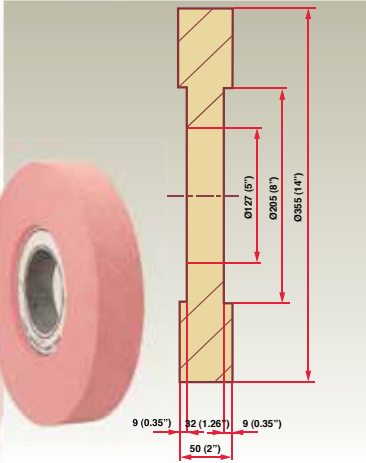
	H/B 1640III	H/B 24III
J	82 (3.22")	110 (4.33")
K	620 (24.4")	850 (33.4")
I	240 (9.44")	337.5 (13.3")
H	240 (9.44")	337.5 (13.3")
L	202.5 (8")	305 (12")
M	100 (4")	210 (8")

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

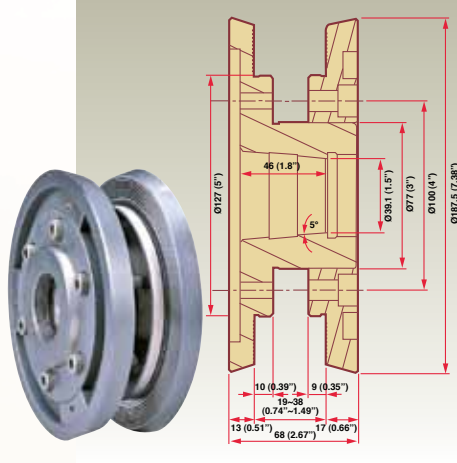
9. Table Splash Guard
10. Hex Head Wrench
11. Heat Exchanger



4. Grinding Wheel

- 12/16 series
 $\phi 355 \times 50 \times \phi 127 \text{mm}$
 $(\phi 14" \times 2" \times \phi 5")$
- 24 series
 $\phi 406 \times 75 \times \phi 127 \text{mm}$
 $(\phi 16" \times 3" \times \phi 5")$
- 818 series
 $\phi 203 \times 12.7 \times \phi 31.75 \text{mm}$
 $(\phi 8" \times 1/2" \times \phi 1 1/4")$

Note: The drawing is 12/16 Series



8. Wheel Flange

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

Note: The drawing is 12/16 Series



12. Oil Chiller (24 Series only)

Standard on H models.
 Minimizes thermal expansion
 and maintain consistent
 accuracy and repeatability
 during heavy-duty
 machining conditions.

SMART-III Series Optional Accessories

GRINDING WHEEL DYNAMIC BALANCER



- Various sizes available

ROLLER BALANCING STAND



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

CNC ROTARY TABLE



- Various sizes available

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: 2000rpm
Shaft Dia: $\phi 25.4\text{mm}$ (1")
- **SMART-1224/1640**
Spindle Speed 1800rpm
Shaft Dia: $\phi 35\text{mm}$ (1.38")
 $\phi 45\text{mm}$ (1.77"), $\phi 52\text{mm}$ (2.05")
OD: $\phi 140\text{mm}$ (5.51")
Width: 35mm (1.38")
- **SMART-2440/60/80**
Spindle Speed 1800rpm
Shaft Dia: $\phi 45\text{mm}$ (1.77")
 $\phi 52\text{mm}$ (2.05")
OD: $\phi 140\text{mm}$ (5.51")
Width: 35mm (1.38")

DUAL SUPPORT ROLLING TYPE WHEEL DRESSER



- **SMART-1224**
Spindle Speed 2000rpm
Shaft Dia: $\phi 45\text{mm}$ (1.77")
 $\phi 52\text{mm}$ (2.05")
- **SMART-1640**
Spindle Speed: 2000rpm
Shaft Dia: $\phi 45\text{mm}$ (1.77")
 $\phi 52\text{mm}$ (2.05")
OD: $\phi 140\text{mm}$ (5.51")
Width: 35mm (1.38")
- **SMART-2440/60/80**
Spindle Speed 2000rpm
Shaft Dia: $\phi 45\text{mm}$ (1.77")
 $\phi 52\text{mm}$ (2.05")
OD: $\phi 140\text{mm}$ (5.51")
Width: 35mm (1.38")

ADDITIONAL GRINDING WHEEL



NOTE: See Page 14 For Grinding Wheel Dimensions

- **818 series**
 $\phi 203 \times 12.7 \times \phi 31.75\text{mm}$
($\phi 8" \times 1/2" \times \phi 1 1/4"$)
- **12/16 series**
 $\phi 355 \times 50 \times \phi 127\text{mm}$
($\phi 14" \times 2" \times \phi 5"$)
- **24 series**
 $\phi 406 \times 75 \times \phi 127\text{mm}$
($\phi 16" \times 3" \times \phi 5"$)

ADDITIONAL WHEEL FLANGE



NOTE: See Page 14 For Grinding Flange Dimensions

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

CHUCK CONTROL



- Input: 135VAC
- Output: 90 ~ 110VDC

ELECTRO-MAGNETIC CHUCK



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

SMART-III Series Specifications

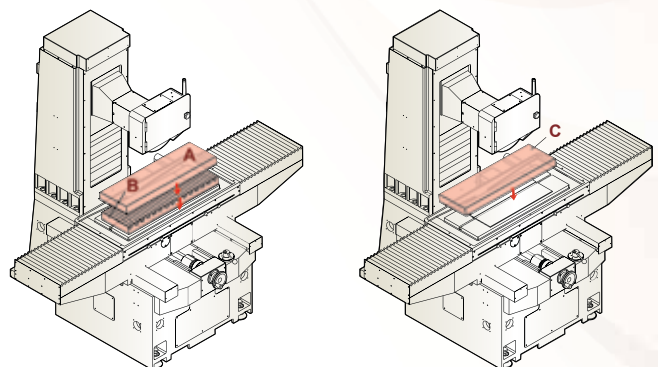
DISCRIPTION		H818III	B818III	H1224III	B1224III	
Capacity	Max. Grinding Length	460 (18")		610 (24")		
	Max. Grinding Width	200 (8")		305 (12")		
	Max. Grinding Height	310 (12")		420 (17")		
	Max. Distance From Table	445 (17.5")	406 (16")	600 (24")		
	Surface To Spindle Center	210 kg (462 lbs.)		420 kg (923 lbs.)		
Table	Table Size	200 x 460 (8" x 18")		300 x 600 (12" x 24")		
	T Slot (Size x Quantity)	12 x 1		14 x 1		
	Distance Between Table And Ground	1,062 (42")		970 (38")		
Longitudinal Transverse Travel	Rapid	1-25m/min (0.33~82fpm)	0-20m/min (0-65.6fpm)	5-25m/min (16-82fpm)	0-20m/min (0-65.6fpm)	
	Max Travel (Manual)	510 (20")		700 (28")		
Cross Transverse Travel	Max Travel	220 (8 3/4")		350 (14")		
	Rapid	0-3m/min (0-10fpm)		0-3m/min (0-10fpm)		
	Least Increment Input	0.001 (0.0001")		0.001 (0.0001")		
Wheel head Elevation	Max Travel	350 (13")		600 (24")		
	Rapid	0-3m/min (0-10fpm)		0-3m/min (0-10fpm)		
	Least Increment Input	0.001 (0.0001")		0.001 (0.0001")		
Spindle	Spindle rpm	7,000rpm		1,800rpm		
Grinding Wheel	OD x Width x Bore	203 x 12.7 x 31.75 (8" x 1/2" x 1 1/4")		355 x 50 x 127 (Double recess) (14" x 2" x 5")		
Servo Motor	Spindle Motor	3kW (4HP)		11kW (15HP)		
	Servo (X, Y, Z)	(Y/Z) 1kW (1.3HP)	(X) 2kW (2.7HP), (Y/Z) 1Kw (1.3HP)	(Y/Z) 1kW (1.3HP)	(X) 3kW (4HP), (Y/Z) 1kW (1.3HP)	
	Lubrication Pump	25W		25W		
	Hydraulic Pump	0.75kW (1HP)	—	1.5kW (2HP)	—	
Power	Power Consumption	30A (11KVA)		60A (22KVA)		
	Air Pressure	4Kg/cm2 (57psi)		5Kg/cm2 (71psi)		
Tank Capacity	Hydraulic Tank	90L (23 gal.)	—	150L (39 gal.)	—	
	Lubrication Tank	20L (5 gal.)		10L (2.6 gal.)		
Machine Size	Height	2,100 (83")		2,200 (87")		
	Length x Width	2,092 x 2,055 (82" x 81")		2,650 x 2,564 (104" x 101")		
	Net Weight	1,550 kg (3,410 lbs.)		3,200 kg (7,074 lbs.)		
Accuracy	Positioning Accuracy	0.004 (0.00015")		0.005 (0.0002")		
	Repeatability	0.003 (0.00012")		0.003 (0.00012")		
	Manufactory Standard	ISO 230-2 / VDI3441		ISO 230-2 / VDI3441		
Floor Space	(L x W x H)	2,055 x 2,092 x 2,100 (81" x 82" x 83")		2,776 x 2,092 x 2,210 (109" x 105" x 87")		

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
A Kg (lbs)	175 (385")	314 (690")	423 (930")
B Kg (lbs)	35 (77")	106 (233")	247 (543")
C Kg (lbs)	210 (462")	420 (923")	670 (1,473")



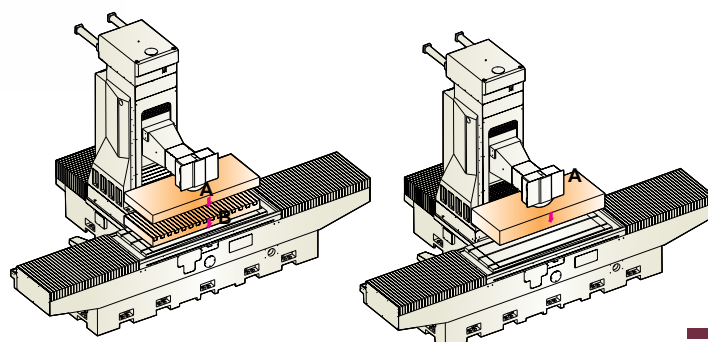
	H1640III	B1640III	H2440III	B2440III	H2460III	B2460III	H2480III	B2480III
	1,000 (40")		1,000 (40")		1,500 (60")		2,000 (80")	
	405 (16")		600 (24")		600 (24")		600 (24")	
	420 (16.5")		645 (25")		645 (25")		645 (25")	
	600 (24")		850 (33")		850 (33")		850 (33")	
	670 kg (1,473 lbs.)		1,500 kg (3,300 lbs.)		1,815 kg (3,993 lbs.)		2,000 kg (4,400 lbs.)	
	400 x 1,000 (16" x 40")		600 x 1,000 (24" x 40")		600 x 1,500 (24" x 60")		600 x 2,000 (24" x 80")	
	14 x 3		14 x 3		14 x 3		14 x 3	
	975 (38.3")		880 (35")		880 (35")		880 (35")	
	5-25m/min (16~82fpm)	0-20m/min (0~65.6fpm)	5-30m/min (16~98.4fpm)	0-20m/min (0~65.6fpm)	5-30m/min (16~98.4fpm)	0-20m/min (0~65.6fpm)	5-30m/min (16~98.4fpm)	0-20m/min (0~65.6fpm)
	1,100 (43")		1,100 (43")		1,600 (63")		2,100mm (82.6")	
	450 (17.7")		675 (26.6")		675 (26.6")		675 (26.6")	
	0-3m/min (0-10fpm)		0-5m/min (0-16.4fpm)		0-5m/min (0-16.4fpm)		0-5m/min (0-16.4fpm)	
	0.001 (0.0001")		0.001 (0.0001")		0.001 (0.0001")		0.001 (0.0001")	
	600 (24")		850 (33")		850 (33")		850 (33")	
	0~3m/min (0-10fpm)		0~2m/min (0-6.56fpm)		0-2m/min (0-6.56fpm)		0-2m/min (0-6.56fpm)	
	0.001 (0.0001")		0.001 (0.0001")		0.001 (0.0001")		0.001 (0.0001")	
	1,800rpm		1,800rpm		1,800rpm		1,800rpm	
	355 x 50 x 127 (Double recess) (14" x 2" x 5")		406 x 75 x 127 (Double recess) (16" x 3" x 5")					
	11kW (15HP)		11kW (15HP)		11kW (15HP)		11kW (15HP)	
	1kW (1.3HP)	(X) 3kW (4HP) (Y/Z) 1kW(1.3HP)	(Y/Z) 3kW (4HP)	(X) 7.5kW (10HP) (Y/Z) 3kW (4HP)	(Y/Z) 3kW (4HP)	(X) 7.5kW (10HP) (Y/Z) 3kW (4HP)	(Y/Z) 3kW (4HP)	(X) 7.5kW (10HP) (Y/Z) 3kW (4HP)
	25W		190W		190W		190W	
	2.25kW (3HP)	—	3.75kW (5HP)	—	5.63kW (7.5HP)	—	5.63kW (7.5HP)	—
	60A (22KVA)		100A (37KVA)		100A (37KVA)		100A (37KVA)	
	5Kg/cm2 (71psi)		5Kg/cm2 (71psi)		5Kg/cm2 (71psi)		5Kg/cm2 (71psi)	
	150L (40 gal.)	—	250L (66 gal.)		250L (66 gal.)		250L (66 gal.)	
	10L (2.6 gal.)		25L (6.6 gal.)		25L (6.6 gal.)	—	25L (6.6 gal.)	—
	2,200 (86.6")		3,250 (128")		3,250 (128")		3,250 (128")	
	3,500 x 2,768 (138" x 109")		3,842 x 4,000 (152" x 158")		3,842 x 4,926 (152" x 194")		3,842 x 6,080 (152" x 239")	
	4,200 kg (9,240 lbs.)		8,400 kg (18,480 lbs.)		8,800 kg (19,360 lbs.)		9,600 kg (21,120 lbs.)	
	0.005 (0.0002")		0.006 (0.00023")		0.006 (0.0023")		0.006 (0.00023")	
	0.003 (0.00012")		0.004 (0.00015")		Y/Z: 0.004 (0.00015") X: 0.006 (0.00023")		Y/Z: 0.004 (0.00015") X: 0.006 (0.00023")	
	ISO 230-2 / VDI3441		ISO 230-2 / VDI3441		ISO 230-2 / VDI3441		ISO 230-2 / VDI3441	
	3,350 x 2,896 x 2,210 (132" x 114" x 87")		4,090 x 2,970 x 3,200 (161" x 117" x 126")		4,940 x 3,050 x 3,200 (195" x 120" x 126")		6,325 x 3,020 x 3,200 (249" x 119" x 126")	

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
A Kg (lbs)	1,120 (2,464")	1,320 (2,904")	1,240 (2,728")
B Kg (lbs)	380 (836")	495 (1,089")	760 (1,672")
C Kg (lbs)	1,500 (3,300")	1,815 (3,993")	2,000 (4,400")





Bridge Grinder



SMART Grinder



Vertical Lathe



Bridge Mill

FALCON MACHINE TOOLS CO., LTD.

No. 34, Hsing Kong Road, Shang Kang, Chang Hua
TAIWAN 509

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

www.chevalier.com.tw

overseas@chevalier.com.tw

TA-YA Factory Tel: +886 4 2567 3266

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

info@chevalierusa.com

