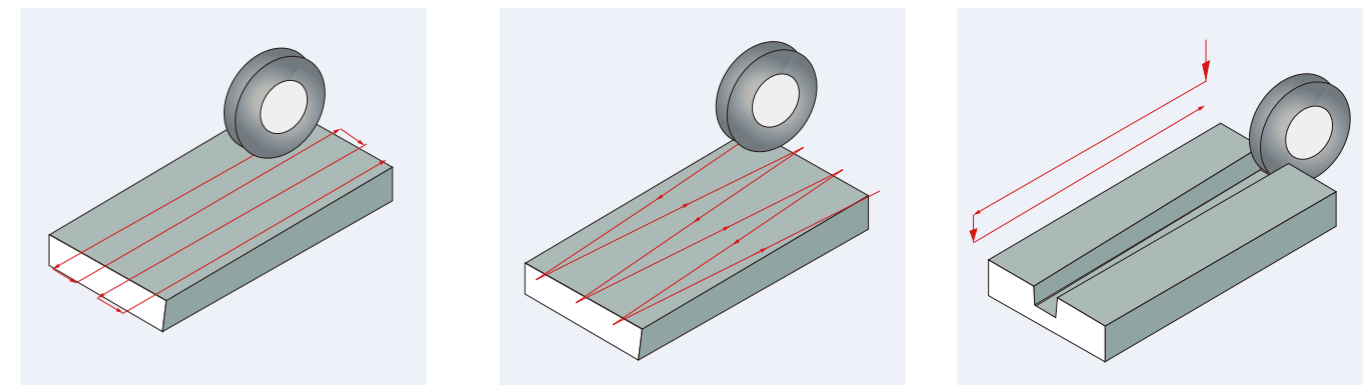


CNC Surface Grinder

EASY CNC Series



Grinder Professionals

EASY series for SURFACE/FORM/PROFILE grinding

EASY series machines can be configured as 2 or 3 axes CNC.
 Table size ranges are 8"x20", 12"x24" and 16"x32" to max. 24"x120"
 2 axes (II) : Table driven by hydraulic cylinder
 3 axes (III) : Table driven by servo motor + ballscrew

Features

- The EASY series CNC surface and profile grinder with its easy to learn, easy to program, shop floor language, is indeed an innovation for close-tolerance, repeatable, multi-purpose grinding. The EASY Series incorporates all the excellent features required for high precision grinding. Due to the machines versatility, it is suitable for numerous high accuracy, complex contouring and forming applications.
- The operator doesn't need to use G or M codes to program the grinding functions. You just input the grinding values into the graphic conversational screen for both grinding and wheel dressing cycles.
- The EASY control also allows for G or M code programming or downloading programs from a CAD file through the USB ports.



EASY-820 CNC III
 shown w/optional accessories

EASY CNC SERIES

Unit : inch

Model	820	1224	1632	1640	2040	2060	2448	2460	2480	24100	24120
Table size (width x length)	8"x20"	12"x24"	16"x32"	16"x40"	20"x40"	20"x60"	24"x48"	24"x60"	24"x80"	24"x98"	24"x118"

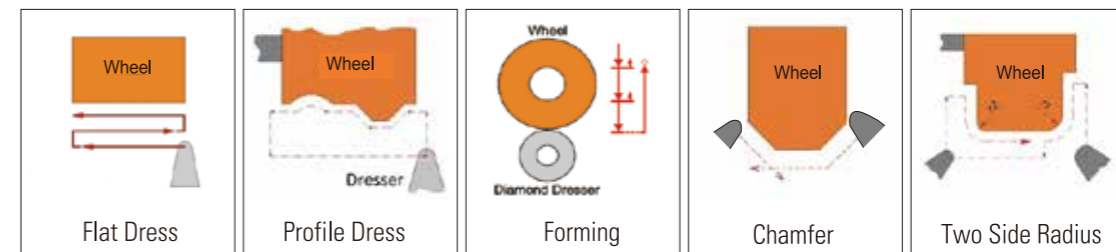
Control Features

- Multiple Box Slicing function
- High speed wheel dressing
- 0.0001" least increment input
- Graphic conversational programming for Grinding and Dressing with automatic compensation
- Grinding path simulation mode by turning MPG
- Graphic grinding path display
- Surface / Slice / Crisscross / Profile grinding modes are standard
- Additional final finish grinding function after cycle end
- Part program can be stored for future grinding purpose



Graphic conversational dressing modes

Wheel dressing can be programmed easily through the graphic conversational screen. There are also options for the dressing devices, such as single disk, form roller dresser and multi-tip diamond dressers depending upon the grinding application .

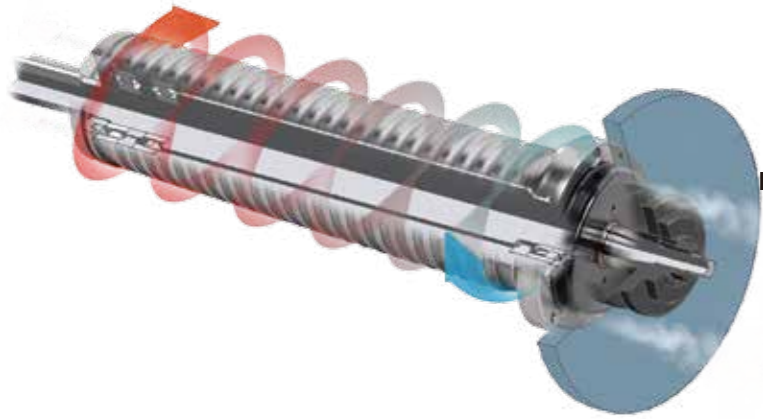


Graphic conversational grinding modes

The grinding functions can be easily programmed through the graphic conversational screen without the use of complex G and M code. A very powerful grinding path display function is available to test run the part program prior to grinding.



Machine Features



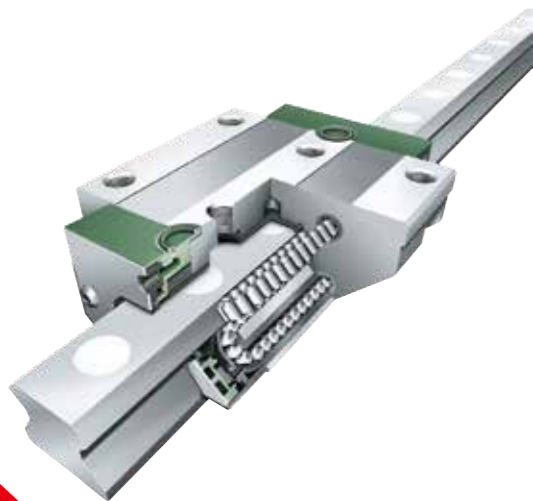
Spindle Air Purge design

The air purge designed spindle generates positive air pressure between the spindle and spindle housing. The spiral groove design helps keep the spindle cool and efficient prevent small chips from entering.



5HP Spindle Motor (EASY-820)

5HP spindle motor is available to work with the ultra heavy duty spindle for tough material or creepfeed grinding.

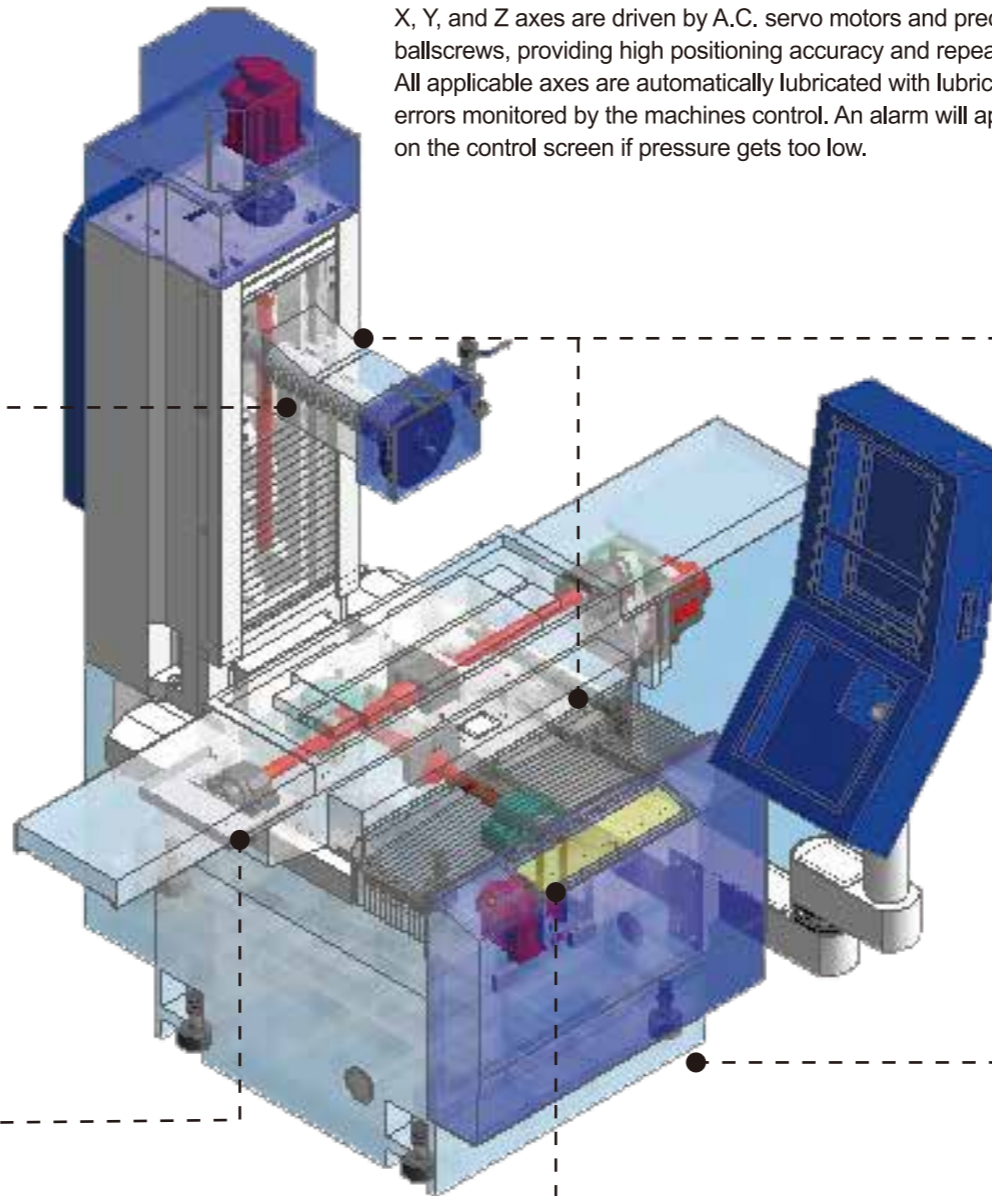


Roller type Linear Ways

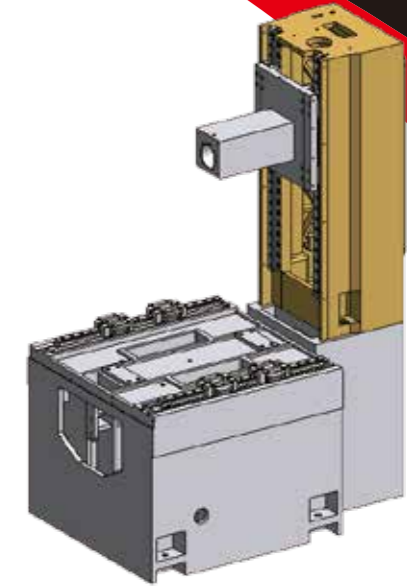
Roller type linear guideways are used in Y axis and Z axis of EASY-820 for superb rigidity and micro feed accuracy.

Axes Drive Mechanism

X, Y, and Z axes are driven by A.C. servo motors and precision ballscrews, providing high positioning accuracy and repeatability. All applicable axes are automatically lubricated with lubrication errors monitored by the machines control. An alarm will appear on the control screen if pressure gets too low.

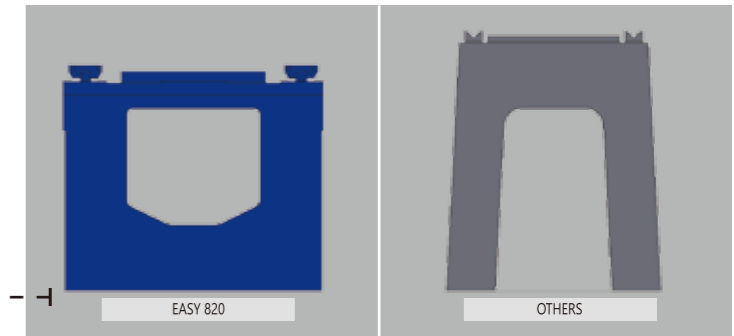


EASY- 820CNC III



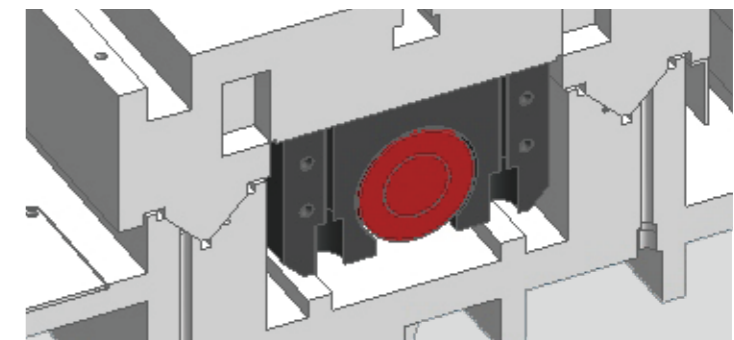
Machine Design

An extra wide 30.47" machine base provides excellent rigidity for low vibration dynamic grinding. The 17.12" large column width offers higher stability and rigidity than other manufacturers.



Ultra Rigid Box Structure Design

Box-structure machine base is made of Meehanite cast-iron to guarantee the superior rigidity and stability of machine. Machine net weight : 4,840 lbs.



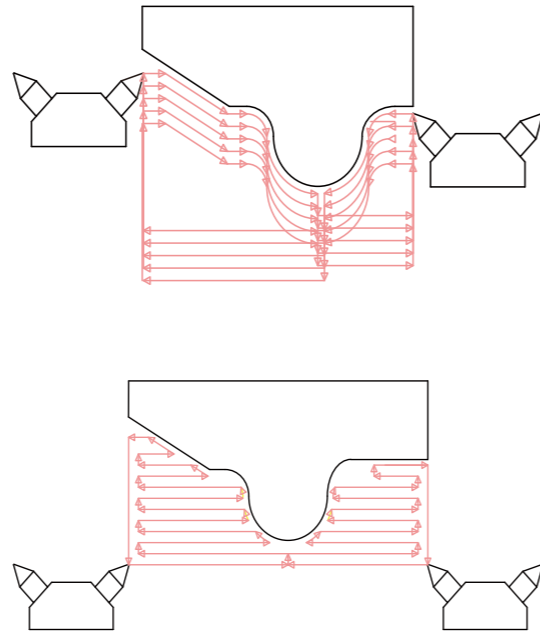
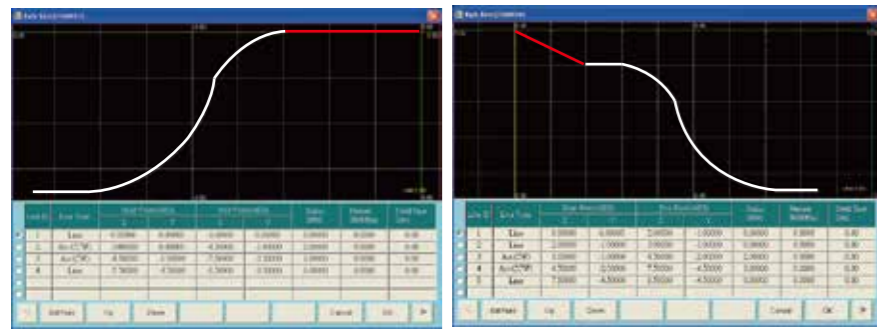
Double "V" Table Way Design

Precision hand scraped longitudinal travel guideways with hydrostatic oil film technology and Turcite-B coating to assure the positioning accuracy and machine longevity.

High Speed Wheel Dressing Function

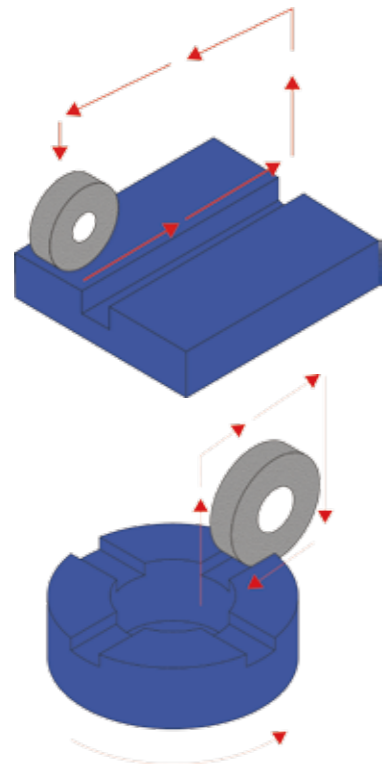
The most efficient way to profile a new wheel is with the EASY high speed wheel dressing function. This unique function dramatically reduces new wheel forming time, thus greatly increases the grinding efficiency.

The operator needs to input the related coordinates and parameters of the dressing tools along with the geometric data of the profile to avoid air dressing time.



Box Slicing Function

Box slice function incorporates with other indexing devices for high accuracy slicing and forming grinding.



Box slicing Function

Box slicing + indexer(opt.)

Application Samples

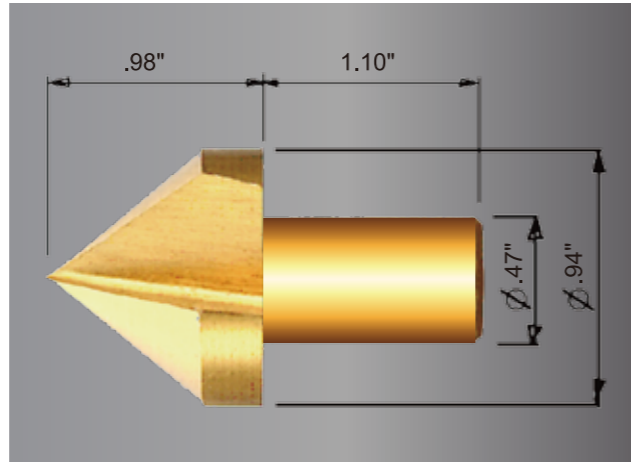


Optional Accessories



7 Grinding Example

Workpiece : Chamfering Tool
 Job : Flute Grinding
 Material : Steel Alloy
 Hardness : HRC 55
 Grinding Wheel : 81A46-3J9
 Total Grinding Amount : 0.165"
 Rough Grinding : 40 sec
 Fine Grinding : 20 sec
 Wheel Dressing : 170 sec
 Cycle time : 7 minutes 50 sec (2 flutes grinding)

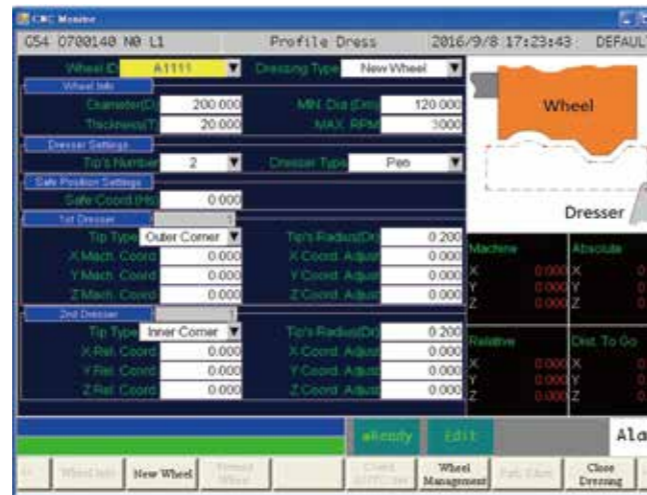


- Optional accessories :
1. Two tips diamond dresser
 2. Special fixture + indexer

Getting Started with EASY grinder is so easy

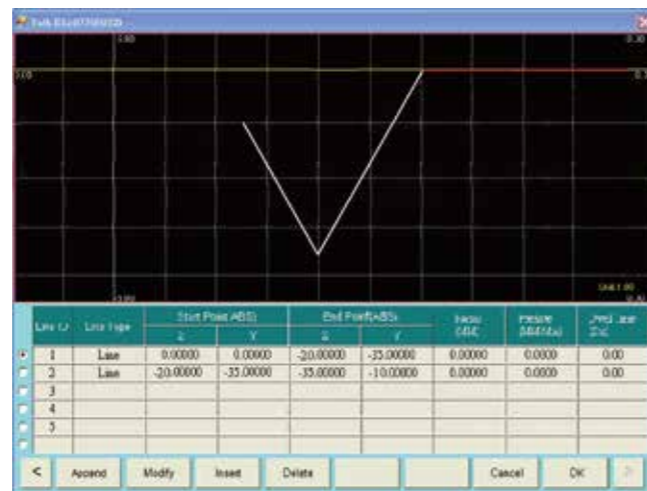
Step 1. Select dressing mode

Input the dressing values.



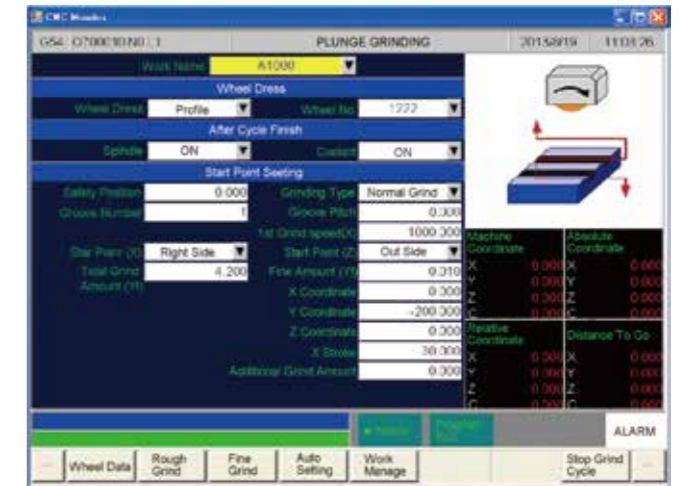
Step 2. Input wheel profile

Input the profile dressing value.



Step 3. Select grinding mode

Input grinding values.



Step 4. Use simulation function to avoid program errors

1. Turn the MPG to simulate the program you entered.
2. No more worries about crashing the wheel
3. You can turn MPG in CW direction to advance or CCW to reverse.



Step 5. Push Cycle start

The EASY system will start to execute wheel dressing and grinding process according to your settings. Even a new operator can grind like a skilled operator, and a skilled operator can improve grinding efficiency by using the EASY Series grinder.

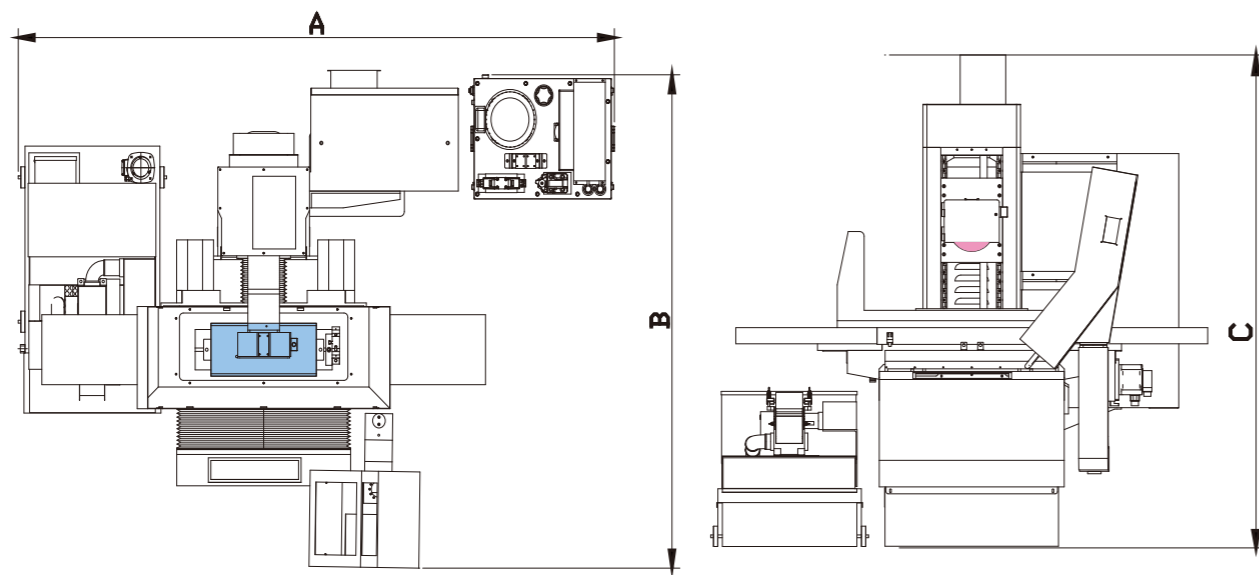


SPECIFICATIONS

E A S Y			820CNC II	820CNC III	1224CNC II	1224CNC III	1632CNC II	1632CNC III	1640CNC II	1640CNC III	2040CNC II	2040CNC III	2060CNC II	2060CNC III	2448CNC II	2448CNC III	2460CNC II	2460CNC III	2480CNC II	2480CNC III	24100CNC II	24100CNC III	24120CNC II	24120CNC III
Capacity	Maximum grinding (width x length)		8"x20"		12"x24"		16"x32"		16"x40"		20"x40"		20"x60"		24"x40"		24"x60"		24"x80"		24"x100"		24"x120"	
	Maximum distance for table surface to spindle centerline		19.6"		22"		22"		23"		24"		24"		27.5"		27.5"		27.5"		27.5"		27.5"	
Table	Table size (width x length)		8"x20"		12"x24"		16"x32"		16"x40"		20"x40"		20"x60"		24"x48"		24"x60"		24"x80"		24"x100"		24"x120"	
	Maximum longitudinal travel		24"	24"	30"	30"	35"	35"	48"	48"	42"	42"	42"	42"	50"	50"	61.4"	61.4"	81"	81"	100.7"	100.7"	120.4"	120.4"
	Maximum cross travel		9.4"		12.5"		16.3"		16"		22"		22"		26"		26"		26"		26"		26"	
	T-slot (No x width)		1x0.5"		1x0.5"		1x0.5"		3x0.5"		3x0.5"		3x0.5"		3x0.5"		3x0.5"		3x0.5"		3x0.5"		3x0.5"	
Longitudinal Movement	Hydraulic transverse feed	In/Min	984	N/A	984	N/A	984	N/A	984	N/A	984	N/A	984	N/A	984	N/A	984	N/A	984	N/A	984	N/A	984	N/A
	Rapid transverse servo feed	In/Min	N/A	787	N/A	787	N/A	787	N/A	787	N/A	787	N/A	787	N/A	787	N/A	787	N/A	787	N/A	787	N/A	787
Cross Movement	Rapid transverse feed	In/Min	196		196		196		192		196		196		196		196		196		196		196	
	Least increment input		0.0001"		0.0001"		0.0001"		0.0001"		0.0001"		0.0001"		0.0001"		0.0001"		0.0001"		0.0001"		0.0001"	
Elevation Movement	Rapid feed	In/Min	196		196		196		192		118		118		78		78		78		78		78	
	Least increment input		0.0001"		0.0001"		0.0001"		0.0001"		0.0001"		0.0001"		0.0001"		0.0001"		0.0001"		0.0001"		0.0001"	
Spindle & Wheel	Spindle motor	HP	5HP		7.5HP		7.5HP		10HP		10HP(15 opt.)		10HP(15 opt.)		15HP		15HP		15HP		15HP		15HP	
	Spindle speed	rpm	3600		1800		1800		1720		1800(1100 opt.)		1800		1100		1100		1100		1100		1100	
Wheel	Grinding wheel outside diameter		Ø8"x0.5"		Ø14"x2"		Ø16"x2"		Ø16"x2"		Ø16"x2"		Ø16"x2"		Ø16"x2"		Ø16"x2"		Ø16"x2"		Ø16"x2"		Ø16"x2"	
	Grinding wheel bore		Ø1.25"		Ø5"		Ø5"		Ø5"		Ø5"		Ø5"		Ø5"		Ø5"		Ø5"		Ø5"		Ø5"	
Motor	Hydraulic	HP	1	N/A	2	N/A	2	N/A	2	N/A	4	N/A	6.7	N/A	6.7	N/A	6.7	N/A	6.7	N/A	6.7	N/A	6.7	N/A
	Cross feed (AC servo)	HP	1.3		1.3		1.3		2.6		2.4		2.4		2.4		2.4		2.4		2.4		2.4	
	Vertical feed (AC servo)	HP	1.3		1.3		1.3		4		2.6		2.6		4		4		4		4		4	
	Longitudinal feed (AC servo)	HP	N/A	1.3	N/A	1.3	N/A	1.3	N/A	2.6	N/A	2.6	N/A	2.6	N/A	4	N/A	4	N/A	4	N/A	4	N/A	4
Machine Size	Weight (net/gross Approx.)	lbs.	4850/5290		8928/9920		9920/11243		10471/11486		10802/12125		14462/16534		13444/14550		19400/21605		21715/23479		24030/25794		26433/28214	
	Packing dimensions (L x W x H)		90"x80"x90"		112"x88"x101"		121"x91"x102"		152"x92"x100"		137"x90"x100"		191"x88"x88"		120"x88"x81"		203"x90"x100"		247"x90"x100"		300"x90"x100"		322"x104"x100"	

Note : All machine design and specification are subject to change without prior notice.

Floor Space



MODEL	EASY-820	EASY-1224	EASY-1632	EASY-1640	EASY-2040	EASY-2060	EASY-2448	EASY-2460	EASY-2480	EASY-24100	EASY-24120
A	102"	104"	122"	182"	132"	185"	181"	198"	242"	293"	317"
B	81"	101"	101"	105"	101"	101"	118"	118"	118"	118"	118"
C	84"	96"	101"	93"	104"	104"	104"	104"	104"	104"	104"

Unit: inch

Standard Accessories

- Leveling Bolts with Blocks
- Balancing Stand
- Tool Box with Tools
- Grinding Wheel with Flange
- Wheel Extractor
- Spindle Inverter
- Diamond Pen with Holder
- Working Light
- Three-Color Warning Lights
- Operation Manual and Part List
- Splash Guard For Table

Optional Accessories

- Electromagnetic Chuck
- Permanent Magnetic Chuck
- Fine-Pole Permanent Magnetic Chuck
- Tilting Permanent Magnetic Chuck
- Chuck Controller
- Oil Mist Collector
- Dust And Mist Collector
- Dust Collector
- Rotary Table
- Indexing Table
- Single Disc Roller Dresser
- Multi-tip Diamond Dresser
- Roller Type Balancing Stand
- Linear Scale (Y/Z Axis)
- Fully Enclosed Splash Guard
- Extra Grinding Wheel Flange
- Coolant System w/ Magnetic Separator
- Coolant System w/ Paper Filter
- Coolant System w/ Magnetic Separator and Paper Filter