



CNC Surface and Profile Grinder EASY series

e-techMachinery, Inc.

No.36, Ln.686, Sec.4, Changping Rd.,
Daya Dist., Taichung City 428
Taiwan(R.O.C)

E-mail : info@etechtw.com

TEL : 886-425686418

URL : www.etechtw.com

e-techUSA

6435 Alondra Blvd, Paramount,
CA.90723

E-mail : info@supertecusa.com

TEL : (562) 220-1675

URL : www.supertecusa.com

e-techChina

No.1288 Chengbei Middle Road, Yushan
Town, Kunshan City, Jiangsu.

(China Zhengtailong International
Equipment Purchase Center, Hall 8,
1F-A13, 2F-D17)

E-mail : gzminz@gmail.com

TEL : 86-0512-5039 3617

URL : www.etechtw.com/cn



EASY CNC · Printed in Taiwan · E1 · 03/2017 · en



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 200x500, 300x600 and 400x800 mm.
 to max. 600x3000mm.
 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 programing or down loading programs from a CAD file through the USB ports.



EASY-820 CNC III

EASY CNC SERIES Unit: mm

Model	820	1224	1632	2040	2060	2448	2460	2480	24100	24100
Table size (width x length)	200x500	300x600	400x800	500x1000	500x1500	600x1200	600x1500	600x2000	600x2500	600x3000

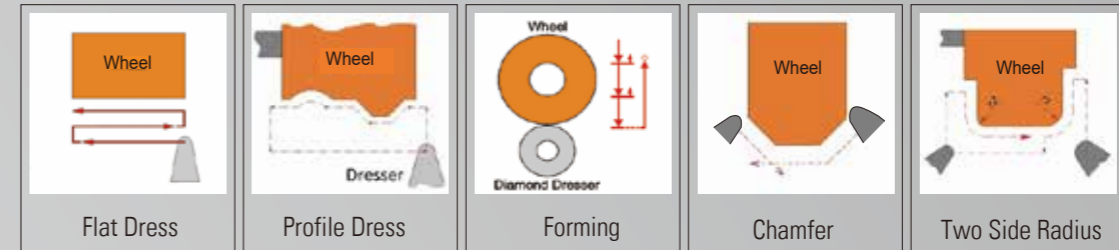
Control Features

- Multiple Box Slicing function
- High speed wheel dressing
- 0.001 mm (0.0001") least increment input.
- Graphic conversational programing 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



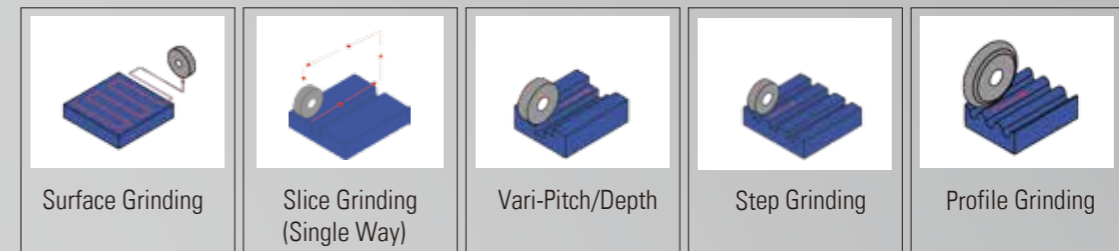
Graphic conversational dressing modes

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 .

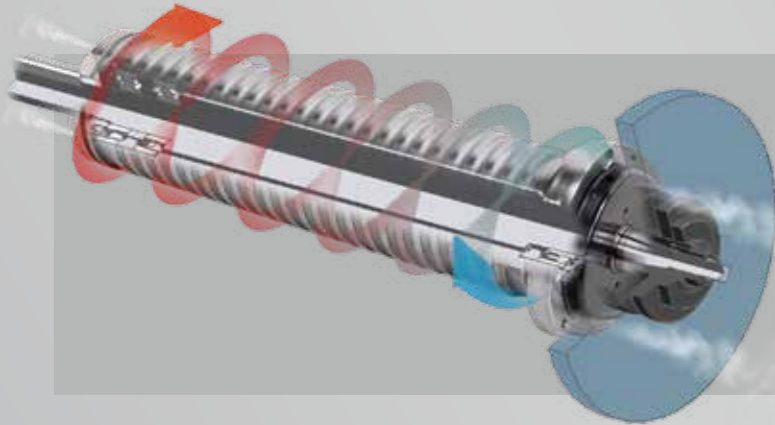


Graphic conversational grinding modes

The grinding funtions 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.

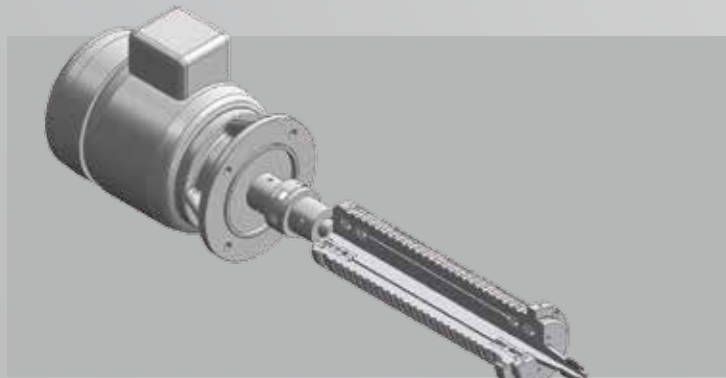


Machine Design Features



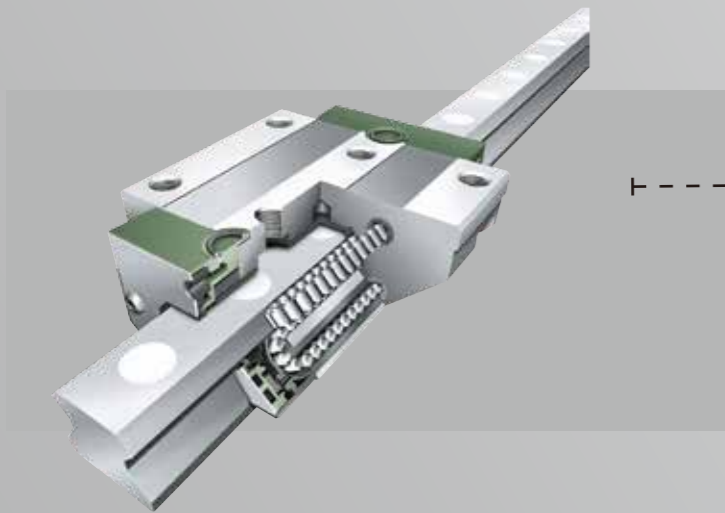
Spindle Air Purge design

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 efficiently prevents small chips from entering.



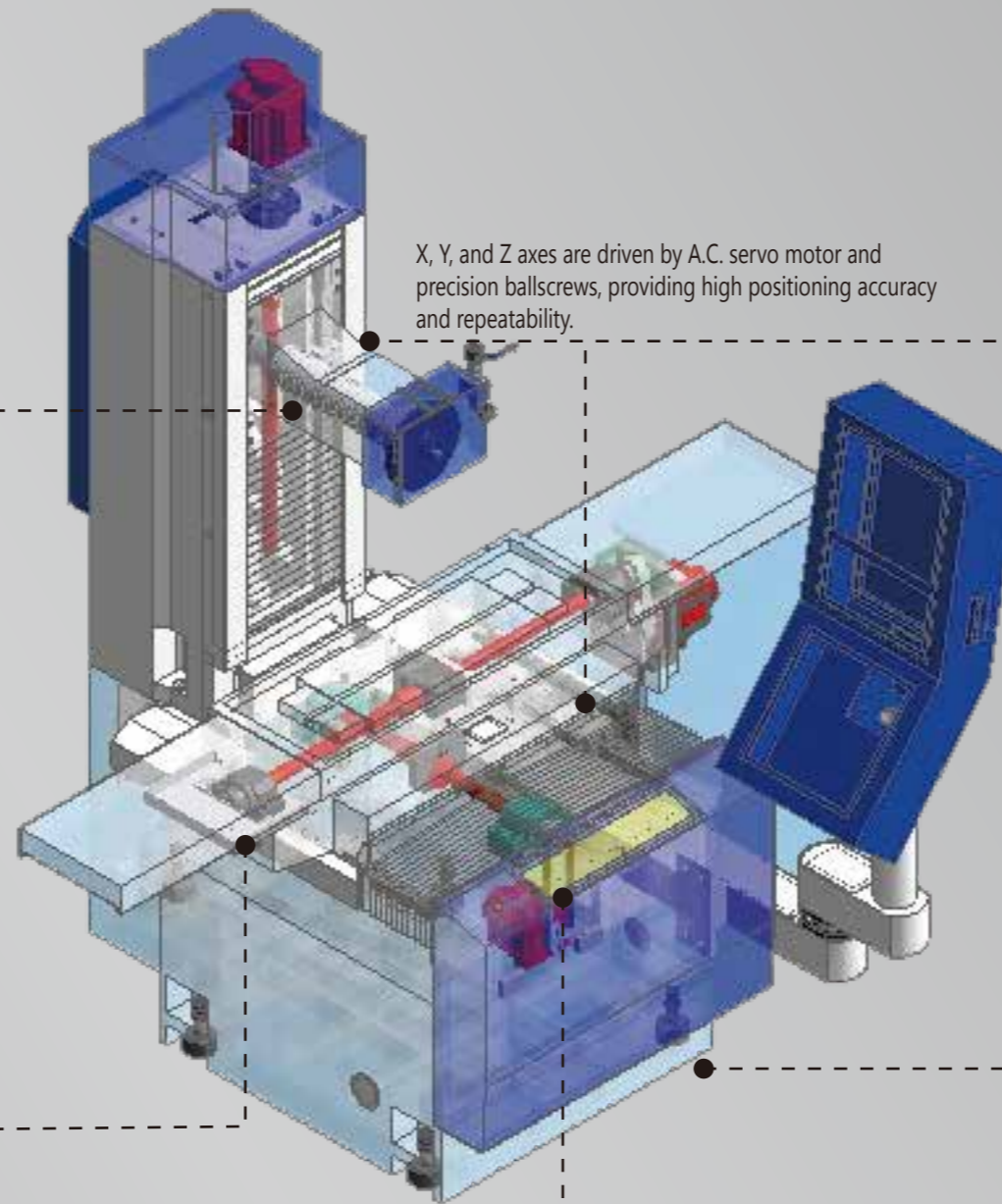
5 HP Spindle Motor (EASY 820)

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



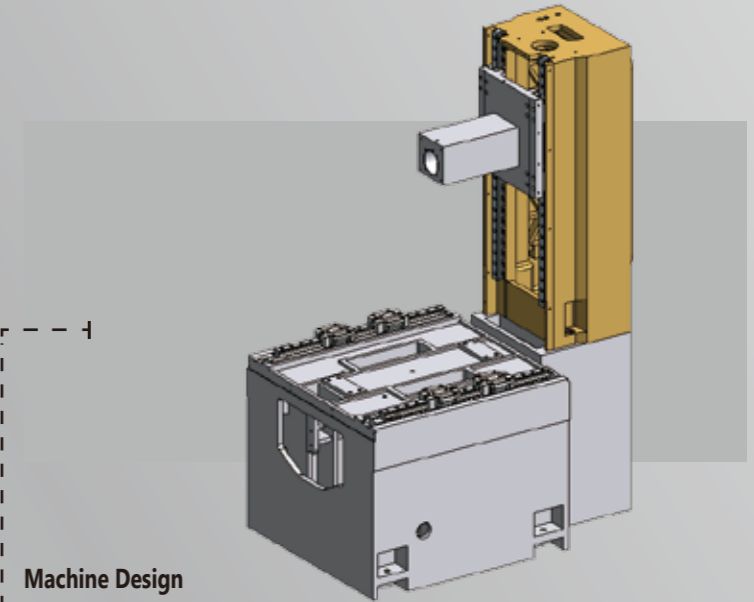
Roller Type Linear Ways

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



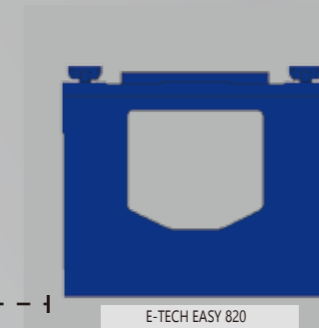
X, Y, and Z axes are driven by A.C. servo motor and precision ballscrews, providing high positioning accuracy and repeatability.

EASY-820CNC III



Machine Design

Extra wide 774mm (30.47") machine base design, providing excellent rigidity for low vibration dynamic grinding, 435mm (17.12") large column width design offers higher stability and rigidity than other manufacturers.



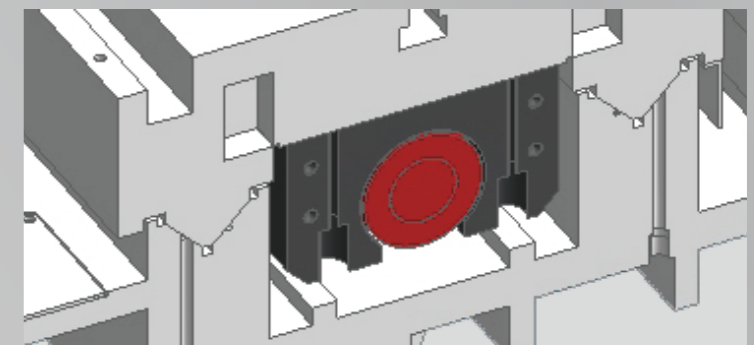
E-TECH EASY 820



OTHERS

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 : 2,200 kgs (4,840 lbs).



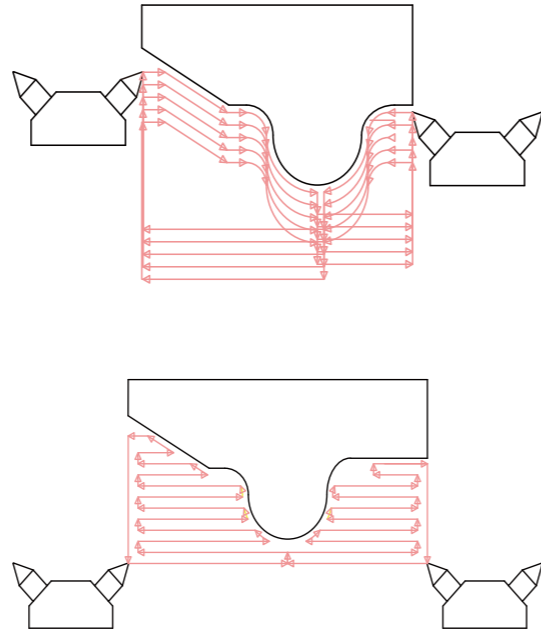
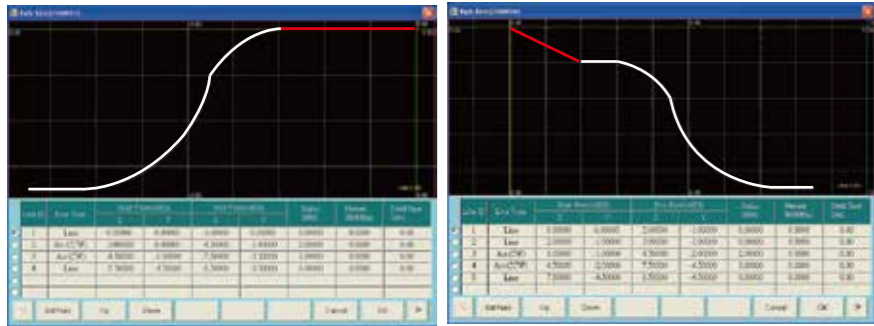
Double "V" Table Way Design

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

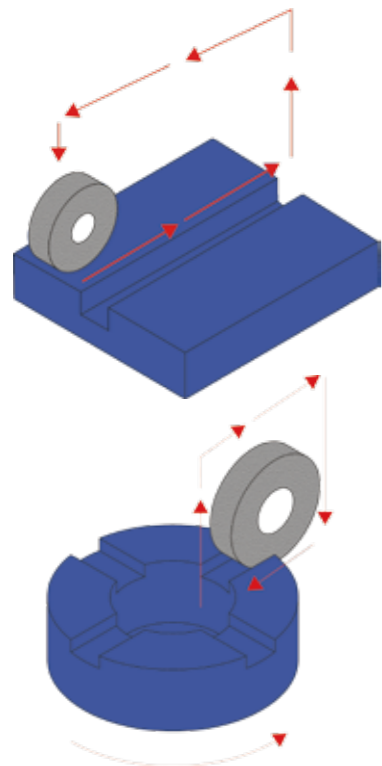
The most efficient way to profile a new wheel is with the EASY high speed wheel dressing function. This unique function dramatically reduces new wheel forming time, thus greatly increases the grinding efficiency.

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

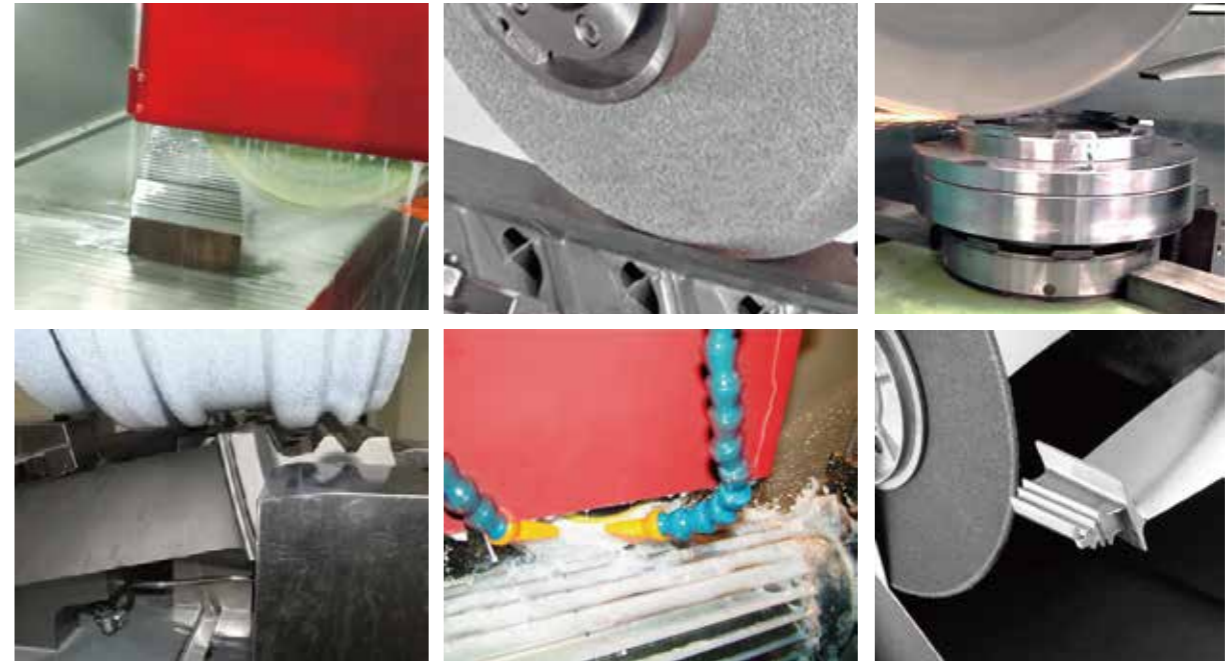
Box slice function incorporates with other indexing devices for high accuracy slicing and forming grinding.



Box slicing Function

Box slicing + indexer(opt.)

Application Samples

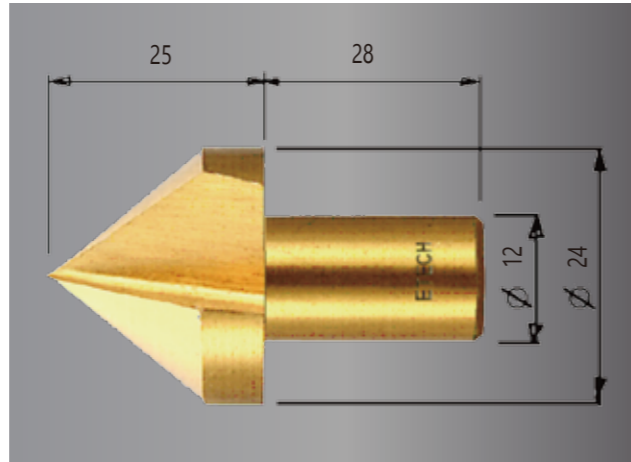


Optional Accessories



Grinding Example

Workpiece : Chamfering Tool
 Job : Flute Grinding
 Material : Steel Alloy
 Hardness : HRC 55
 Grinding Wheel : 81A46-3J9
 Total Grinding Amount : 4.2 mm
 Rough Grinding : 40 sec
 Fine Grinding : 20 sec
 Wheel Dressing : 170 sec
 Cycle time : 7 minutes 50 sec (2 flutes grinding)

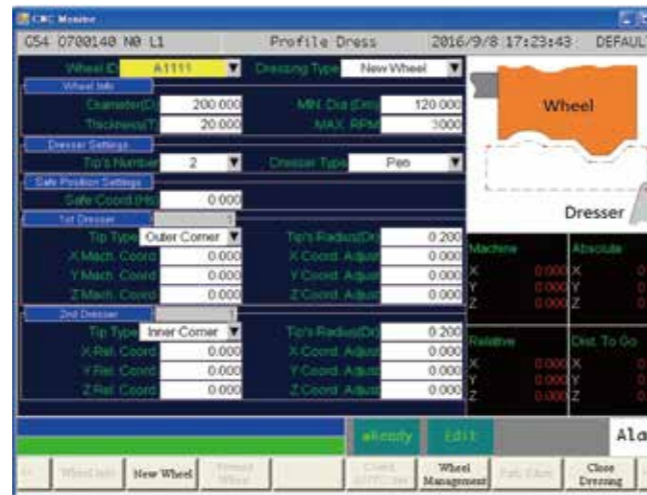


- Optional accessories :
1. Two tips diamond dresser
 2. Special fixture + indexer

Getting Started with EASY grinder is so easy

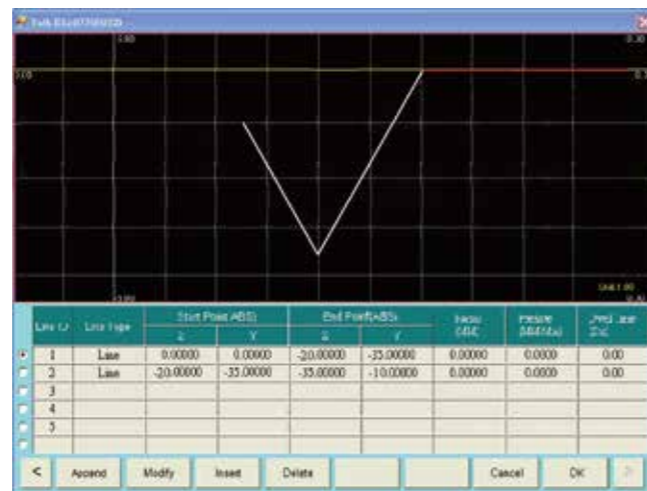
Step 1. Select dressing mode

Input the dressing values.



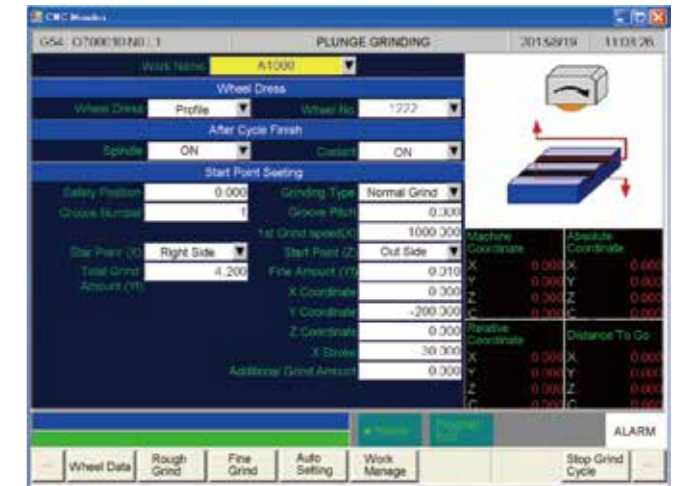
Step 2. Input wheel profile

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.

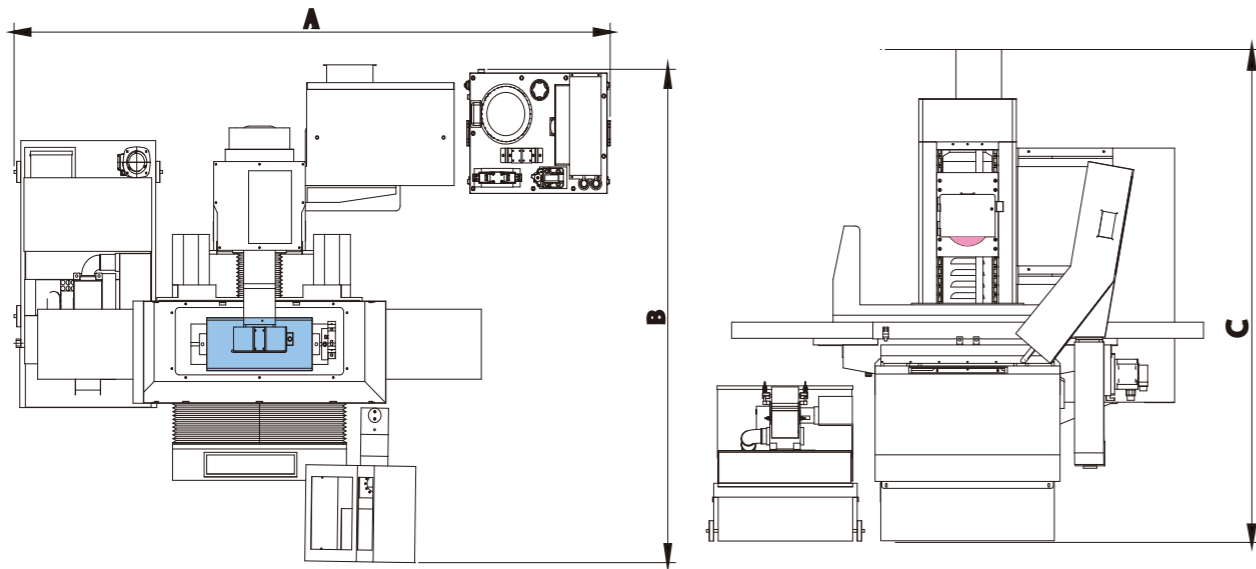


SPECIFICATIONS

E A S Y			820CNC II	820CNC III	1224CNC II	1224CNC III	1632CNC II	1632CNC III	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)	mm	200X500		300X600		400X800		500X1000		500X1800		600X1200		600X1500		600X2000		600X2500		600X3000	
	Maximum distance for table surface to spindle centerline	mm	500		560		560		600		600		700		700		700		700		700	
Table	Table size (width x length)	mm	200X500		300X600		400X800		500X1000		500X1500		600X1200		600X1500		600X2000		600X2500		600X3000	
	Maximum longitudinal travel	mm	600	600	710	710	900	900	1060	1060	1060	1060	1260	1260	1560	1560	2060	2060	2560	2560	3060	3060
	Maximum cross travel	mm	240		320		415		560		560		660		660		660		660		660	
	T-slot (No. x width)	mm	1X13		1X13		1X13		3X14		3X14		3X14		3X14		3X14		3X14		3X14	
Longitudinal Movement	Hydraulic transverse feed	m/min	25	-	25	-	25	-	25	-	25	-	25	-	25	-	25	-	25	-	25	-
	Rapid transverse servo feed	m/min	-	20	-	20	-	20	-	20	-	20	-	20	-	20	-	20	-	20	-	20
Cross Movement	Rapid transverse feed	m/min	5		5		5		5		5		5		5		5		5		5	
	Least increment input	mm	0.001		0.001		0.001		0.001		0.001		0.001		0.001		0.001		0.001		0.001	
Elevation Movement	Rapid feed	m/min	5		5		5		3		3		2		2		2		2		2	
	Least increment input	mm	0.001		0.001		0.001		0.001		0.001		0.001		0.001		0.001		0.001		0.001	
Spindle & Wheel	Spindle motor	HP	3HP (5HP opt.)		5HP		10HP		10HP (15HP opt.)		10HP (15HP opt.)		15HP		15 HP		15 HP		15 HP		15 HP	
	Spindle speed	rpm	3600		1800		1800		1800 (1100rpm opt.)		1800		1100		1100		1100		1100		1100	
	Grinding wheel outside diameter	mm	ø200X13		ø360X50		ø410X50		ø410X50		ø410X50		ø410X50		ø410X50		ø410X50		ø410X50		ø410X50	
	Grinding wheel bore	mm	ø30		ø127		ø127		ø127		ø127		ø127		ø127		ø127		ø127		ø127	
Motor	Hydraulic	kw	0.74	-	1.4	-	1.4	-	3	N/A	5	N/A	5	N/A	5	N/A	5	N/A	5	N/A	5	N/A
	Cross feed (AC servo)	kw	1		1		1		1.8		1.8		1.8		1.8		1.8		1.8		1.8	
	Vertical feed (AC servo)	kw	1		1		1		2		2		3		3		3		3		3	
	Longitudinal feed (AC servo)	kw	-	1	-	1	-	1	-	2	-	2	-	3	-	3	-	3	-	3	-	3
Machine Size	Weight (net/gross Approx.)	kg	2200/2400		4050/4500		4500/5100		4900/5500		6560/7500		6100/6600		8800/9800		9850/10650		10900/11700		11990/12800	
	Packing dimensions (L x W x H)	mm	2290X2035X2290		2850X2250X2590		3073X2316X2590		3500X2280X2550		4860X2250X2250		3060X2240X2070		5180X2280X2550		6290X2280X2550		7600X2280X2550		8200X2650X2550	

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

Floor Space



MODEL	EASY-820	EASY-1224	EASY-1632	EASY-2040	EASY-2060	EASY-2448	EASY-2460	EASY-2480	EASY-24100	EASY-24120
A	2608	2645	3098	3350	4710	2810	5030	6140	7450	8050
B	2069	2575	2575	2600	2990	2990	2990	2990	2990	2990
C	2127	2430	2562	2650	2650	2650	2650	2650	2650	2650

Unit: mm

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
- Coolant Tank
- 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