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High Precision Clamping Grinders

Reliability, Precision
& Performance

REFER TO OP
INSTRUCTIONS

Max 85kN
Max 32kN
Max 5000RPM

Praet Burnerd
International
500 Group

HSQC POWER CHUCK
9137-26870
SERIAL No. K04238



Trusted in industry for over

100 Years

Direct sales in
Europe,
North America,
& Australia



Recognised

Worldwide
brands



Distribution in
50
Countries



Over 400
distributors
in North America



COLCHESTER GRINDER

SPECIFICATION

UF / CSG-618 Manual type

UF / CSG-618M/818M
Manual type (Ballway)

1A: Longitudinal hydraulic

2A: Longitudinal hydraulic and crossfeed motorised

3A: Longitudinal hydraulic and crossfeed motorised and rapid up /down motorised

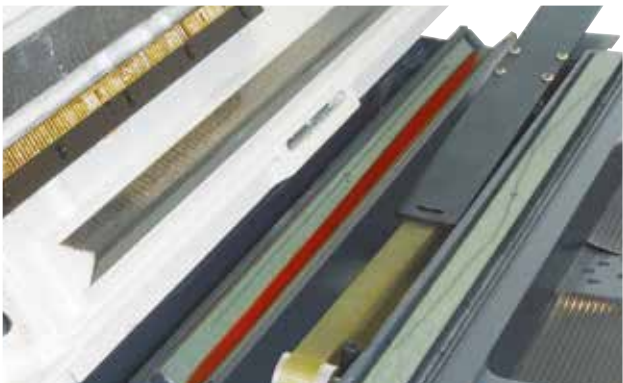
ASDIII: equipped plc ontrol and man-machine 7.2" touch colour screen



Patented steel wire timing belt transmission system (for 618m / 818m only) high precision slides way and steel balls assemble that allow lasting accuracy and smooth movement.



Indexible table handwheel (manual type only).



Hand scrapped one v one "t" turcite-b slide ways for table longitudinal movement.



Table travel adjustment, provide built-in-type (hidden) proximity switch, features safe and easy operation.



ASD models cross traverse system.



The saddle rests on precision hand-scraped double v ways, and the table rests on precision hand-scraped v and flat ways which coated with "turcite-b" these guide ways are equipped with auto lubrication to resist wear of guide ways, plus lasting accuracy and damping.

HYDRAULIC SERIES

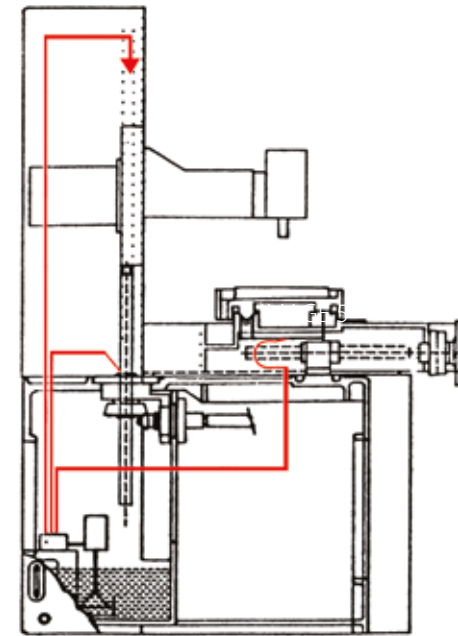


Model : CSG-1A618 / 1A818 CSG-2A618 / 21818
 CSG-1A618 / 1A818 :
 Longitudinal hydraulic grinder
 CSG-2A618 / 21818 :
 Longitudinal hydraulic & cross

Model : CSG-3A618 / 3A818
 3A: longitudinal hydraulic & cross motorised
 and rapid up/down

Model : CSG-1A1020 / CSG-2A1020 / CSG-3A1020

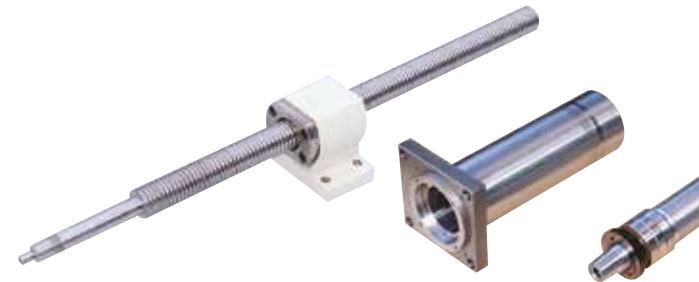
Model : CSG-2A1224 / CSG-3A1224



Auto lubrication system



Model : CSG-3A1228 / CSG-3A1236 / CSG-3A1632 /
 CSG-3A1640



Cross feed high feed
 precision ball screw

1228-1648 Models high
 precision spindle



Easy-adjust guarded
 proximity switch
 (long & cross)



Honeycomb-ribbed column



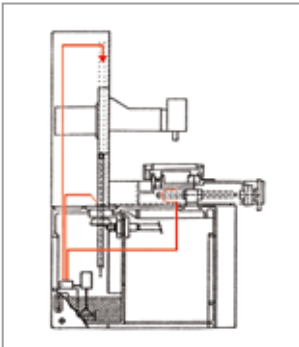
Humanware for High Precision

On ASDIII Models, you can set the vertical zero point, start point, finish grinding volume, target point and the grinding wheel rise-up point

- The machines features a simple and clear digital display and touch control panel for easy learning and efficient operation
- Vertical feed powered by an efficient AC servomotor
- Vertical positioning is displayed on the screen showing present spindle and setting the start point, rough grinding volume, finish grinding volume, downfeed volume for finish grinding, target point, rise up point, intermittent spark out
- Cross tranverse travel is powered by AC servomotor – this allows for step feeding and continuous infeed grinding. The speed of wheel dressing can be adjusted on the panel.



Table travel adjustment, provide built-in-type (hidden) proximity switch, features safe & easy operation



Auto lubrication system.



Honeycomb-ribbed column.



1228-2040 Models table speed control.



Enlarged double v base. These guideways are equipped with auto lubrication to resist wear of guide ways, plus lasting accuracy and damping.

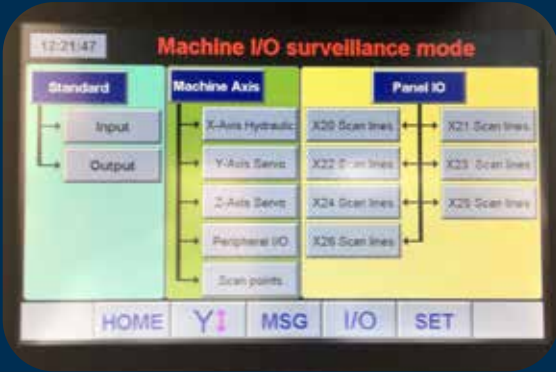
ASDIII PLC TOUCH
PANEL SETTING

- 7.2" Colour touch screen
- Embedded mpg
- Chuck control (optional)
- Z axis cross travel setting

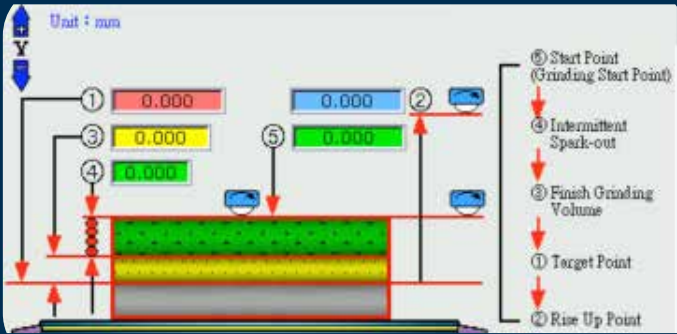


An interface
for humanistic
technology

- Column**
Enlarged honeycomb ribbed column especially suitable for heavy duty grinding.
- Cross feed**
cross feed ball and screm is driven by ac servomotor, there are two speed rates – rough grinding speed and finish grinding speed, provide high efficiency.
- High anti-wear guide-ways**
the saddle rests on precision hand scraped double v ways, and the table rests on precision hand scraped v and flat ways which coated with "turcite b" these guide ways are equipped with auto lubrication to resist wear of guide ways and provide stable movement and durable accuracy.
- Operation Panel**
Man-machine 7.2" touch colour screen equipped PLC digital control and Euiptop exclusive pictures mode working system, easy to learn and operate.



Machine i / o monitoring



Digit setting for grinding



Downfeed (rough grinding, finish grinding, sparkout setting) minimum display unit: y axis 0.001Mm / z axis 0.001Mm



System data

ASDIII PLC TOUCH
PANEL SETTING



Model : CSG-2040ASDIII

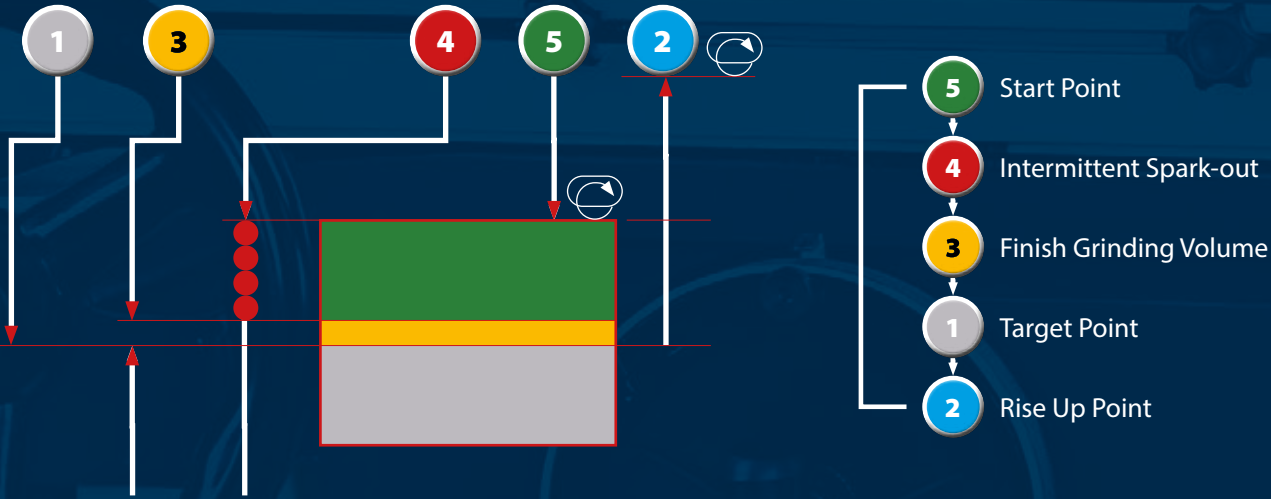


Model : CSG-2040ASDIII



Model : CSG-1228TD/1632ASDIII

Full guarded splash
guard (optional)



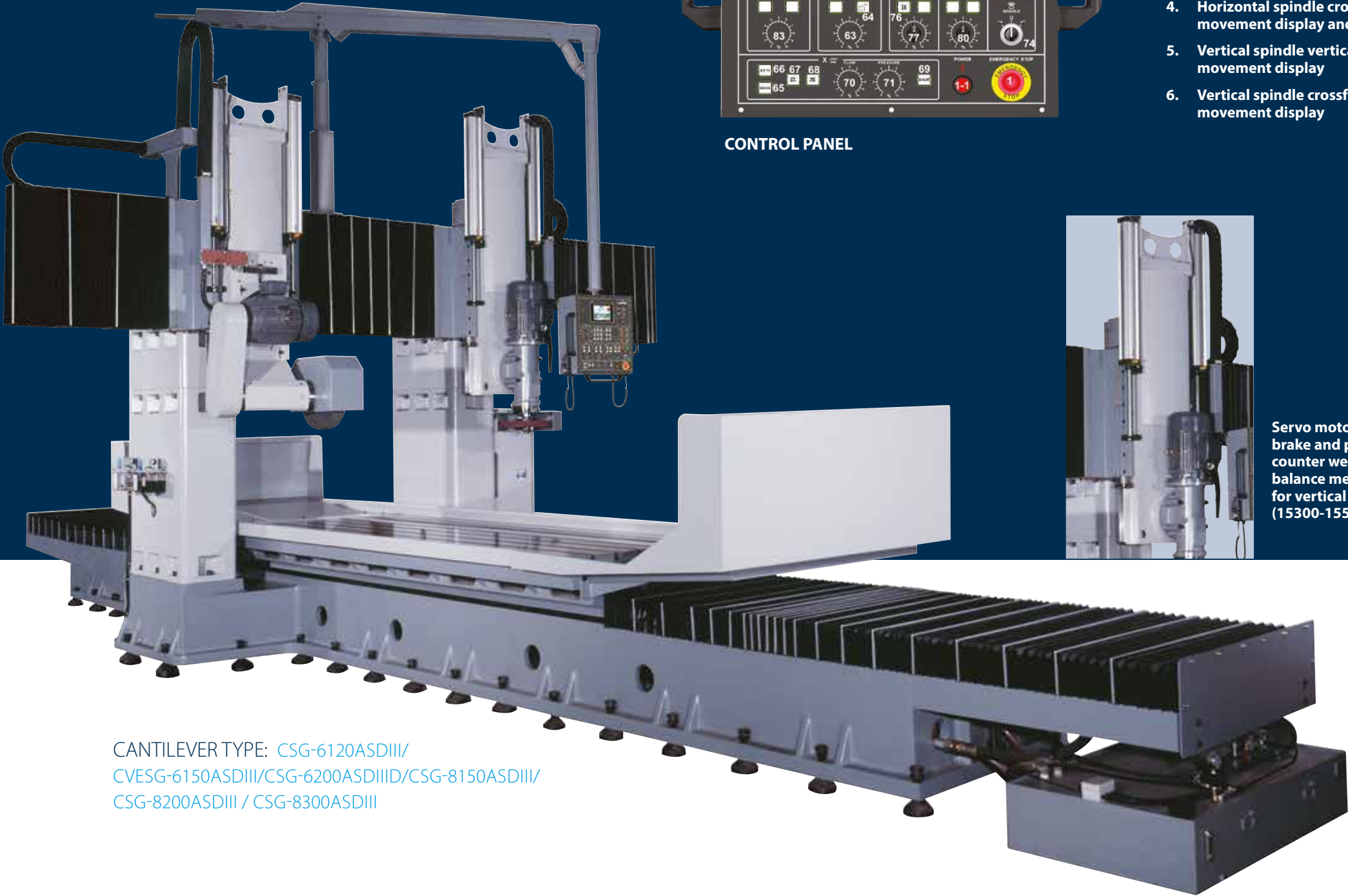
ASDIII SERIES



COLUMN TYPE :
CSG-2448ASDIII / CSG-2460ASDIII /
CSG-24120ASDIII

CANTILEVER TYPE:
CSG-6120ASDIII/CSG-6150ASDIII /
CSG-6200ASDIII / CSG-8150ASDIII/
CSG-8200ASDIII/CSG-8300ASDIII

DOUBLE EDGE GRINDER



CANTILEVER TYPE: CSG-6120ASDIII/
CVESG-6150ASDIII/CSG-6200ASDIID/CSG-8150ASDIII/
CSG-8200ASDIII / CSG-8300ASDIII



CONTROL PANEL

CONTROL PANEL DESCRIPTION

- 1. Horizontal spindle vertical movement mechanical coordinates
- 2. Working digital control setting
- 3. Working mode selector
- 4. Horizontal spindle crossfeed movement display and setting
- 5. Vertical spindle vertical movement display
- 6. Vertical spindle crossfeed movement display



Servo motor with brake and pneumatic counter weight balance mechanism for vertical axis (15300-15500)



Patented linear and box way structure



Swivel vertical spindle provides simple operation. Adjustable angle for high efficiency grinding

OPTIONAL ACCESSORIES



Adjustable speed rotary magnetic chuck



Permanent magnetic chuck



Electro magnetic chuck



Inclinable permanent magnetic chuck



Dynamic balancer



Punch former



Digital readout



Manual pulse generator



Coolant system with magnetic separator



Coolant System



Coolant and dust unit



Auto paper feeding device with magnetic separator



Spare wheel flange



Halogen work light



Balancing stand (Double line)



Frequency inverter



Dust collection



Coolant system with manual paper feeding



Fully enclosed splash guard



Roller type balancing stand



Micro crossfeed 618/818 series



Concave/convex forming dresser



Hydraulic oil cooling system



Manual parallel dressing attachment



Chuck control with demagnetizer



Table type splash guard



Electrical parallel dressing attachment



Micro down-feed for 120 series above



Manual pulse generator for ASD II, ASDIII type



Precision vice

SPECIFICATIONS

Descriptions	Model	UF-614 CSG-614	UF-618/618M CSG-618/618M CSG-1A618/2A618	CSG-3A618	UF-818M CSG-818/818M CSG-1A818/2A818	CSG-3A818	CSG-2A 1020	CSG-3A1020	CSG-2A1224	CSG-3A1224	CSG-3A1228	CSG-3A1236	CSG-3A1632	CSG-3A1640
TABLE SIZE		152x360mm	152x460mm	203x460	254x508mm	254x508mm	300x600mm	305x712mm	305x915mm	406x813mm	406x1020mm			
Max. Grinding Length	Longitudinal	380mm	480mm	520mm	520mm	600mm	712mm	915mm	813mm	1020mm				
Max. Grinding width	Crosswise	178mm	178mm	228mm	280mm	280mm	300mm	330mm	410mm					
Max. distance from table surface to spindle centreline		406mm	460mm	Standard Column: 500m Optional high Column: 600mm	Standard Column: 500m Optional high Column: 600mm	585mm	Standard Column: 630m Optional high Column: 720mm							
Standard magnetic chuck size		150x350mm	150x450mm	200x450mm	250x500mm	250x500mm	300x600mm	300x700mm	300x900mm	400x800mm	400x1000mm			
Longitudinal movement of table	Max. travel, hydraulic		480mm	580mm	580mm	650mm	970mm	860mm	890mm	1060mm				
	Max. travel, manual	400mm	510mm	620mm	620mm	730m	830mm	1000mm	930mm	1100mm				
	Max. travel, infinitely variable		60HZ, 5-28m/min; 50HZ, 5+23m/min	60HZ, 5-25m/min; 50HZ, 5-20m/min	60HZ, 5-25m/min; 50HZ, 5-20m/min									
Cross transverse travel	Auto transverse increment		1-10mm	1-13mm	1-13min	1-19min	1-25min							
	Auto constant feeding speed		20-320mm/min			20-320mm/min								
	Max. auto transverse travel		180mm	235mm	270mm	310mm	350mm	430mm						
	Max. manual transverse travel	190mm	195mm	250mm	300mm	340mm	380mm	460mm						
	Handwheel per revolution		5mm			5mm								
	Handwheel per graduation		0.02mm			0.02mm								
Wheelhead vertical infeed	Automatic infeed		ASD II:0.001-0.05mm	ASD: 0.001-0.01mm/ASD II: 0.001-0.05mm										
	Step feed (jog)		0.001mm	0.001mm	0.001mm	0.001mm								
	Rapid travel approx		250mm/min	250mm/min	150mm/min	150mm/min								
	Slow travel approx		6mm/min	6mm/min	6mm/min	6mm/min								
	Handwheel revolution		1mm ASD II	1mm ASD II: Min display value: 0.001mm (no elevating hardwheel)										
	Handwheel graduation		0.005mm ASD II	0.005mm ASD II: Min.display value: 0.001mm (no elevating handwheel)										
Grinding Spindle drive	Speed	60HZ, 3450R.P.M; 50HZ, 2850R.P.M.	60HZ, 1750rpm; 50HZ, 1450rpm											
	Power rating	2.0HP	3.0HP	3.0HP	5.0HP	Standard: 5HP; Optional:71/2HP								
Standard grinding wheel	Diameter	203mm	203mm	304mm	355mm									
	Width	12.7mm, max. 19mm	19mm max 25mm	19mm, max.25mm	31.75mm	50mm								
	Bore	31.75mm	31.75mm	76.2mm	127mm									
Hydraulic motor	Power rating	1HP	2.0HP	2.0HP	3.0HP									
Crossfeed motor	Power rating	40W/ASDII: 500W	80W	80W/ASD II: 500W										
Elevating motor	Power rating	60W	80W	80W	1/4HP									
Floor Space	Total space required	1600x1133 x1610mm	1810x1133x1660mm	1810x1285x1680mm	2400x1450x 1750mm	2400x1450x 1750mm	2700x1600x 1850mm	2950x1970x 2050mm	3550x1970x 2050mm	3290x2200x 2050mm	4020x2200x 2050mm			
Weights	Net weight approx	635kgs	820kgs	850kgs	1170kgs	1205kgs	1780kgs	1810kgs	1950kgs	1990kgs	3020kgs	3330kgs	3400kgs	4000kgs
	Gross weight approx	755kgs	970kgs	1000kgs	1340kgs	1375kgs	2130kgs	2160kgs	2250kgs	2290kgs	3520kgs	3700kgs	4000kgs	4500kgs
Rated power approx		30.HP	5.0HP	5.0HP	7.5HP	8 1/4HP	8 1/2 (Spindle Motor: 5HP), 11HP (Spindle motor: 7.5HP)							
Packing dimensions	LxWxH	1120x1000x 1830mm	1940x1400x 1930mm	1980x1420x 1930mm	1120x1000x 1830mm	1890x1630x 1930mm	2290x1830x 2100mm	2480x2060x 2100mm	2340x2130x 2100mm	2480x2140x 2100mm	2500x2290x 2220mm	3000x2290x 2220mm	2800x2290x 2220mm	3250x2290x 2220mm

ASDIII SPECIFICATIONS

Descriptions	Model	CSG-818ASDIII	CSG-1020ASDIII	CSG-1224ASDIII	CSG-1228ASDIII	CSG-1236ASDIII	CSG-1632ASDIII	CSG-1640ASDIII	CSG-2040ASDIII
TABLE SIZE		203x460mm	254x508mm	300x600mm	305x712mm	305x915mm	406x813mm	406x1020mm	506x1020mm
Max. Grinding Length	Longitudinal	480mm	520mm	600mm	712mm	915mm	813mm	1020mm	1020mm
Max. Grinding width	Crosswise	228mm	280mm	300mm	330mm		410mm		500mm
Max. distance from table surface to spindle centreline		460mm	Standard Column: 500m Optional high Column: 600mm	585mm	Standard Column: 630m Optional high Column: 720mm				710mm
Standard magnetic chuck size		200x450mm	250x500mm	300x600mm	200x700mm	300x900mm	400x5800mm	400x1000mm	500x1000mm
Longitudinal movement of table	Max. travel, hydraulic	480mm	4580mm	650mm	760mm	960mm	890mm	1060mm	1060mm
	Max. travel, manual	510mm	620mm	730mm	830mm	1000mm	930mm	1100mm	1100mm
	Max. travel, infinitely variable	60HZ, 5-25m/min; 50HZ, 5-20m/min							
Cross transverse travel	Auto transverse increment	1-10min	1-13mm	1-19mm	1-25mm				
	Auto constant feeding speed	20-320mm/min							
	Max. auto transverse travel	235mm	270mm	310mm	350mm		430mm		510mm
	Max. manual transverse travel	250mm	300mm	340mm	380mm		460mm		520mm
	Handwheel per revolution	5mm							
	Handwheel per graduation	0.02mm							
Wheelhead vertical infeed	Automatic infeed	0.001-0.05mm							
	Step feed (jog)	0.001mm							
	Rapid travel approx	150mm/min							
	Slow travel approx	6mm/min							
Grinding Spindle drive	Speed	50/60HZ, 2850/3450R.P.M.			50/60HZ, 2850/3450R.P.M.				
	Power rating	2.0HP	3.0HP	5.0HP	Standard: 5HP; Optional:7.5HP				
Standard grinding wheel	Diameter	203mm		305mm		355mm			
	Width	Standard 12.7mm Optional: 19mm	Standard 19mm Optional: 25mm	31.75mm		50mm			
	Bore	31.75mm		76.2mm		127mm			
Hydraulic motor	Power rating	1.0HP	2.0HP			3.0HP			
Crossfeed motor	Power rating	400W					750KW		
Elevating motor	Power rating	400W	750W			1W			
Floor Space	Total space required	1810x1285 x1680mm	2380x1450x 1750mm	2700x1600 x1850mm	2950x1970 x2050mm	3550x1970 x2050mm	3290x2200 x2050mm	4020x2200 x2050mm	4170x2200 x2100mm
Weights	Net weight approx	1205KGS	1810KGS	1990KGS	3020KGS	3330KGS	3400KGS	4000KGS	4800KGS
	Gross weight approx	1375KGS	2160KGS	2290KGS	3520KGS	3700KGS	4000KGS	4500KGS	5200KGS
Rated power approx		3.8HP	7HP	9HP	11HP(Spindle motor: 5HP), 13.5HP(Spindle motor: 7.5HP)				13.5HP
Packing dimensions	LxWxH	1810x1285x 1680mm	2450x2180x 2110mm	2450x2180x 2110mm	2670x2290x 2240mm	2930x2290x 2240mm	2930x2290x 2240mm	3120x2290x 2240mm	3500x2290x 2460mm

DOUBLE EDGE GRINDERS SPECIFICATIONS

TECHNICAL SPEC		UNIT	CDG-15300	CDG-15400	CDG-15500
Capacity	Max travel (W x L)	mm	2050 x 3200	2050 x 4200	2050 x 5200
	Distance between table surface to grinding wheel(vertical head)	mm	720		
	Distance between table surface to spindle centre (horizontal head)	mm	1050		
	Working table surface	mm	1500 x 3000	1500 x 4000	1500 x 5000
	Max. Table load capacity	kg	5000	6000	7000
Cross transverse travel	Table speed	M/min	5~25		
Longitudinal movement of table	Distance between two columns	mm/min	0-2050		
	Automatic crossfeed increment (approx)	mm/min	0~50		
	Max. Crossfeed speed (approx)	mm/min	2000		
Wheelhead vertical infeed	Max. Vertical speed (approx)	mm	300		
	Mpg per graduation	MPG	0.001 X 1 i 0.01		
Grinding	Grinding wheel size (dx w x 8)	mm	Horizontal 510 x 75 x 203 ; vertical 355 x 50 x 127		
	Spindle speed	rpm	Horizontal 1150 ; vertical 1750		
Motor	Spindle motor	HP	Horizontal 20hp/6p; 25hp(opt) i vertical 5hp/4p: 7.5~15Hp(opt)		
	Vertical servo motor	kw	1.0		
	Crossfeed servo motor	kw	1.5		
	Hydraulic motor	HP	15Hp / 20hp(opt)		
Weight & Dimensions	Machine weight	Kg	36000	40000	45000
	Floor space	Mm	14500 x 8000 x 6780	16500 x 8000 x 6780	8500 x 8000 x 6780
	Packing dimension	Mm	10910 x 3880 x 2550	11520 x 3880 x 2550	1600 x 3900 x 2600

The manufacturer reseves the right to modify the design. specifications or mechanisms, to improve the performances, wilhout prior notice. All the specifications shown here are for reference only.

DOUBLE EDGE GRINDERS SPECIFICATIONS

TECHNICAL SPEC		UNIT	CDG-8200	CDG-8250	CDG-8300	CDG-8400	CDG-8500
Capacity	Max travel (W x L)	mm	1200x2300	1200x2800	1200x3300	2100x4300	1200x5300
	Distance between table surface to grinding wheel(vertical head)	mm	650				
	Distance between table surface to spindle centre (horizontal head)	mm	750				
	Working table surface	mm	800x2000	800x2500	800x3000	800x4000	800x5000
	Max. Table load capacity	kg	4000	4500	5000	75000	8500
Cross transverse travel	Table speed	M/min	5~25				
Longitudinal movement of table	Distance between two columns	mm/min	0-1250				
	Automatic crossfeed increment (approx)	mm/min	0~35				
	Max. Crossfeed speed (approx)	mm/min	3000				
Wheelhead vertical infeed	Max. Vertical speed (approx)	mm	300				
	Mpg per graduation	MPG	0.001 / 0.01 / 0.1				
Grinding	Grinding wheel size (dx w x 8)	mm	Horizontal 510 x 75 x 203 ; vertical 355 x 50 x 127				
	Spindle speed	rpm	Horizontal 1150 ; vertical 1750				
Motor	Spindle motor	HP	Horizontal 15HP / 20P(OPT) ; Vertical 1 0HP(OPT)				
	Vertical servo motor	kw	2 (servo motor · reducer 1:20)				
	Crossfeed servo motor	kw	3 (servo motor)				
	Hydraulic motor	HP	10HP / 15HP(OPT)				
Weight & Dimensions	Machine weight	kg	15500	17500	20000	24000	28500
	Floor space	mm					
	Packing dimension	mm					

DOUBLE EDGE GRINDERS SPECIFICATIONS

TECHNICAL SPEC		UNIT	CDG-10200	CDG-10250	CDG-10300	CDG-10400	CDG-10500
Capacity	Max travel (W x L)	mm	1400x2300	1400x2800	1400x3300	1400x4300	1400x5300
	Distance between table surface to grinding wheel(vertical head)	mm	650				
	Distance between table surface to spindle centre (horizontal head)	mm	700				
	Working table surface	mm	1000x2000	1000x2500	1000x3000	1000xx4000	1000x5000
	Max. Table load capacity	kg	4000	4500	5000	75000	8500
Cross transverse travel	Table speed	M/min	5~25				
Longitudinal movement of table	Distance between two columns	mm/min	0-1400				
	Automatic crossfeed increment (approx)	mm/min	0~35				
	Max. Crossfeed speed (approx)	mm/min	3000				
Wheelhead vertical infeed	Max. Vertical speed (approx)	mm	300				
	Mpg per graduation	MPG	0.001 / 0.01 / 0.1				
Grinding	Grinding wheel size (dx w x 8)	mm	Horizontal 510 x 75 x 203 ; vertical 355 x 50 x 127				
	Spindle speed	rpm	Horizontal 1150 ; vertical 1750				
Motor	Spindle motor	HP	Horizontal 15HP / 20P(OPT) ; Vertical 1 0HP(OPT)				
	Vertical servo motor	kw	2 (servo motor · reducer 1:20)				
	Crossfeed servo motor	kw	3 (servo motor)				
	Hydraulic motor	HP	10HP / 15HP(OPT)				
Weight & Dimensions	Machine weight	kg	16000	18000	21000	25500	31000
	Floor space	mm					
	Packing dimension	mm					

ENGINEERING CAPABILITIES

Tailored Machine Tool Solutions

Special requirements require
special solutions...

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Our experienced team of engineers use the latest 3D computer modelling software to collaborate with end users and develop innovative solutions.

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- Trusted in the industry for over 100 years
- Synonymous for precision, performance & reliability
- Global customer support





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With over £4 million of Colchester, Harrison & Clausen spares, our experts are there to help you identify the correct replacement part and ensure prompt delivery every time.



Reliable Servicing

Our factory trained engineering team are always available to support your machine tool, either through our dedicated help-desk or out in the field.



Machine Tool Finance

Colchester Machine Tool Solutions offer a range of innovative and highly competitive finance packages to support your machine tool purchase.



Valuable Training

Whether it's when your new machine arrives, or more intensive courses to ensure that you make the most of your machine tool, our applications specialists are there to support you.



Delivery & Installation

Our highly trained transport and service teams are on-hand to effectively deliver, install and commission your machine tool exactly to your satisfaction.



Preventative Maintenance

We work closely with you on a range of preventative maintenance contracts ensuring your assets are utilised fully, whether for one machine or a workshop of our machine tools.