

# Clausing Precision 10 - 12 - 16 Series Surface Grinders

- Longitudinal Hydraulics and Motorized Crossfeed Surface Grinders
- Longitudinal Hydraulics, Motorized Crossfeed and Motorized Rapid Up/Down Surface Grinders



Model CSG-3A1020 shown with optional dresser and coolant/dust system

Model CSG-3A1228 shown with optional paper/coolant system

## Outstanding Features...

### ■ Column

Wide, deep base & honeycomb ribbing are especially suitable for heavy duty grinding.

### ■ Construction

Table, saddle and base are cast from high grade iron, strongly ribbed.

### ■ Spindle

Large diameter spindle is supported by four preloaded precision angular contact ball bearings & one NU type Roller bearing for durable, heavy duty operation.

### ■ Enlarged Column & Base

Enlarged column & base create high stability & rigidity. The maximum height is 18" (460mm) from table surface to the center line of spindle.

### ■ Slideways

Vertical, cross (double vees) and longitudinal (vee & flat) slideways are coated with Turcite-B, to provide stable movement and durable accuracy.

### ■ Automatic Continuous Lubrication System

All slideways and screws are fully oiled by automatic continuous lubrication system to minimize wear on slideways & screws.

### ■ Cross Feed

Ball screw for cross travel, powered by AC motor.

### ■ Proximity

Has a built-in type (hidden) proximity switch for easy operation.

### ■ Table Speed Control

Presetable hydraulic table speed control allows operator to pre-set speed rate, enables you to have same speed rate when engaging hydraulic table every time.

**2A:** Longitudinal Hydraulics and Motorized Crossfeed

**3A:** Longitudinal Hydraulics, Motorized Crossfeed and Motorized Rapid Up/Down

## Specifications

Model	CSG2A1020	CSG3A1020	CSG2A1224	CSG3A1224	CSG3A1228	CSG3A1236	CSG3A1632	CSG3A1640
Table Size	10" x 20" (254 x 508mm)	10" x 20" (254 x 508mm)	11.81" x 23.62" (300 x 600mm)	11.81" x 23.62" (300 x 600mm)	12" x 28" (305 x 712mm)	12" x 36" (305 x 915mm)	16" x 32" (406 x 813mm)	16" x 40" (406 x 1020mm)
Max. grinding length (longitudinal)	20.47" (520mm)	20.47" (520mm)	23.62" (520mm)	23.62" (520mm)	28" (712mm)	36" (915mm)	32" (813mm)	40" (1020mm)
Max. grinding width (crosswise)	11" (280mm)	11" (280mm)	11.81" (300mm)	11.81" (300mm)	13" (330mm)	13" (330mm)	16" (410mm)	16" (410mm)
Max. distance from table surface to spindle centerline (standard column) (optional column)	19.68" (500mm) 23.62" (600mm)	19.68" (500mm) 23.62" (600mm)	23" (585mm) -	23" (585mm) -	24.8" (630mm) 28.35" (720mm)	24.8" (630mm) 28.35" (720mm)	24.8" (630mm) 28.35" (720mm)	24.8" (630mm) 28.35" (720mm)
Standard magnetic chuck size	10" x 20" (250 x 500mm)	10" x 20" (250 x 500mm)	11.81" x 23.63" (300 x 600mm)	11.81" x 23.63" (300 x 600mm)	11.81" x 27.56" (300 x 700mm)	11.81" x 35.43" (300 x 900mm)	15.75" x 31.5" (400 x 800mm)	15.75" x 39.37" (400 x 1000mm)
<b>Longitudinal movement of table</b>								
Max. travel (hydraulic)	22.83" (580mm)	22.83" (580mm)	25.59" (650mm)	25.59" (650mm)	30" (760mm)	37.8" (960mm)	35" (890mm)	41.73" (1060mm)
Max. travel (manual)	24.41" (620mm)	24.41" (620mm)	28.74" (730mm)	28.74" (730mm)	32.68" (830mm)	39.37" (1000mm)	36.61" (930mm)	43.31" (1100mm)
Table speed infinitely variable	196"-984"/min. (5-25 m/min.)	196"-984"/min. (5-25 m/min.)	196"-984"/min. (5-25 m/min.)	196"-984"/min. (5-25 m/min.)	196"-984"/min. (5-25 m/min.)	196"-984"/min. (5-25 m/min.)	196"-984"/min. (5-25 m/min.)	196"-984"/min. (5-25 m/min.)
<b>Crossfeed transverse travel</b>								
Auto transverse increment	.04" - .5" (1-13mm)	.04" - .5" (1-13mm)	.04" - .75" (1-19mm)	.04" - .75" (1-19mm)	.04" - 1" (1-25mm)	.04" - 1" (1-25mm)	.04" - 1" (1-25mm)	.04" - 1" (1-25mm)
Max. auto transverse travel	10.63" (270mm)	10.63" (270mm)	12.2" (310mm)	12.2" (310mm)	13.78" (350mm)	13.78" (350mm)	17" (430mm)	17" (430mm)
Max. manual transverse travel	11.81" (300mm)	11.81" (300mm)	13.39" (300mm)	13.39" (300mm)	15" (380mm)	15" (380mm)	18" (460mm)	18" (460mm)
Handwheel per revolution	0.05" (1mm)	0.05" (1mm)	0.05" (1mm)	0.05" (1mm)	0.05" (1mm)	0.05" (1mm)	0.05" (1mm)	0.05" (1mm)
Handwheel per graduation	0.0001" (.005mm)	0.0001" (.005mm)	0.0001" (.005mm)	0.0001" (.005mm)	0.0001" (.005mm)	0.0001" (.005mm)	0.0001" (.005mm)	0.0001" (.005mm)
<b>Wheelhead vertical downfeed</b>								
Rapid travel Approx.	-	6" (150mm)/min	-	6" (150mm)/min	6" (150mm)/min	6" (150mm)/min	6" (150mm)/min	6" (150mm)/min
Handwheel per revolution	.04" (1mm)	.04" (1mm)	.04" (1mm)	.04" (1mm)	.04" (1mm)	.04" (1mm)	.04" (1mm)	.04" (1mm)
Handwheel per graduation	.0002" (.005mm)	.0002" (.005mm)	.0002" (.005mm)	.0002" (.005mm)	.0002" (.005mm)	.0002" (.005mm)	.0002" (.005mm)	.0002" (.005mm)
<b>Grinding spindle drive</b>								
Speed (rpm)	3450	3450	1750	1750	1750	1750	1750	1750
Power rating	3 Hp	3 Hp	5 Hp	5 Hp	7.5 Hp	7.5 Hp	7.5 Hp	7.5 Hp
<b>Standard grinding wheel</b>								
Diameter	8" (203mm)	8" (203mm)	12" (304mm)	12" (304mm)	14" (355mm)	14" (355mm)	14" (355mm)	14" (355mm)
Width	.75" (19mm) max. 1" (25mm)	.75" (19mm) max. 1" (25mm)	1.25" (31.75mm)	1.25" (31.75mm)	2" (50mm)	2" (50mm)	2" (50mm)	2" (50mm)
Bore	1.25" (31.75mm)	1.25" (31.75mm)	3" (76.2mm)	3" (76.2mm)	5" (127mm)	5" (127mm)	5" (127mm)	5" (127mm)
Hydraulic motor (power rating)	2 Hp x 6P	2 Hp x 6P	2 Hp x 6P	2 Hp x 6P	3 Hp x 6P	3 Hp x 6P	3 Hp x 6P	3 Hp x 6P
Crossfeed motor (power rating)	80W	80W	80W	80W	80W	80W	80W	80W
Elevating motor (power rating)	-	80W	-	80W	1/4 Hp x 6P	1/4 Hp x 6P	1/4 Hp x 6P	1/4 Hp x 6P
Total space required (LxWxH)	94.5"x57"x68.9" (2400x1450x1750mm)	94.5"x57.5"x68.9" (2400x1450x1750mm)	106.3"x63"x73" (2700x1600x1850mm)	106.3"x63"x73" (2700x1600x1850mm)	116"x78"x81" (2950x1970x2050mm)	140"x78"x81" (3550x1970x2050mm)	130"x87"x81" (3290x2200x2050mm)	158"x87"x81" (4020x2200x2050mm)
<b>Weight</b>								
Net weight	3,916 lbs (1780kg)	3,990 lbs (1810kg)	4,299 lbs (1950kg)	4,387 lbs (1990kg)	6,659 lbs (3020kg)	7,341 lbs (3330kg)	7,496 lbs (3400kg)	8,818 lbs (4000kg)
Gross weight	4,695 lbs (2130kg)	4,762 lbs (2160kg)	4,960 lbs (2250kg)	5,038 lbs (2290kg)	7,760 lbs (3520kg)	8,157 lbs (3700kg)	8,818 lbs (4000kg)	9,920 lbs (4500kg)
Rated power, approx	5 Hp (3.7 kw)	5.2 Hp (3.9 kw)	8 Hp (6 kw)	8 Hp (6 kw)	11 Hp (8.2 kw)	11 Hp (8.2 kw)	11 Hp (8.2 kw)	11 Hp (8.2 kw)
Packing dimensions	91"x84"x83" (2290x2130x2100mm)	91"x84"x83" (2290x2130x2100mm)	91"x84"x83" (2290x2130x2100mm)	98"x84"x83" (2480x2140x2100mm)	98"x90"x87" (2500x2290x2220mm)	109"x90"x87" (2780x2290x2220mm)	109"x90"x87" (2780x2290x2220mm)	128"x90"x87" (3250x2290x2220mm)

Machine design, control, and specifications are subject to change without notice.