

# Clausing Precision 618 & 818 Series Surface Grinders

- Manual Surface Grinders
- Longitudinal Hydraulics and Motorized Crossfeed Surface Grinders (2A Models)
- Longitudinal Hydraulics, Motorized Crossfeed and Motorized Rapid Up/Down Surface Grinders (3A Models)



Model CSG-3A818 shown with optional dresser and coolant/dust system

## Outstanding Features...

### ■ High Precision Cartridge Spindle

High precision cartridge type spindle is supported by 2 preloaded precision angular contact ball bearings & one NN type roller bearing and driven by V3 class motor that allows highly accurate grinding performance. (CSG-618/818 series driven by 2HP motor).

### ■ Anti-wear Guide Ways

The saddle rests on precision hand-scraped double V ways & the table rests on precision hand-scraped V & flat ways which are coated with 'TURCITE-B'. These guide ways are equipped with auto lubrication to resist wear for lasting accuracy & dampening. CSG-618/818 hand feed grinders have ballways between table and saddle.

### ■ Rigid Cast Construction

Machines are constructed of high grade cast iron with heavy walls & reinforced ribs to provide excellent rigidity and dampening.

### ■ 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.

### ■ Auto Lube System

Automatic lubrication system is supplied as standard to ensure sufficient lubrication to lead-screws & guideways for greater longevity.

### ■ Timing Belt Table Drive

Handfeed models (CSG-618/818 only) use a timing belt for the table drive which has enclosed high tensile steel cores that ensure more smooth table movement and longevity. The table handwheel can be indexed to 9 different positions, without backlash, for more convenient operation.

### ■ Longitudinal & Cross Drive

For all models, except CSG-618 & 818 handfeed, the longitudinal movement is driven by a hydraulic system; On 2A and 3A series, the cross movement is driven by motor for more accurate increment feeding.

2A: Longitudinal Hydraulics and Motorized Crossfeed

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

## Specifications

Model	CSG618H	CSG2A618	CSG3A618	CSG818H	CSG2A818	CSG2A818
Table Size	6" x 18" (152 x 460mm)	6" x 18" (152 x 460mm)	6" x 18" (152 x 460mm)	8" x 18" (203 x 460mm)	8" x 18" (203 x 460mm)	8" x 18" (203 x 460mm)
Max. grinding length (longitudinal)	19" (480mm)	19" (480mm)	19" (480mm)	19" (480mm)	19" (480mm)	19" (480mm)
Max. grinding width (crosswise)	7" (179mm)	6.61" (168mm)	6.61" (168mm)	9.375" (238mm)	9" (228mm)	9" (228mm)
Max. distance from table surface to spindle centerline (standard column)	18" (460mm)	18" (460mm)	18" (460mm)	18" (460mm)	18" (460mm)	18" (460mm)
Standard magnetic chuck size	6" x 18" (150 x 450mm)	6" x 18" (150 x 450mm)	6" x 18" (150 x 450mm)	8" x 18" (200 x 450mm)	8" x 18" (200 x 450mm)	8" x 18" (200 x 450mm)
<b>Longitudinal movement of table</b>						
Max. travel (hydraulic)	-	19" (480mm)	19" (480mm)	-	19" (480mm)	19" (480mm)
Max. travel (manual)	20" (510mm)	20" (510mm)	20" (510mm)	20" (510mm)	20" (510mm)	20" (510mm)
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.)
<b>Crossfeed transverse travel</b>						
Auto transverse increment	-	.04" - .4"(1-10mm)	.04" - .4"(1-10mm)	-	.04" - .4"(1-10mm)	.04" - .4"(1-10mm)
Max. auto transverse travel	-	7" (180mm)	7" (180mm)	-	9.25" (235mm)	9.25" (235mm)
Max. manual transverse travel	7.68" (195mm)	7.68" (195mm)	7.68" (195mm)	9.84" (250mm)	9.84" (250mm)	9.84" (250mm)
Handwheel per revolution	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)
Handwheel per graduation	0.0008" (.02mm)	0.0008" (.02mm)	0.0008" (.02mm)	0.0008" (.02mm)	0.0008" (.02mm)	0.0008" (.02mm)
<b>Wheelhead vertical downfeed</b>						
Handwheel per revolution	0.04" (1mm)	0.04" (1mm)	0.04" (1mm)	0.04" (1mm)	0.04" (1mm)	0.04" (1mm)
Handwheel per graduation	0.0002" (.005mm)	0.0002" (.005mm)	0.0002" (.005mm)	0.0002" (.005mm)	0.0002" (.005mm)	0.0002" (.005mm)
<b>Grinding spindle drive</b>						
Speed (rpm)	3450	3450	3450	3450	3450	3450
Power rating	2 Hp	2 Hp	2 Hp	2 Hp	2 Hp	2 Hp
<b>Standard grinding wheel</b>						
Diameter	8" (203mm)	8" (203mm)	8" (203mm)	8" (203mm)	8" (203mm)	8" (203mm)
Width	.5"(12.7mm) max .75"(19mm)	.5"(12.7mm) max .75"(19mm)	.5"(12.7mm) max .75"(19mm)	.5"(12.7mm) max .75"(19mm)	.5"(12.7mm) max .75"(19mm)	.5"(12.7mm) max .75"(19mm)
Bore	1.25" (31.75mm)	1.25" (31.75mm)	1.25" (31.75mm)	1.25" (31.75mm)	1.25" (31.75mm)	1.25" (31.75mm)
Hydraulic motor (power rating)	-	1 Hp x 6P	1 Hp x 6P	-	1 Hp x 6P	1 Hp x 6P
Crossfeed motor (power rating)	-	1/6 Hp x 6P	1/6 Hp x 6P	-	1/6 Hp x 6P	1/6 Hp x 6P
Elevating motor (power rating)	-	-	40W x 4P	-	-	40W x 4P
Total space required (LxWxH)	71" x 45" x 65" (1810x1133x1660mm)	71" x 45" x 65" (1810x1133x1660mm)	71" x 45" x 65" (1810x1133x1660mm)	71" x 50.6" x 66" (1810x1285x1680mm)	71" x 50.6" x 66" (1810x1285x1680mm)	71" x 50.6" x 66" (1810x1285x1680mm)
<b>Weight</b>						
Net weight	1,587 lbs (720kg)	1,808 lbs (820kg)	1,874 lbs (850kg)	2,332 lbs (11060kg)	2,579 lbs (1170kg)	2,657 lbs (1205kg)
Gross weight	1,873 lbs (850kg)	2,138 lbs (970kg)	2,204 lbs (1000kg)	2,662 lbs (1210kg)	2,954 lbs (1340kg)	3,031 lbs (1375kg)
Rated power, approx	2 Hp (1.5 kw)	3 Hp (2.3 kw)	3 Hp (2.3 kw)	2 Hp (1.5 kw)	3 Hp (2.3 kw)	3 Hp (2.3 kw)
Packing dimensions (L x W x H)	51" x 45" x 76" (1300x1140x1930mm)	65" x 45" x 76" (1650x1140x1930mm)	71" x 52" x 76" (1800x1320x1930mm)	60" x 45" x 76" (1530x1300x1930mm)	67" x 53" x 76" (1710x1340x1930mm)	75" x 56" x 76" (1890x1430x1930mm)

Machine design and specifications are subject to change without notice.