

Clausing Precision ASDIII Automatic Surface Grinders



Model CSG-1640ASDIII shown with optional paper/coolant system

Frequency Inverter (Optional) 7.2" Touch Color Screen Chuck Control (Optional)



Starting Picture



Machine I / O Monitoring

ASDIII Series Operation Panel

Delta PLC Digital Control features a



Grinding Size Input



Grinder Condition Input



Alarm Message



System Data

7.2" color touch screen and is equipped with the exclusive EQUIPTOP picture mode working system, easy to learn and operate.

ASDIII Series Precision Automatic Surface Grinder Features...

- 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 machine features a simple and clear digital display & touch control panel for easy learning and operation
- Vertical feed powered by dual motors, AC motor for rapid up / down and stepping motor for micro downfeed positioning, slow auto downfeed and slow up / down
- 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 transverse travel powered by DC servo motor, allows step feed and continuous infeed grinding
- The speed of wheel dressing can be adjusted on the control panel
- Wide, deep base and honeycomb ribbed column on 10, 12, 16 & 20 series, designed for heavy-duty grinding
- High quality, ribbed, cast iron table, saddle and base
- All slideways and screws are fully oiled by an automatic continuous lubrication system to minimize wear on slideways & screws
- High Grade Anti-Wear Slideways... The saddle rides on precision, hand-scraped double V ways, and the table rides on precision hand-scraped V and flat ways coated with "TURCITE-B".
- Precision spindle cartridge, supported by preloaded precision angular contact ball bearings and one NN type roller bearing on 618 & 818 models
- Presettable hydraulic table speed control allows operator to pre-set speed rate, so you can have the same speed rate every time the hydraulic table is engaged (10, 12, 16 series)
- Ballscrew for cross travel, powered by DC servo motor

Specifications

Model	CSG818ASDIII	CSG1020ASDIII	CSG1224ASDIII	CSG1228ASDIII	CSG1236ASDIII	CSG1632ASDIII	CSG1640ASDIII	CSG2040ASDIII
Table Size	8" x 18" (203 x 460mm)	10" x 20" (254 x 508mm)	12" x 24" (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)	20" x 40" (506 x 1020mm)
Max. grinding length (longitudinal)	19" (480mm)	20.47" (520mm)	23.62" (600mm)	28" (700mm)	36" (915mm)	32" (813mm)	40" (1020mm)	40" (1020mm)
Max. grinding width (crosswise)	9" (228mm)	11" (280mm)	11.81" (300mm)	13" (330mm)	13" (330mm)	16" (410mm)	16" (410mm)	20" (500mm)
Max. distance from table surface to spindle centerline: standard optional	18" (460mm) -	19.68" (500mm) 23.62" (600mm)	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)	24.8" (630mm) 28.35" (720mm)
Standard magnetic chuck size	8" x 18" (200 x 450mm)	10" x 20" (250 x 500mm)	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)	19.68" x 39.37" (500 x 1000mm)
Longitudinal movement of table								
Max. travel (hydraulic)	19" (480mm)	22.83" (580mm)	25.59" (650mm)	30" (760mm)	37.8" (960mm)	35" (890mm)	41.73" (1060mm)	41.73" (1060mm)
Max. travel (manual)	20" (510mm)	24.41" (620mm)	28.74" (730mm)	32.68" (830mm)	39.37" (1000mm)	36.61" (930mm)	43.31" (1100mm)	43.31" (1100mm)
Table speed infinitely variable	.196"-.984"/min. (5-25m/min.)	.196"-.984"/min. (5-25m/min.)	.196"-.984"/min. (5-25m/min.)	.196"-.984"/min. (5-25m/min.)	.196"-.984"/min. (5-25m/min.)	.196"-.984"/min. (5-25m/min.)	.196"-.984"/min. (5-25m/min.)	.196"-.984"/min. (5-25m/min.)
Crossfeed transverse travel								
Auto transverse increment	.04" - .4" (1-10mm)	.04" - .5" (1-13mm)	.04" - .75" (1-19mm)	.04 - 1" (1-25mm)	.04 - 1" (1-25mm)	.04 - 1" (1-25mm)	.04 - 1" (1-25mm)	.04 - 1" (1-25mm)
Auto constant feeding speed	.79"-12.6" (20-320mm)/min.	.79"-12.6" (20-320mm)/min.	.79"-12.6" (20-320mm)/min.	.79"-12.6" (20-320mm)/min.	.79"-12.6" (20-320mm)/min.	.79"-12.6" (20-320mm)/min.	.79"-12.6" (20-320mm)/min.	.79"-12.6" (20-320mm)/min.
Max. auto transverse travel	9.25" (235mm)	10.63" (270mm)	12.2" (310mm)	13.78" (350mm)	13.78" (350mm)	17" (430mm)	17" (430mm)	20" (510mm)
Max. manual transverse travel	9.84" (250mm)	11.81" (300mm)	13.39" (300mm)	15" (380mm)	15" (380mm)	18" (460mm)	18" (460mm)	20.47" (520mm)
Handwheel per revolution	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)	0.2" (5mm)
Handwheel per graduation	0.0008" (0.02mm)	0.0008" (0.02mm)	0.0008" (0.02mm)	0.0008" (0.02mm)	0.0008" (0.02mm)	0.0008" (0.02mm)	0.0008" (0.02mm)	0.0008" (0.02mm)
Wheelhead vertical downfeed								
Automatic infeed	.00005"-.0025" (0.001 - 0.05mm)	.00005"-.0025" (0.001 - 0.05mm)	.00005"-.0025" (0.001 - 0.05mm)	.00005"-.0025" (0.001 - 0.05mm)	.00005"-.0025" (0.001 - 0.05mm)	.00005"-.0025" (0.001 - 0.05mm)	.00005"-.0025" (0.001 - 0.05mm)	.00005"-.0025" (0.001 - 0.05mm)
Step feed (JOG)	.00004" (0.001mm)	.00004" (0.001mm)	.00004" (0.001mm)	.00004" (0.001mm)	.00004" (0.001mm)	.00004" (0.001mm)	.00004" (0.001mm)	.00004" (0.001mm)
Rapid travel approx.	10"(250mm)/min	6"(150mm)/min	6"(150mm)/min	6"(150mm)/min	6"(150mm)/min	6"(150mm)/min	6"(150mm)/min	6"(150mm)/min
Slow travel, approx.	.236"(6mm)/min	.236"(6mm)/min	.236"(6mm)/min	.236"(6mm)/min	.236"(6mm)/min	.236"(6mm)/min	.236"(6mm)/min	.236"(6mm)/min
*Minimum display value	.00004" (.001mm)	.00004" (.001mm)	.00004" (.001mm)	.00004" (.001mm)	.00004" (.001mm)	.00004" (.001mm)	.00004" (.001mm)	.00004" (.001mm)
Grinding spindle drive								
Speed (rpm)	3450	3450	1750	1750	1750	1750	1750	1750
Power rating	2 Hp (1.5kw)	3 Hp (2.2kw)	5 Hp (3.7kw)	7.5 Hp (5.5kw)	7.5 Hp (5.5kw)	7.5 Hp (5.5kw)	7.5 Hp (5.5kw)	7.5 Hp (5.5kw)
Standard grinding wheel								
Diameter	8" (203mm)	8" (203mm)	12" (304mm)	14" (355mm)	14" (355mm)	14" (355mm)	14" (355mm)	14" (355mm)
Width	.5" (127mm) max .75" (19mm)	.75" (19mm) max 1" (25mm)	1.25" (31.75mm)	2" (50mm)	2" (50mm)	2" (50mm)	2" (50mm)	2" (50mm)
Bore	1.25" (31.75mm)	1.25" (31.75mm)	3" (76mm)	5" (127mm)	5" (127mm)	5" (127mm)	5" (127mm)	5" (127mm)
Hydraulic motor (power rating)	1 Hp (.75kw)	2 Hp (1.5kw)	2 Hp (1.5kw)	3 Hp (2.2kw)	3 Hp (2.2kw)	3 Hp (2.2kw)	3 Hp (2.2kw)	3 Hp (2.2kw)
Crossfeed motor (power rating)	350W	750W	750W	750W	750W	750W	750W	750W
Elevating motor (power rating)	40W	1/4 Hp (.2kw)	1/4 Hp (.2kw)	1/4 Hp (.2kw)	1/4 Hp (.2kw)	1/4 Hp (.2kw)	1/4 Hp (.2kw)	1/4 Hp (.2kw)
Total space required (LxWxH)	71"x50.6"x66" (1810x1285x1680mm)	94.5"x57.5"x68.9" (2400x1450x1750mm)	106.3"x63"x73" (2700x1600x1850mm)	116"x78"x81" (2950x1970x2050mm)	140"x78"x81" (3550x1970x2050mm)	130"x87"x81" (3290x2200x2050mm)	158"x87"x81" (4020x2200x2050mm)	177"x87"x83" (4500x2200x2100mm)
Weight								
Net weight	2,657 lbs (1205kg)	3,990 lbs (1810kg)	4,387 lbs (1990kg)	6,659 lbs (3020kg)	7,341 lbs (3330kg)	7,496 lbs (3400kg)	8,818 lbs (4000kg)	10,582 lbs (4800kg)
Gross weight (lbs)	3,031 lbs (1375kg)	4,762 lbs (2160kg)	5,038 lbs (2290kg)	7,760 lbs (3520kg)	8,157 lbs (3700kg)	8,818 lbs (4000kg)	9,920 lbs (4500kg)	11,464 lbs (5200kg)
Rated power, approx.	3 Hp (2.3kw)	5.2 Hp (3.9kw)	8.25 Hp (6kw)	11 Hp (8.2kw)	11 Hp (8.2kw)	11 Hp (8.2kw)	11 Hp (8.2kw)	11 Hp (8.2kw)
Packing dimensions	75"x56"x76" (1890x1430x1930mm)	91"x84"x83" (2290x2130x2100mm)	98"x84"x83" (2480x2140x2100mm)	98"x90"x87" (2500x2290x2220mm)	109"x90"x87" (2780x2290x2220mm)	109"x90"x87" (2780x2290x2220mm)	128"x90"x87" (3250x2290x2220mm)	138"x90"x87" (3500x2290x2220mm)

*ADSI models have no elevating handwheel but jog buttons per revolution or graduations. Machine design, control, and specifications are subject to change without notice.