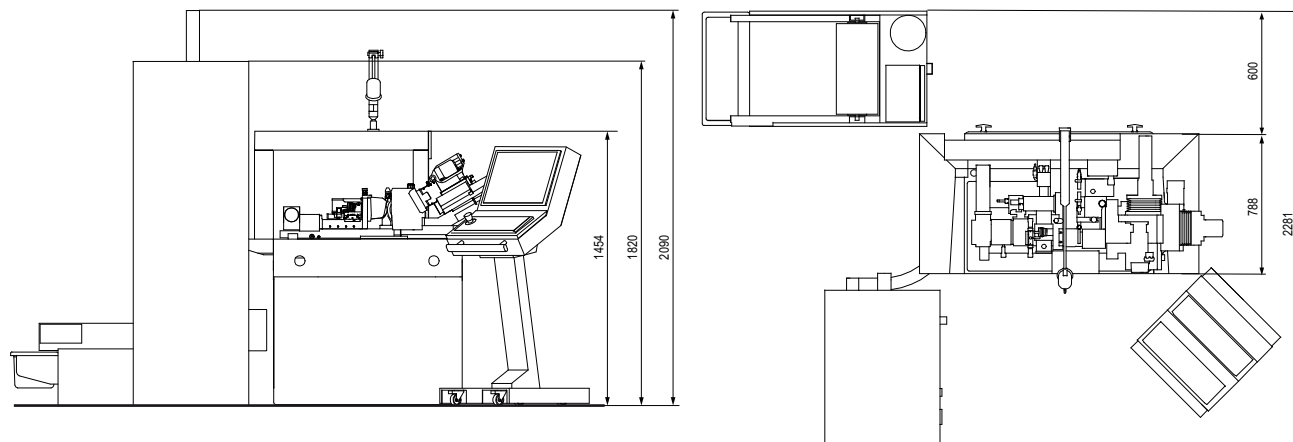


Technical data

Production	
Workpiece diameter range	0.1 to 10 mm
Grinding wheel	
Diameter	200 mm
Width	50 mm (optional 63 mm)
Peripheral speed with frequency converter (continuously adjustable)	20 to 63 m/s
Power of the grinding wheel motor	2.2 kW
Control wheel	
Diameter	100 mm
Width	50 mm (optional 63 mm)
Peripheral speed (continuously adjustable)	0 to 94 m/min
Speed (continuously adjustable)	0 to 300 min ⁻¹
Inclination	-2.5° / +0.5°
Smallest programmable step	0.1 µm
Infeed speed	max. 20 mm/s min. 0.002 mm/s
Control wheel slide X2	max. 3000 mm/min
Grinding wheel dressing	
Precision CNC dressing unit with rotary tool (diamond disk for all grinding means)	Ø 90 mm
Precision CNC dressing unit with stationary tool (diamond plate for conventional grinding wheels)	
Heidenhain glass scales	resolution 0.0001 mm
Dressing width	50 mm (optional 63 mm)
Control wheel dressing	
With template, cross slide movement	hydropneumatic
Loading possibilities	
Manual:	with loading table
Automatic:	with handling system, vibration feeder, HF loader, conveyor belt
Software options	
Contour Editor, comprises a simple input/programming of contours and a contour visualization	
DXF-File Importer, drawn contours can be imported in a DXF file (available only with software option "Contour Editor")	
Connection data and Weight	
Power supply	3x400 V 50/60 Hz
Weight	with control unit approx. 1250 kg
Compressed-air supply	6 bar
Air consumption	8 m ³ /h
Space requirements	approx. 6 m ²

Floor plan



150 SL30 CNC

the flexible

High precision centerless grinding machine with grinding wheel CNC dressing unit (option)



flexible

easy to operate



150 SL 30 CNC



Automatic dressing of the grinding wheel



Siemens 840 D control unit



Contour editor

Applications

The AGATHON 150 SL 30 CNC is suitable for a vast spectrum of parts with diameters ≤10 mm and a plunge length of max. 60 mm. On the basis of its good accessibility and simple changeovers, the machine can be used for both small and large production runs.

Operation

AGATHON has developed a user friendly interface to guide operators through menu options using text and graphics. No ISO code knowledge is required for programming using our contour editor. The respective data is entered into table-based input blocks and directly displayed in our graphics. A "DXF File Importer" option is available for complex dressing contours.

Simple equipment

The 150 SL 30 CNC is also available without CNC dressing. On this model, the dressing attachment is equipped with a template holder. A stepping motor is used to provide the infeed of the X-axis. An hydropneumatic drive executes the axial displacement in the Y-direction.



Simple equipment

Advantages

- The machine has a very high repetition accuracy.
- Capable of holding smallest diameter tolerances.
- Inexpensive shaped templates on the grinding-wheel side.
- Simple reading of CAD data via the DXF File Importer (option).
- Good accessibility, which has a positive impact on the setup.
- Fully automatic dressing during the production.

CNC dressing (option)

A precision CNC dressing device with rotary or stationary dressing tool is installed on the grinding-wheel side. The device is equipped with a Heidenhain glass scales with a resolution of 0.0001 mm. Rotating dressing enables to dress conventional as well as CBN and diamond grinding wheels on the machine. The diamond disc has a diameter of 90 mm and can have different shapes in accordance with the application. Dressing amount, dressing interval and number of repetitions are programmable.

Options / Peripherals

- Concentric-grinding attachment
- Creep-feed grinding attachment
- Semi-automatic loading device
- Compact filter system
- Oil-mist suction
- Coolant flow cooling
- Machine enclosure
- Fire extinguishing system

Customer-specific automation

Customized handling or measuring systems are available on request.

Grinding example

- Hydraulic system



Domains of application

- Medical equipment
- Dental equipment
- Anti-friction bearings
- Component-supply industry
- Precision engineering
- Toolmaking
- Electrical/Electronic equipment
- Hydraulic system