

## TECHNICAL DATA Precision-Surface and Profil Grinder

manufacturer	<b>BLOHM</b>
type	<b>PLANOMAT 608</b>
built	<b>2001</b>



### Working area

Grinding length	800 mm
Grinding width	600 mm
max. distance table to spindle center	700 mm
max. table load	800 kg

### X-axis – table longitudinal motion

Table clamping area with additional space	1.200 x 600 mm
Table travel longitudinal max.	900 mm
Table speed	30 – 3000/300 – 30.000 mm/min steplessly variable
Grinding travel adjustment	by soft key on control panel
Guideways	pretensioned roller guides
Table drive	Servo motor with ball screw drive
manual table adjustment	via joystick on the control panel
measuring system	0,001 mm rotatory

## Y-axis – Vertical adjustment of the grinding wheel

Max. Distance table to spindle center	700	mm
Rapid traverse	3.750	mm/min.
Guideways	pretensioned roller guides	
Axis drive	Servo motor with ball screw drive	
Measuring system	0,001 mm	rotational

## Z-axis – transverse adjustment of grinding wheel

Automatic cross travel	max. 560	mm
Transverse movement automatically	40 – 4.000	mm/min stepless
	Optionally intermittent or continuous	
Rapid traverse	4.000	mm/min.
Guideways	pretensioned roller guides	
Axis drive	Servo motor with ball screw drive	
Measuring system	0,001 mm	rotational

## Grinding spindle

Spindle speed max.	3.400	1/min
Input power	15	kW
Three-phase motor with frequency converter		
Max. Dimensions of grinding wheel (DA x B)	400 x 80	mm
Bore grinding wheel	127	mm
Constant peripheral speed	35	m/sec
Max. Peripheral speed	45	m/sec
		Unlockable via key switch

## Dressing

Dressing unit pneumatically hinged, mounted on the left side next to the magnetic clamping plate Dressing amount is automatically compensated

## Space required including coolant system, weight

Length x width x height	4,6 x 4,2 x 2,45	m
weight ca.	4.900	kg

## Electrical connection

Connecting power	19	kVA
Operating voltage	400	V
Power frequency	50	Hz

### BLOHM Grinding control ERGOMATIC

Movable setup console in the middle of the machine:  
Electronic handwheels for conventional operation of the machine for axes Y and Z.  
Joy stick for the axes X and Z.  
Feed control per axis via potentiometer, also active during program run.

*Control panel on support arm on the right side of the machine:*

LC display, visible area 121 x 103 mm, with backlight  
Membrane keyboard with short-stroke keys for acknowledging recommended default values or for entry of freely selectable parameters with the following functions:

- Loading position X and Z axis
- Set or change reversing points during the program
- Set zero points for Y and Z axis
- Set safety position
- Set grinding wheel data
- Select dressing function

Softkey for preselection measuring system metric / inch

Info button for help texts and service instructions

Display for operating hours and maintenance intervals

*Fixed programs for workshop-related, operator-friendly handling:*

- Reciprocating loops with automatic Y-feed
  - Longitudinal, circumferential and surface grinding with intermittent or continuous crossfeed and automatic Y positioning
  - Grinding wheel adjustment with handwheel or automatic
  - ECO loops with automatic Y positioning:  
1st layer: plunge grinding "roughing"  
2nd layer: Surface grinding "finishing"  
3rd layer: surface grinding "fine finishing"
- Automatic Y positioning: 3 layers with dressing, 10 parameter sets for 10 delivery programs storable, allowance or finished dimension grinding preselectable.

*Dressing programs:*

- Straight dressing from the table with compensation by single diamond, foldable dressing unit.
- face dressing with single diamond or foldable dressing unit.
- Dressing with compensation by automatic straightening device.
- Deep dressing with compensation by PEA-T100.

### Coolant cleaning equipment

Coolant system with belt filter (tank capacity 1,400 l) consisting of:

- Belt filter with a cleaning surface of 2.25 m<sup>2</sup> for a flow rate of 250 l / min
- Supply pump 200 l / min, 4 bar
- Additional pump for water trough flushing and rinsing gun
- Cooling unit for coolant emulsion with max. 5% grinding concentrate
- Power 4.9 kW (4,200 kcal / h), refrigerant CFC-free

### Equipment / Accessories

- Basic machine with work enclosure closed at the top
- Spindle drive 15 kW, frequency controlled
- Manual balancing device MPM incl. Vibration sensor and speed sensor
- Belt filter coolant cleaning system Tank capacity 1,400 liters
- Pneumatically folding dressing unit
- Electro-permanent magnetic clamping plate 800 x 600 mm, transverse pole pitch 4 mm, with 8-fold adhesion control
- 2 pieces of grinding wheel flanges
- 1 pc. balancing mandrel
- Machine documentation incl. CE conformity declaration
- Finish: RAL 5009 azure / RAL 9002 gray white
- Grinding spindle insert renewed 02-2016