

# **PLANOMAT XT 612 ESSENTIAL**

The economic machine for high precision surface grinding

### PLANOMAT XT 612 ESSENTIAL

#### Everything, what's required for surface grinding

The economic 3-axis machine for high-precision surface and profile grinding

- Table size 600 x 1.200 mm
- Siemens CNC control
- BLOHM single piece production with graphical operator guidance

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- Grinding technologies
  - Reciprocate grinding
  - Creep feed grinding





#### **DESIGN FEATURES**

- Extreme rigid ductile cast iron components
- Elevated Z-axis guideways
- Linear guideways in all machine axes
- Re-circulating ball screws for all machine axes
- Grease lubricated grinding spindle with BLOHM transverse stop
- Housing and coolant sump designed as welded part
- Large sliding door on the outside of the enclosure
- Maintenance doors on the left and right hand side



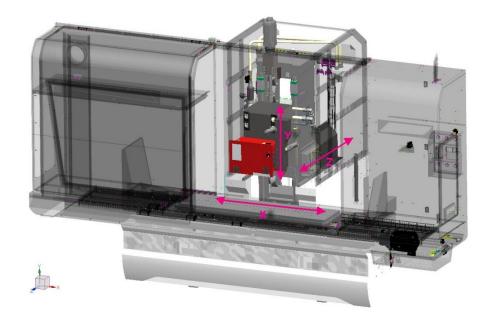




# TECHNICAL DATA



- X-axis
  - Speed 30...30.000 mm/min
- Y-/ Z-axis
  - Speed 4...2.000 mm/min
- Grinding spindle drive 11 kW, max. 3.500 U/min
- Grinding wheel dimension 400 x 100 x127 mm
- Table load max. 1.500 kg

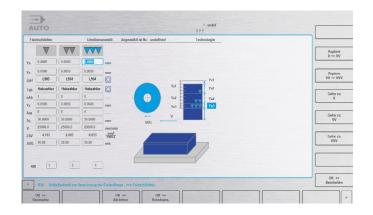




The BLOHM operator interface with graphical operator guidance adapts the control system perfectly to the needs of profile and contour grinding applications

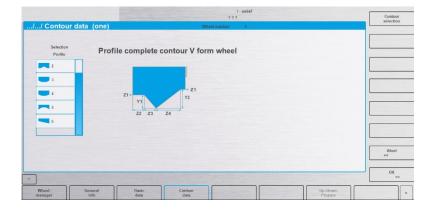
- User friendly with comfortable programming functions
- Particularly suitable for the production of single parts and small series
- Simple set-up of machine and parameter
- Quick adaptation of grinding and dressing cycles with graphical support
- Tool management for 50 grinding wheels and 15 dressing tools

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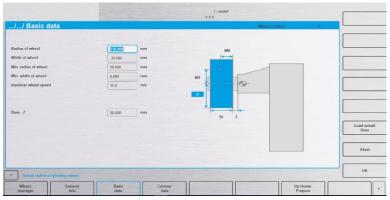


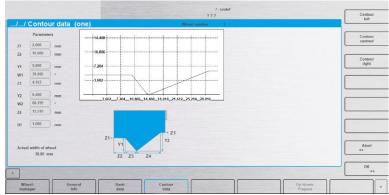
The wheel management comprises

- Input of basic wheel data
- Storage of contour data
- 6 parametric standard contours are available
- Storage of free or via GripsProfile generated contours











The preparation of the machine program can be started once the grinding wheel, dresser and zero-off sets are set-up. This is done by using the following input screens

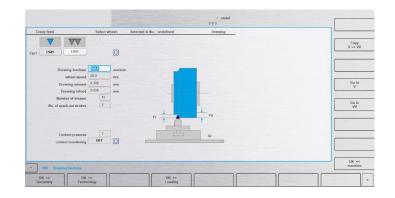
- Input of workpiece geometry
  - Possibility to store up to 8 workpiece geometries, incl. the process parameter using the function "save generate"
- Selection of grinding method
  - Reciprocate plunge grinding
  - Surface grinding
  - Creep feed grinding
- Input of technology data

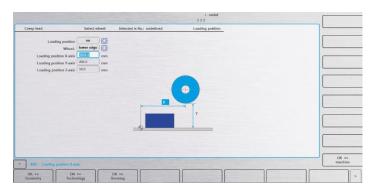
			/ undef 777		Reciprocate
Creep leed	Select wheel:	Selected is No.: undefined	Geometry		- Summed
Length of workpiece	[200.00] mm				Surface-
Length of overrun in X	20.000 mm				grinding
Z grinding position					
Finish dimension	60.000 mm				Creep leed-
Retract distance of tool Y	1.000 mm				grinding
Safety position of Y-axis	200.0 mm				
Number of zero offset	54 O front O				
Wheel edge	front				
Number Z-Positions	1				
mment and data information			T T		Abort << mechine
R20 Length of workpiece :	without overrun				OK << machine
OK		OK >> OK >> OK >> Loading		Savo	archiv filo archiv file





- Input of technology data for dressing, incl. selection of dressing method
  - L941 = Straight dressing
  - L820 = Standard dressing contours
  - L901 = Plunge dressing
  - L920 = Contour parallel dressing
  - L923\* = Contour parallel dressing GripsProfile
  - L944\* = Face dressing
    - > \* Optional
- Input of loading position
  - Position will be approached automatically once machining is completed
- Data entry is completed by pushing the soft-key "OK<<machine" and the screen to input the start position is called up



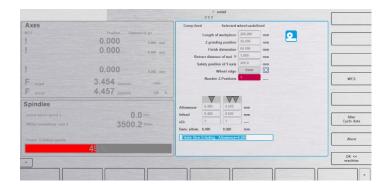




The start position for machining the workpieces can be established by the following methods:

- Spark on
- Allowance grinding
- Finish size grinding
- Select method and adjust parameter if required
- Conduct operations to establish start position or enter data and confirm
- Data entry will be completed by pushing the soft key "OK<<machine"</li>
- Push cycle start to machine the workpiece

Axes		Creep feed Selected wheetundelined					Spark on			
WCS	PeelSon Distance to go			Longth of	workpiece	200,000	mm	0		and the second
	0.000	0.000 emm	Z grinding position		50.000	mm	<b>—</b>		Allowahon- Grinding	
	0.000			Finish dimension		60.000	mm			
				Retract distance of tool Y 1.000 mm Safety position of Y-axis 200.0 mm					Firmh Size	
	0.000									Grindleig
	0.000	0.030 man	Wheel edge		front		C			
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Spindles				0.480	0,620					
			Allowance	0.480	0.020	mm				
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	49								I C	



#### **READY TO GRIND**

Ready to grind with a defined scope of supply for surface grinding

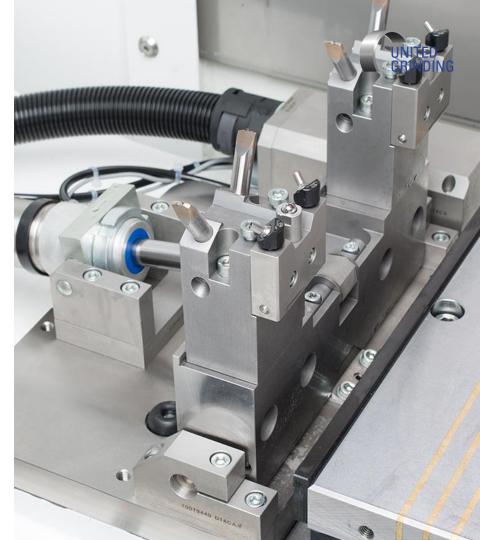
- Electro-permanent magnetic chuck 1200 x 600 mm, DQ 18
- Diamond holder with single point diamond
- Preparation for manual balancing unit
- Band filter coolant filtration system 100 l/min, 3 bar, tank volume 500 l





## **OPTIONS**

- Automatic grease lubrication system for guideways and recirculating ball screws
- Linear scales for Y- / Z-axis
- Electro-permanent magnetic chuck 1200 x 600 mm, DQ 13
- Riser for magnetic chuck
- Universal dressing unit, tiltable type, incl. pneumatics
- Profile dressing attachment PA-T 40, PA-TLR 40, PA-T 150S or PA-T 200S
- Manual balancing unit
- Coolant mist exhaust units





#### CONTACT

#### United Grinding GmbH

India Branch Office & Technology Center # 487, D1 & D2A, 4th Phase - KIADB Main Road Peenya Industrial area - 560 058 - Bangalore – India

Tel. +91 63665 75730

dhanalakshmi.h@grinding.ch

www.grinding.ch

