ELECTRONIC VERTICAL DRILLING MACHINE FOR GLASS

MODEL: PRIAM

Priam model is a two-spindle (double-sided) vertical glass drilling machine. It is designed for customers looking for a functional and easy-to-use machine that is also durable. When designing it, we went back to the old school of machine construction – on heavy, heat-treated steel bodies with mechanical solutions for subsequent easier operation and servicing. With this different approach to design and manufacturing, our machine ensures many years of trouble-free glass drilling, providing a multiple return on investment.

To make sure that the components of our drill are made with due care, we manufacture them in Poland using local contractors. The main body is made on site, by our company, and then heat treated and processed further in local areas. This ensures that all production is carried out under our careful supervision, and any imperfections can be detected and corrected before the product reaches the customer. This ultimately also supports the local machinery industry.

The product's components are at the highest European level. Our suppliers include SIEMENS, HITACHI, UNITRONICS, SCHNEIDER, GARLOCK

Mechanical components are accessible, while in-service replacement is simple and quick.

The Expoglass Priam drill - functionality at the highest level:

• 2 spindles (front and back) - allowing to drill the pane in a single pass - without turning it

• Electronically controlled loading bar – in order to set the size of the bottom edge of the glass from the hole, you just need to enter the required size on the touch screen and the machine will automatically adjust to the right position

• Quick drilling bit change mode – after pressing the drill bit change button, both spindles are automatically locked (they cannot be turned), the vertical table, located between both drilling bit, slides down – thus opening a large space between them. This means that the drill bits can be unscrewed without the use of a wrench, and there is plenty of space to perform this operation comfortably.

• Automatic (electronic) measurement of the drill bits length and position – after the drill bits have been changed, the machine automatically calibrates them, measuring their length so that it knows the distance between the glass and the drilling end of each bit – very important in small plants where there are no series, but most of the holes are made individually

• Automatic (electronic) calculation of spindle cavity depth – after automatic calibration of spindles, the machine measures the thickness of drilled glass by itself, by pressing the glass, and then selects the perfect values of cavities on its own. The operator's only task is to click the "drill" button, the process is completely automatic

• Electronically controlled feed of the spindles – significantly increases machine capabilities, in addition to enabling the operation of most of the foregoing functionalities, it also makes the feed values perfectly adaptable to any situation and changeable with just a few clicks on the screen. This is illustrated, for example, by the fact that e.g. after drilling a 15 mm piece of glass, you take 10 seconds to change the settings, you can immediately drill a 2 mm glass pane without fear of cracking or chipping. And all this without the experience and "intuition" of the operator

• Automatic drill speed adjustment – after the drill bit has been changed, the machine electronically measures the bit diameter itself and selects the specific speed

*Automatic glass thickness measurement - the machine measures the glass thickness independently, and then assigns the appropriate drilling parameters

- Y-axis serial drilling capability After entering 6 distances from the bottom edge of the glass, the machine will automatically drill up to 6 holes.
 - Drilling in a closed chamber the Expoglass drilling machine is one of the few to have a separate drilling

spindle that is not mounted directly on the motor. This translates into some very important advantages:

- easier maintenance
- high rigidity of the system
- reduced vibrations
- increased safety
- improved cooling performance
- · reduced water spray and consequently increased machine service life

• Solid, ribbed body, heat-treated as well as mechanically-treated – even the most precise systems and mechanisms loose their meaning on a flimsy body, which deforms during operation and may also remain deformed permanently. Thanks to its heavily overdimensioned body, the Expoglass drill demonstrates very low vibration and distortion during operation, making it an extremely durable machine that can operate at high performance, with nearly no risk of material breakage.

• Adjusting the distance of drilling a hole (left, right) is solved by a series of bumpers to attach the glass. Measure stick on the loading bar (left, right) is used to set the position. This is the best solution in terms of time and convenience.

Primary	Technical	Data:
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Length	- 4440 mm				
Height	- 2793 mm				
Width	- 1487 mm				
Weight	- 1900 k	g			
Communication - 7" HMI panel and analogue buttons					
Spindle feed	-	automat	ic		
Feed control	-	electron	ic		
Loading bar control	-	electron	ic		
Spindle speed - 700 RPM to 2800 RPM					
Drill bit tip position measuremen	it	-	automat	ic	
Drill change mode		- with tal	ble-top lo	wering a	nd spindle lock
Determination of spindle depth - electronic (calculated by the controller)					
Horizontal positioning	- two-rov	w manual	l bumper	system	
Number of manual bumpers		- 6 pcs.			
Material pressure		- pneum	atic		
Hole chamfering function		- installe	ed, electro	onically c	ontrolled
Number of places in the drill bit storage cabinet - 70 drill bits (35 sets)					
Drill measurement accuracy				-	5 mm
Accuracy of glass thickness measurement		nt		- 0.2 mr	n
Maximum height of the loading bar (top position) - 2 mm					
Minimum loading bar height (bottom position) - 1050 mm					

Loading board	- sliding roller system
Cooling system	- Closed
Language installed different language	- (Polish, English, Bulgarian) optional possibility to install a
Mains connector – plug	- 16 A 5 pin
Air connection	- standard 7.2 NW
Working air pressure	- 5 bar
Voltage	- 400 V 50 Hz
Power	- 4 Kw

DOCUMENTS ATTACHED TO THE MACHINE:

-Declaration of conformity to the machine standards

- -CE marking
- -EU EMC declaration
- -Guarantee 12 months
- -User manual (Polish and English)

The product is shipped completely ready to use. Our company also provides deliveries of PRIAM drilling machines in the EU and other countries. For a fee, our technician can come to provide the connection and commissioning / instructions.









