



FLAME-POLISHING MACHINE - LIZA-L5/2000

This is a linear polishing machine in automatic glass production that is designed for slow glass surface polishing cycles. Polishing is achieved with flame after pressing the glass article prior it is moved into an annealing oven. A control and visual systems are a part of the machine. The machines can be set in a line for polishing one side of the product, its turning, and subsequent polishing of the other side. The turning device is supplied depending on the line type.

The polishing machine consists of a chain conveyor whose links are small desks equipped with revolving plates that can move along a linear track. 5 upper positions are technological ones (1 feeding position, 3 polishing positions and 1 removing position). The desks return back below to the feeding position from the removing position.

The base of the machine consists in a steel construction. The positions are moved with a servomotor and transmission.

All 5 upper positions are equipped with their own servomotor driving mechanisms for turning the plates. In the feeding and removing positions the article is turned appropriately to the handling equipment. In the polishing positions the article rotates in front of the burner. When moving the positions, the driving mechanisms of the plates are disengaged as they are swung away with a pneumatic cylinder, and the revolving of plates is mechanically locked.





All three working positions have their own linear servomotor drive approach of burners. The control system enables to couple electronically the burner approach and revolving the plates, so that the burner can copy non-cylindrical shape of the article. Cylindrical articles can be polished after adjustment of the burner approach to the article diameter.

The machine is shielded against scrapped glass and heat with stainless tin.

The system of burners depends on a type of glass material and the size of glass articles. The articles can be cooled with airflow coming from outside or through the desk centres.

The control system enables to set the jogging parameters of the machine and revolving the plates, to adjust the burner approach both for cylindrical and non-cylindrical article shapes, to create the electronic curve in order to follow the surface of non-cylindrical article shapes, and to switch the burner valves and cooling on and off. The main parameters of the machine can be changed during operation and the change is realized in the next cycle. The parameters can be stored as a recipe for the same type of glass product. The visual control enables you to show the data on the screen, including the timing of individual valves. The control systems of the machine and the whole line are equipped with inputs and outputs used for connection with the control systems of adjacent technological equipment (for example, pressing machine, annealing oven, etc.).

	L	LIZA-L5/2000	
Length of the machine	[mm]	2500	
Width of the machine	[mm]	1300	
Height of the machine	[mm]	1300	
Machine weight	[kg]	1500	
Spacing of the positions	[mm]	500	
Distance between the feeding and removing positions	[mm]	2000	
Burner approach	[mm]	340	
Cycle	[pcs/min]	0,25 až 2,5	
Maximum product diameter	[mm]	460	
Maximum product height	[mm]	420	
Product weight	[kg]	up to 7	
Input of the machine	[kw]	7,5	
Control pressure air 5bar	[m ³ /hour]	0,08	
Number of positions 1 feeding + 3 polishing + 1 removing			
Product shape cylindrical, non-cylindrical, flat			
Polishing position standard or on last			



TECHNICAL DATA

Consumption of gas, oxygen and cooling air depends on

a type of glass material, product size and system of polishing.