

EXPOGLASS®

# SOLUTIONS FOR GLAZIERS



@expoglass • @expoglass



www.expoglass.pl/en

## About the Company

# EXPOGLASS

For a long time we have also been involved in glass processing, and therefore we have extensive knowledge in this field. These experiences allow us to create devices tailored to the needs of our market.

Knowing the needs of our clients, we focus on functional products that are easy to use and durable.

The entire design and production process takes place in Poland, based on subassemblies of Polish and western producers. This allows us to control and maintain the appropriate quality of products. This approach makes our products excellent solutions for our clients' problems, making the glass processing faster, easier and safer.



Countries in which EXPOGLASS® machines work

# History



#### 17.03.2014

Establishment of Expoglass, dealing in glass processing



Production and sale of the first machine for an external customer



#### 10.03.2016

Bringing to the final version of projects: glass racking systems and glass cutting tables



#### 18.11.2016

Debut at GLASS 2017 fairs in Poznań



#### 30.10.2017

Beginning the work of the Expoglass drilling machine in one of the polish customer's plant



#### 23.10.2018

Presentation of the Priam glass drilling machine at Glasstec 2018 Messe Düsseldorf



#### 01.03.2020

Moving the company to a new production hall with an area of 1200 m2



#### 15.02.2021

Introduction of glass racking systems for cranes, sliding side to side



Creating the first machine for our own needs



#### 04.11.2015

The end of glass processing and the transormation of production compeletely towards the construction of machines



#### 11.03.2016

The steady increase in sales of glass cutting tables and glass racking systems



#### 20.08.2017

Completing and refinishing the project of the prototype of an automatic two-spindle drilling machine for glass, 2 prototypes ready to work



#### 19.11.2017

Presentation of the second copy of the glass machine Expoglass Priam at GLASS 2018



#### 12.10.2019

Introducing of automatic measuring of glass thickness and drill diameter



#### 10.08.2020

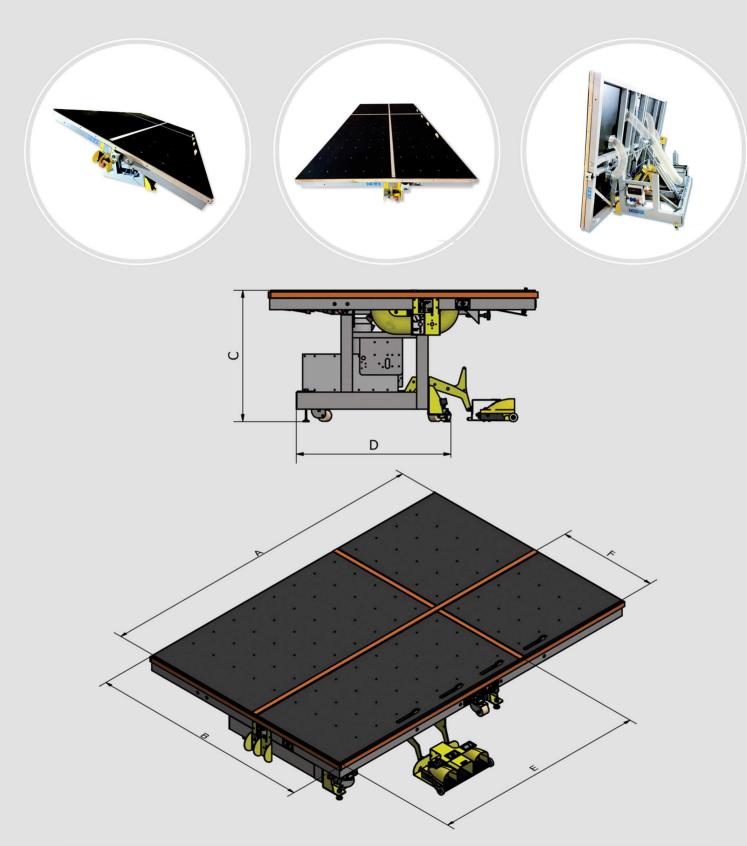
Start of production of a new series of Priam drilling machines, now even more adapted to heavy industrial work





GOAL

MANUFACTURING MACHINES WHICH MAKE YOUR WORK:



Type of the table	Name	Α	В	С	D	E	F
SMALL	SDRM	2800	1860		1070	1810	
BIG	SDRD	3400	2400	920	1200	2080	850
ULTRA BIG	SDRXL	3400	2600		1380		

## The purpose of use

**EXPOGLAS** S glass cutting table is a machine which makes operation of glass cutting: easier, safer and faster. Usually it also reduces the number of neccesary operators during the glass cutting process. The main three features which helps in glass cutting are: tilted top, breaking bars and air cushion system.

## Loading the glass

The basic funcion of all glass cutting tables is to enable safe and convenient glass loading. Glass sheets, should be handled in a vertical orientation, otherwise they could break under their own weight. In our tables, in order to be able to put the sheets on tables safely and comfortably, it is enough to pull out loading cantilevers from the table top, tilt the table top to an inclined position and place the panes on the brackets.

## Breaking the glass

Breaking bars greatly improve the glass breaking process. After scoring the glass, it is enough to set surface in such a way that the score is located above the bar and press the pedal under the table. Pressing the pedal causes the braking bar to lift, pushing from bottom along the score on the glass and the material breaks under its own weight. Depending on the orientation in which we cut the glass, we can use breakers - longitudinal or transversal.

## Manipulating large and / or heavy panels

While manipulating large and / or thick glass sheets, large friction is generated on the worktop surface. This phenomenon makes it difficult for the operator to work, and in some cases, may unable the operator to operate alone. An additional risk is scratching of the glass at the moment when there are pieces of glass or other dirt on the table. The occurrence of these problems can be minimized by using an aircushion system.

# Advantages of using

## Safety of operation

Safe vertical loading
Breaking with bars
Foot panel hiding while the tilting of the top

# Higher effectiveness and reduction of the number of operators

Fast breaking of the glass
Efficient manipulating thanks to air cushion system

#### Less material loss

Less scores on glass thanks to air cushion system
 Higher quality of edge after breaking the glass with bars
 Less risk of failure while breaking the glass



## Long-term use thanks to highest quality

- Whole production takes place in Europe
  - All of the parts are high quality
    - All spare parts are available

## **Ergonomics**

- 2 x 230V industrial sockets
- Whole design process focused on our and clients' experience
  - Setting of the breaking bar height
  - 3 switches for air cushion system on every side

## Mobility

- All tables equipped with wheels - Tables with tilted top need 1/3 less space



## Glass racking system



EXPOGLASS® racking system is the steel construction used to store plate materials, especially glass sheets.

They consist of a frame - a fixed steel structure and a group of single racks - drawers (inside the frame), which can be pulled out in order to load or unload the glass. The drawers are narrow steel frames incliced at an angle of around 5 degrees with the 1cm of space between each other.

Therefore  $\mathbf{E} \times \mathbf{P} \circ \mathbf{G} \mathbf{L} \wedge \mathbf{S} \circ \mathbf{G} \mathbf{L} \wedge \mathbf{S} \circ \mathbf{G} \mathbf{L} \wedge \mathbf{G} \circ \mathbf{G} \mathbf{G} \circ \mathbf{G} \circ \mathbf{G} \mathbf{G} \circ \mathbf{G}$ 









#### EASY TO DELIVER

All of our storage systems are manufactured in a modular way so they are able to be delivered by the standard trucks without any problems.

# Glass racking systems

EXPOGLASS® glass racking systems are available in various dimension versions listed below

### TOTAL WIDTH OF DIFFERENT STORAGES

	Type of machine					
Drawers	M80	D80 H255	D220 H255	M260	R220	
8			306	339	346	
10	176	186	368	411	410	
12	202	212	430	483	474	
14	228	238	492	555	538	
16	254	264	554	627	602	
18	280	290			666	
20	306	316			730	
22	332	342			794	
24	358	368			858	
26	384	394			922	
28	410	420		·	986	
30	436	446			1050	

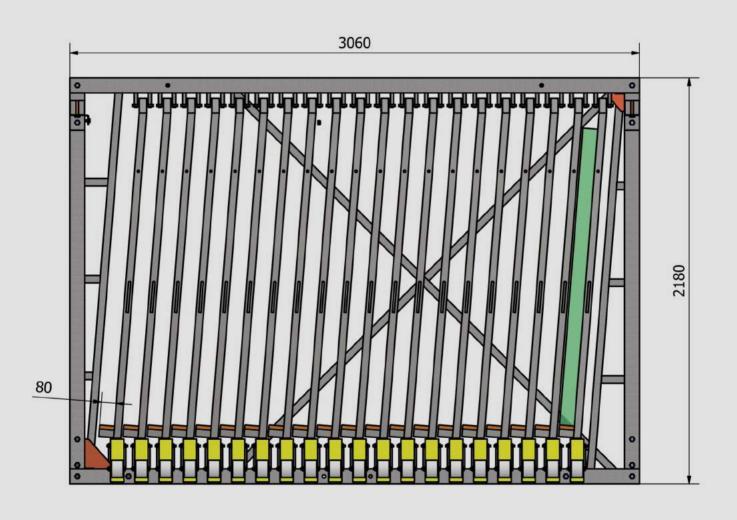
### MAIN FEATURES OF DIFFERENT GLASS RACKING SYSTEM

Type of glass racking system	Stored material	Dimensions of sheets	Loading width of singe drawer [mm]
M80	Single sheets	160x255	80
D80 H255	Single sheets	255x321	80
D220 H255	Cranes	255x321	220
M260	Cranes	160x255	260
R220	Cranes	255x321	220



# Example - M80-20

# Number of drawers - 20 Loading width of single drawer - 80mm Max load of single drawer - 900kg



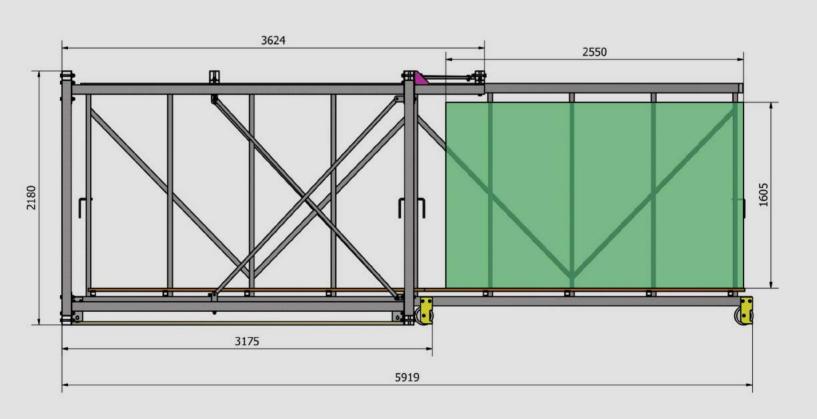
# Example - M80-20

Total width - 3060mm

Capacity [kg] - 20 x 900kg = 18 000kg

Capacity [mm] - 20 x 80mm = 1600mm

Access to any drawer at any time!



# Glass racking systems SIDE TO SIDE



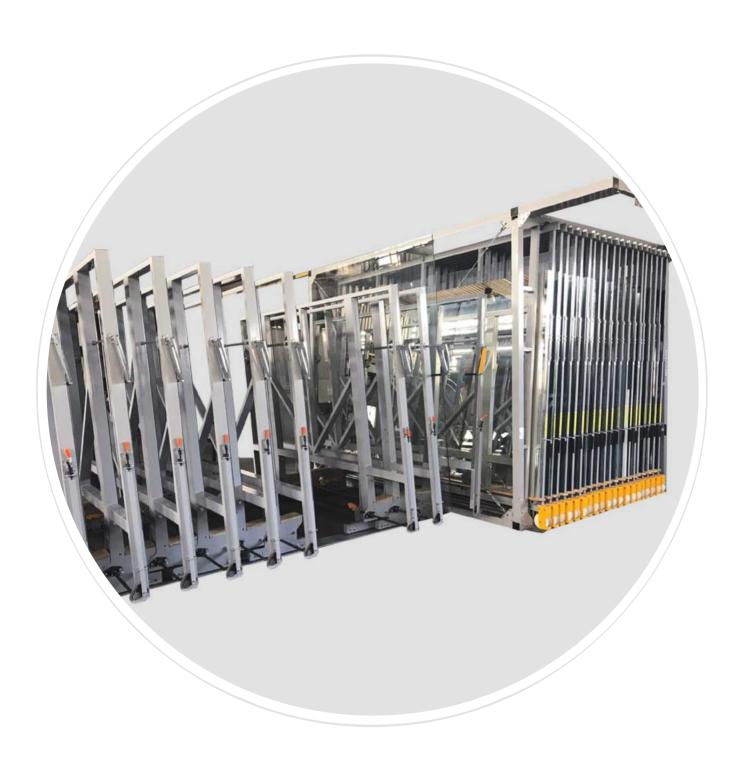


EXPOGLASS® side to side racking system is the system for storing the plate materials in drawers which move on railways from side to side.

It is preferable solution when there is a need to store glass in cranes and there is not enough space to pull out drawers in the standard glass racking storage.

The lenght of these systems has almost no limits but in bigger systems it is suggested to make more than one space for reaching between the drawers.

# Glass racking systems SIDE TO SIDE

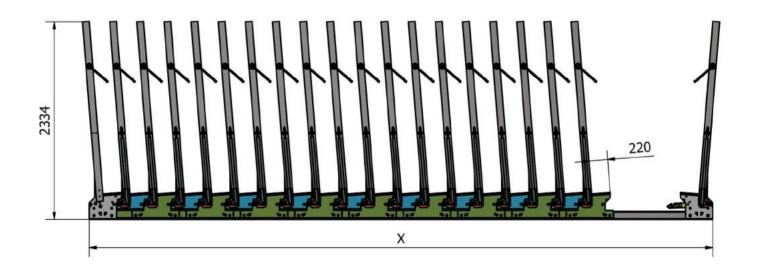


Picture showing side to side storage (on the left) and standard glass racking system (on the right)

# Example - R220-20

## SIDE TO SIDE

Number of drawers - **20**Loading width of single drawers - **220mm**Max load of single drawer - **2500kg** 



# **Example - R220-20**

## SIDE TO SIDE

Total width - **7522mm**Capacity [kg] - 20 x 2500kg = **50 000kg**Capacity [mm] - 20 x 220mm = **4 400mm Access to any drawer in just few seconds!** 



## EXPOGLASS® Priam



The Priam is a two-spindle, vertical glass drilling machine, designed and manufactured in Poland. It is a device that was created for customers who need machine that is functional and easy to use but also very durable.

When designing the Priam glass drilling machine, we returned to the old school of mechanical engineering – machines with heavy, heat treated steel bodies built in such way that exploitation and service can be executed efficiently. Thanks to this different approach to design and production, our machine allows long-term, trouble free glass drilling, which achieves multiple return on investment. To make sure that the elements of our machine are made with care, we manufacture them in Poland with our local cooperators.

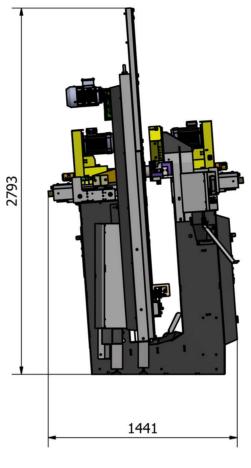
Even the main body of the machine is manufactured in our company in Nysa and then heat treated and later processed localy. As a result, all production is carried out under our careful supervision and any imperfections can be detected and eliminated before the product reaches the customer.

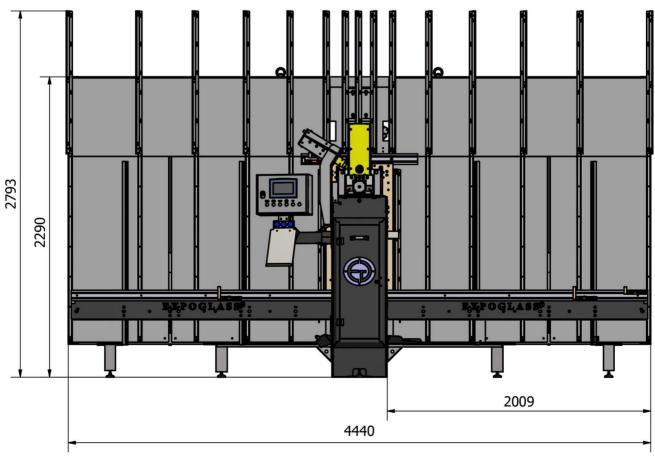
Finally, also supporting european machining industry.

## EXPOGLASS® Priam

#### Functionality at the highest level:

- 2 spindles (front and rear) allow drilling of the glass in a single pass, without turning it.
- Electronically controlled loading bar to set the dimension of the bottom edge of the glass to the center of the hole, simply enter the desired dimension on the touch screen the machine will position itself to the appropriate position.
- Quick drill bit change mode after pressing the drill bit change mode button, both spindles are automatically locked (you can not rotate them), the vertical table, which is between two drill bits, goes down thus opening a large space between them. Thank to this process, normally, the drill can be unlocked without using a single key (in the worst case, only one), with a lot of space for comfortable carrying out this operation.
- Automatic calculation of spindle depth after automatic spindle calibration, machine measures itself the glass thickness of drilled sheet. After that, machine automatically chooses the ideal values of depths and the operator's task will only include clicking on the drilling button since the whole parametrization is performed automatically.
- Electronically controlled spindle feed allows to significantly increase parameters of drilling. Thanks to this feature the spindle feed values can be very precise which increases the repeatability of all of the operations.
- Automatic adjustments of RPM drill bit diameter is measured automatically after changing of the drill bits then computer sets the RPM by itself.
- **Drilling in a closed chamber** our drilling machine has a separate drilling spindle not mounted directly on the electric motor.
- Massive, ribbed body, subjected to heat and mechanical treatment even the most precise systems and mechanisms lose their sense on a flaccid body that deforms during operation. Due to the highly oversized body, our drill has very low vibrations and deformations during operation, which makes it an extremely vital machine and can work on high parameters with close to zero risk of material breaking.







Hole in 2mm thick glass was made without changing any setting after drilling 10mm thick glass. Thickness of glass, depths and speeds were set automatically by the machine itself.

Nowadays more and more companies encounter difficulties due to high employees rotation and also because of lack of qualified employees. Finding a solution for that problem was our main purpose while designing the  $E \times P \circ G L \wedge S \circ Priam$ . Most of the difficult operations are performed automatically so the operators do not need to aquire any special skills. For example machine measures the glass thickness and then drills to the right depth with precision of around 0,1 mm automatically. All of this makes Priam easy to use and there is no need to make training longer than half an hour. After such training operatior should be able to drill all varietes of glass.

