LabVac series





LabVac is a series of laboratory hot platen presses that can create a vacuum condition inside the press chamber, which can prevent oxidation or contamination of the material by oxygen or other gases. A vacuum condition can also enhance the bonding and curing of the material, resulting in higher quality specimens.

Depending on the model – 50, 200, 400, 600, 1000 – the closing force range goes up to 50, 200, 400, 600 or 1000 kN at 300°C. Regardless of the model or settings used, the results will always be accurate and consistent.

The LabVac press is delivered with our ProView control system which includes a 15" touch screen to control the pressure, temperature and vacuum parameters according to the specific requirements of the material and the test. The vacuum system can be controlled manually through the operation panel, or as part of a recipe via a set of commands. The press chamber can be quickly filled with air after pressing. The large screen area of the ProView system gives the user a very good view on the settings and progress of the LabVac as well as extra comfort to control the unit.

BUILT-IN VACUUM PUMP

The LabVac's support table has a built-in vacuum pump that can create a low-pressure environment (30 - 40 mbar) in the press chamber. This allows testing without oxygen and/or with other gases such as nitrogen or argon. The air outlet at the back of the press can be connected to an exhaust system to expel air and gases from the vacuum chamber.



Built-in vacuum pump

EASY-TO-USE GRAPHIC INTERFACE

Thanks to the user-friendly touch screen interface, the LabVac's functions and settings are easily accessible. Moreover, the graphic interface clearly displays the progress of ongoing processes.

The LabVac is equipped with the ProView system, which uses a 15" touch screen. This system allows you full control over the press cycle and comes with a wide range of features and setting options:

- Temperature, pressure and vacuum control
- Heating and cooling ramp functions
- Pressureless preheating
- Graphical representation of the process
- Data recording & USB export options
- Different user access levels
- Compose and store up to 999 presets



Touch screen interface

BUILD YOUR OWN PRESS RECIPES

Lab technicians can easily build and store up to 999 press recipes, using the built-in preset builder. Starting a preset will fire up the corresponding process cycle automatically and will execute all programs commands and events.

SAFETY CAGE & EMERGENCY STOP

The CE-certified LabVac press was designed with the safety of the operator in mind. It has an upstroke design and is equipped with a safety cage and emergency stop.

SUSTAINABILITY

Our presses are known for their long – 20 years or more is no exception – lifespan. What's more, Fontijne Presses provides a wide variety of solutions – such as upgrade packages with the latest technologies – to improve or rebuild aging presses. This way, the presses remain state of the art for many years. And when the press finally reaches the end of its life cycle, the materials can be recycled.

SERVICE POLICY

Fontijne Presses' service policy is aimed at keeping machine downtime to an absolute minimum. This is why we have skilled service engineers available that can be deployed all over the world. We also have a full line of original spare parts available for our LabVac range. Upon request, the standard guarantee period can be extended. Fontijne Presses also offers preventive maintenance and a calibration service.

ISO 9001 AND 14001 CERTIFICATION

Fontijne Presses BV holds a ISO 9001 Quality Management System (QMS) and a ISO 14001 Environmental Management System (EMS) certification - proof of compliance with the requirements laid down in the standards: NEN-EN-ISO 9001:2015 and NEN-EN-ISO 14001:2015.

This states our total commitment to superior quality and environmental system management and our focus on customer requirements and needs, and organization-wide approach to continuous quality and environmental improvement in a way that contributes to sustainability.



REFERENCES

Our presses are used in many laboratories and R&D departments around the world.





























































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OPTIONS

ACTIVE COOLING SYSTEM

Automated water cooling of the press platens, controlled by electric valves. This way, the press can be deployed swiftly for upcoming tasks that need a lower temperature setpoint.

ARGON/NITROGEN CONNECTION

Connection point to enable working with inert gases.

LIGHT & SOUND SIGNAL

The light and sound signal indicates the status of a press cycle.

ETHERNET CONNECTION

For the export of data.

CONNECTION FOR EXTERNAL THERMOCOUPLE

Read out and integration in a process cycle via the ProView control system.

FAST HEATING SYSTEM

When this system is installed, the heating process of the LabVac presses can be accelerated to 20°C/min. This saves quite some time, as it only takes 8 minutes to reach 180°C (instead of 16 minutes) or just 14 minutes to reach 300°C (instead of 28 minutes).

STEEL, ALUMINUM AND COPPER PLATENS

By using optional platens in steel, aluminum or copper, a specific temperature distribution profile can be achieved.

EXTENDED GUARANTEE & MAINTENANCE PLAN

Upon request, the standard guarantee period can be extended. Fontijne Presses also offers preventive maintenance and a calibration service.

CUSTOMIZATION

Do you need other temperatures, closing forces or platen sizes? Let us know your specific requirements and we will work out a customized solution for you!



Connections



Inert gas connection



Ethernet connection



Connection for external thermocouple



TECHNICAL SPECIFICATIONS

LabVac		50	200	400	600	1000
Max. closing force*	kN	50	200	400	600	1000
Platen size*	mm	225 x 225	320 x 225	320 x 320	400 x 400	500 x 500
Specific pressure with full load Max. press force on steel 25 N/mm²	N/mm²	0,99	2,78	3,91	3,75	4
Max. temperature*	°C	300				
Daylight opening*	mm	200				
Amperage	А	16	16	16	32	32
Voltage	V	400V - 3 phase - 50 Hz + zero + ground 480V - 3 phase - 60 Hz + zero + ground				
Length	mm	1360 1540				
Width	mm	675 810				
Height	mm	1685				
Weight	kg	1160	1250	1300	1875	2150

^{*} These parameter values can be altered upon request. Please contact us for further information.

Fontijne Presses BV has a policy of continuous product development and reserves the right to amend these specifications without prior notice.