



Fontijne's floor standing LabEcon series – available with a press range of 300, 600 or 1000kN – is an automated hydraulic laboratory press, which incorporates many features and qualities of the top-of-the-line LabPro series. The critically acclaimed LabEcon series is known for his accurate and consistent pressing quality, and is therefore widely chosen as sample preparation press for quality control and R&D.

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

The unit's small footprint allows it to get installed easily in the lab, while its ergonomic design and straightforward touchscreen interface are appreciated by lab technicians. Furthermore, the LabEcon series incorporates many additional safety features, such as a fixed upper platen, an emergency stop system and a safety shield.

The LabEcon series is recommended for all demanding quality control and R&D applications where accuracy and consistency are prerequisites.

ACCURATE AND CONSISTENT PRESSING QUALITY

The rigid 2-column design of the LabEcon press results in a remarkably high parallelism of less than 0,1 mm. Moreover, both temperature and force are distributed very accurately across the entire platen surface. The LabEcon presses also allow for a highly controlled pressure build-up, resulting in very precise pressings.

ADJUSTABLE FEATURES & SETTINGS

The LabEcon press can either be ordered with our Programmable Control System – incorporating an 8.4" touch screen – or with our ProView system, which includes a 15" touch screen. Both systems enable automatic control of the press cycle and come with the following features and setting options:

- Temperature and pressure 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



PRESET BUILDER

Using the preset builder, lab technicians can easily build and store up to 999 press recipes. Selecting and starting a specific preset will start the process cycle automatically and will execute all programs commands and events.

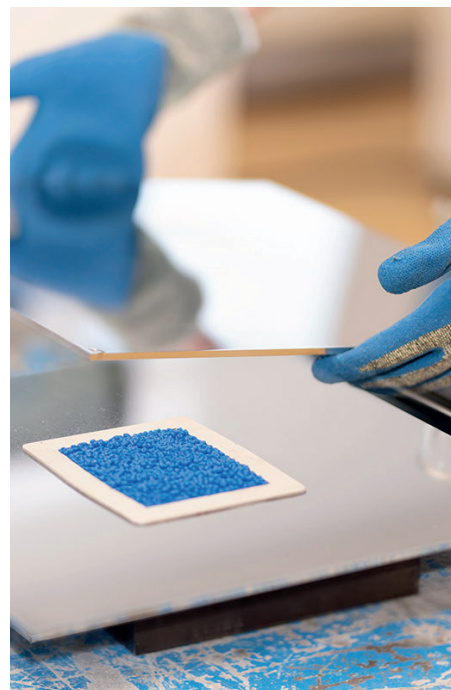
SAFE OPERATION

Fontijne presses are designed with the safety of the operator in mind. The CE-certified LabEcon press has an upstroke design and is equipped with a safety shield and emergency stop.

EASE OF USE

Even though the LabEcon press boasts many sophisticated features and functions, the unit is remarkably easy to operate. Furthermore, the built-in 8.4" or 15" touch screen clearly shows all relevant settings and read-outs.

Several on-site training modules are available for the LabEcon series, as well as online instruction materials.



SUSTAINABILITY

Fontijne presses are known for their long – 20 years or more is no exception – lifespan. What's more, Fontijne 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-start for many years. And when the press finally reaches the end of its life cycle, the materials can be recycled.

SERVICE POLICY

Fontijne's 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 LabEcon range.

REFERENCES

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



OPTIONS

Fontijne has several options available for your LabEcon press, allowing you to expand the area of application and to get the best possible performance from the unit.

HEATING CAPACITY TO 400°C

The heating capacity of the LabEcon models can be expanded up to 400° C. This allows to use of a wider range of sample materials.

FAST HEATING SYSTEM

When this system is installed, the heating process of the LabEcon 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 19 minutes to reach 400°C (instead of 38 minutes).

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. Please note that the cooling system can be made compliant with ASTM D4703 (to achieve a 15°C/min cooling ramp) upon request.

CASSETTE COOLING SYSTEM

The cassette cooling system consists of two water cooled platens which can be moved horizontally – either manually or motorized – between the press platens. The cassette system can even move vertically along with the press platens, to allow cooling under pressure. In situations where extremely fast cooling is needed, the cassette cooling system – cooling up to 280°C per minute – is the right solution.

Furthermore, the heated platens will be continuously heated while the cooling platens will be continuously cooled. This method results in much lower energy consumption compared to a traditional approach where the heated platens have to be cooled down after each pressing and then heated again. For the same reason, the cassette system is also timesaving.

PROGRAMMABLE OR PROVIEW CONTROL SYSTEM

The LabEcon presses can either be delivered with our Programmable Control System – which uses an 8.4” touch screen –, or with our ProView system which includes a 15” touch screen. The larger screen area of the ProView system gives the user a better view on the settings and progress of the LabEcon and adds extra comfort to control the unit. Moreover, the ProView system adds a frequency controller to control the speed of the press during the final closing phase.

MULTIPLE ‘DAYLIGHTS’

By adding extra daylights – this refers to the opening between the lower and higher platens –, a significantly larger number of samples can be processed within the same cycle. Each daylight can have its own heating/cooling settings.

STEEL, ALUMINUM AND COPPER PLATENS

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

ADDITIONAL OPTIONS

Your LabEcon press can also be equipped with additional options like a roller bed, an exhaust hood, an automatic venting cycle and light and sound systems to indicate the end of a press cycle.

- Roller bed: consists of ball transfer units allowing to insert the mold more easily.
- Exhaust/extraction hood: sits on top of the press and can be connected to an existing exhaust system, using the Jacob \varnothing 200 mm connection flange.
- Automatic venting cycle/degassing stroke: allows to vent the unit, by automatically open and close – after a preset period of time – the press. From 1 to 99 venting cycles.
- Light signal: a light signal on top of the unit indicates the end of a press cycle.
- Sound signal: an acoustic signal indicates when the press cycle is finished.



CUSTOMIZATION

Please feel free to contact us if you would like to have your press customized according to your specific needs. We gladly make you a personalized offer.

EXTENDED GUARANTEE & MAINTENANCE PLAN

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

TECHNICAL SPECIFICATIONS

LabEcon		300	600	1000
Closing force range*	kN	1 - 300	1 - 600	1 - 1000
Platen size*	mm	320x320	400x400	500x500
Specific pressure with full load	N/mm ²	2,93	3,75	4
Specific pressure with 250 x 250mm load Max. press force on steel 25 N/mm ²	N/mm ²	4,8	9,6	16
Maximum temperature	°C	300 (optionally up to 400°C)	300 (optionally up to 400°C)	300 (optionally up to 400°C)
Standard daylight opening* Refers to the opening between the upper and lower platen	mm	200	200	200
Amperage	A	16	32	32
Voltage	V	3 x 400V/50 Hz + zero + ground 3 x 480V/60 Hz + zero + ground		
Length	mm	790		
Width	mm	880		
Height	mm	1790		
Weight	kg	600	800	1000

* 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.