



**The LabManual series by Fontijne Presses are manually operated hydraulic laboratory presses. These highly acclaimed benchtop devices are used in many laboratories around the world to prepare samples for quality control and R&D purposes.**

The LabManual series can – depending on the model 50 or 300 – handle pressing needs up to 50kN and 300kN at 200°C or 300°C, but also allows the use of low closing forces. Whichever settings you choose, the results will prove to be accurate and consistent over time.

Thanks to its modest footprint, the LabManual can easily get installed in any lab. Furthermore, the unit's closed hydraulics operation prevents oil from leaking. The LabManual is designed with safety in mind, while its ergonomic design and straightforward operation make life easier for laboratory technicians.

Fontijne Presses' LabManual press is the right choice for applications that need accuracy and consistency, but where the number of samples to be processed is moderate, allowing manual operation.

## ACCURATE AND CONSISTENT PRESSINGS

The LabManual series uses a very rigid press frame, resulting in a remarkably high parallelism of less than 0,1mm. Furthermore, the 2-column design allows easy access to the press area. Thanks to the precise force distribution across the entire platen surface, as well as the accurate and evenly temperature distribution, the LabManual series offers a highly controlled pressure build-up, resulting in accurate pressing.

## SAFE OPERATION

The laboratory presses by Fontijne Presses are designed with the safety of the operator in mind. The LabManual has an upstroke design and is equipped with a safety shield.

## EASE OF USE

Fontijne Presses has gone to great lengths to make the operation of the LabManual as simple as possible. For example, it is unnecessary to manually adjust the opening between the two platens when changing moulds, because the device is designed in such a way that the stroke size always equals the daylight size. Furthermore, several digital controls allow to use the device in a very straightforward fashion.

There is an on-site training module available for the LabManual as well as online instruction materials.



## DIGITALLY CONTROLLED

Even though the LabManual is a manually operated press, it offers multiple digital controls and read-outs, such as a digital temperature controller and a PID control system. Using the digital temperature controller, the desired temperature of the upper and lower platen can easily be entered and monitored, as the display shows both the actual temperature value and the setpoint. The PID control ensures a continuously modulated control by means of accurate and responsive correction and avoids temperature overshoot. There is also an integrated LCD-screen on the LabManual, which shows the closing force that is set by the handpump.

## SUSTAINABILITY

The laboratory presses by Fontijne 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-start 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 LabManual presses range.

Furthermore, Fontijne Presses has put together an extensive maintenance and calibration service to prevent downtime and to extend the life of your machine.

## REFERENCES

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



## OPTIONS

### ACTIVE WATER COOLING (ONLY LABMANUAL 300)

Using the active water-cooling circuit, the LabManual 300's press platens can be cooled swiftly. This allows to use the unit for upcoming tasks that need a lower temperature setpoint, without losing valuable time. The active water cooling option includes an air blow system which uses compressed air to clean the cooling channels of the press platens. This way, dirt can be prevented from settling in the channels.

### CHROMATED BACKING PLATENS

When using higher temperature settings, the sample material may adhere to the platens. This can easily be prevented by using a set of chromated backing plates.

### EXTENDED GUARANTEE & MAINTENANCE PLAN

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

## TECHNICAL SPECIFICATIONS

LabManual		50	300
Closing force range	kN	1 - 50	1 - 300
Platen size	mm	200x200	320x320
Specific pressure with full load	N/mm <sup>2</sup>	1,25	2,93
Specific pressure with 150 x 150mm load	N/mm <sup>2</sup>	2,22	13,30
Maximum temperature	°C	200	300
Daylight <small>Refers to the opening between the upper and the lower platen</small>	mm	150	140 (only heating) 100 (heating/cooling)
Amperage	A	16	16
Voltage	V	230	230
Length	mm	450	500
Width	mm	350	500
Height	mm	600	800
Weight	kg	70	275

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

## AREAS OF APPLICATION

In situations where the number of samples that needs to be pressed is limited, the LabManual series can be used instead of an automated press, at a significantly reduced cost.

The LabManual series is also often used as a secondary or back-up press, allowing to run a limited number of extra tests in addition to the production of the 'normal' samples that are handled by an automated press.

Another application that the LabManual series is particularly suitable for, is for pressing fragile sample materials – such as glass –, or materials for which the pressing force must be built up very carefully.