

Drastically lower your production costs and increase the quality of your plantlets!



Media preparator

- Much less ingredients are needed per batch (agar, hormones, bio-chemicals)
- Save energy and production time
- Increased resistance of your plantlets against diseases
- Higher multiplication rates or shorter cycle times of your plantlets

lab associates

Your global supplier for plant tissue culture and seed laboratories

Overview

The Lab Associates media preparators have been developed with over 30 years of experience in the field of plant tissue culture. Some of the largest PTC laboratories in the world are using our media preparator to gain a competitive advantage.

Our new steam-driven “premium” model is the fastest and most reliable large-volume media preparator on the market with its very short cycle time of only 30 minutes on a stand-alone basis¹. This means that considerably less vitamins, minerals and other nutrition for your plantlets will be lost during the sterilization process. This results in a very high quality agar medium. Your plantlets will be better resistant against diseases and their grow cycle time will be shorter or the multiplication factor will be higher. Furthermore, you can save money on ingredients as well, because much less agar, hormones and sugars will be burned, thanks to the shorter sterilization time.

¹ Cycle time from 60° Celsius, 15 minutes of sterilization at 121° and back to 60°.

PLC Panel

- Fully PLC controlled machine with capacitive glass touchscreen
- Graphic display of all sterilization programs, processes and other relevant information
- Automatic trigger and warning system for errors and defects
- Graphs and statistics of all batches are saved and directly readable on the screen
- Up to 99 different programs can be stored
- Remote control with your PC, tablet and smartphone
- The PLC can be read out from a distance via ethernet connection; enabling our technical service team to solve or assist you with most problems offsite



Magnetic stirring mechanism

The magnetic stirring mechanism is specifically designed to stir continuously at a very high speed, thereby creating a perfectly homogenous mixture and temperature throughout the whole medium. Our magnetic stirring mechanism doesn't need a mechanical seal. Such a seal is very costly and a nursery for heat resistant bacteria, which is a huge problem for other media preparators.



Built-in steam generator

The Lab Associates media preparator has a built-in steam generator for a stand-alone process. Therefore, you don't need an external source of steam with a high amount of pressure for a smooth sterilization process. The steam generator is part of a closed-loop energy system, making the machine very energy efficient as well.

The steam generator is also used to sterilize your dispensing tube. There is no need to take off this tube and sterilize it in a separate autoclave. This sterilization is part of the media preparator's standard program and ensures that it takes place right before you have reached your desired dispensing temperature.



Certified parts

Lab Associates only uses high-quality certified components. The steam generator, electric circuit, and the high pressure vessel are Lloyd's certified and the machine is built according to the European machine guidelines.

Add-on options for the "Premium" model:

- Built-in compressor for compressed air (instead of using house air)
- Semi-automated dispensing unit with optical cell
- Well-dimensioned water systems (demi-water and/or reversed osmosis systems)
- No-break power supply / UPS

Key features

- Available in 75, 100 and 150 liters
- Extremely low maintenance and high durability
- Built-in steam generator
- Magnetic stirring mechanism (no mechanical seal)
- Stainless steel compressed air valves instead of magnetic valves
- All critical parts are made of stainless steel 316L and are completely sanitary
- Constant overpressure to prevent contamination on the inside
- Only high-quality certified parts are used
- The inside of the vessel is made of high polished stainless steel 316L (easy to clean)
- Built according to the European machine guidelines
- Available with all required certificates (e.g. CE, UL, Lloyd's)
- "Budget" versions of these models are also available. Please note that the cycle time will be longer and some features are only available as an option.

Technical specifications "Premium" versions	LA-MP 75 liters	LA-MP 100 liters	LA-MP 150 liters
Dimension and weight			
Frame dimension (WxDxH) [cm]	145 x 80 x 133	150 x 80 x 141	186 x 93 x 141
Worktop height [cm]	93	101	101
Weight [kg]	325	380	440
Power supply	63A	63A	63A
Power required [kW]	26	38	59
External steam connection	Optional		
Process data			
Sterilization cycle time [min.]	15	15	15
Total sterilization process time (60 °C - 121° C - 60 °C) [min.]	30	30	30
Stirring speed	Adjustable on touchscreen		
Error detection	Yes		
pH check [at desired and hold temperature]	Yes		
Controller system [PLC]			
Glass high resolution touchscreen controller	10"	10"	10"
Graphical representation of temperatures	Yes		
Graphical representation of pressures	Yes		
Graphical representation of batch durations	Yes		
Amount filling in plastic cups or jars [cc.]	Yes		
Media vessel			
Material facing medium and R.O. water	stainless steel 316 + 316L	stainless steel 316 + 316L	stainless steel 316 + 316L
Casing material	304	304	304
Gross volume vessel [liters]	93	142	215
Min. + max. capacity [liters]	25 - 75	35 - 100	40 - 150
Max. pressure [bar]	3,5	3,5	3,5
Max. temperature [°C]	130	130	130
Valves			
Valves	All air pressure valves		
Material of critical valves that comes into contact with medium	Stainless steel 316L		
Steam generator			
Volume [liters]	36	55	69
Max. pressure [bar]	3,5	3,5	3,5
Max. temperature [°C]	135	135	135
Water			
Supply pressure [bar]	4	4	4
Water quality cooling / steam production	Decalcified / R.O.		
Drain volume per batch [liters]	130	190	260
Air			
External air supply [liters/min.]	50	75	100
Internal air compressor	Optional		
Software			
Smart Connectivity	Yes		
Failure detection	Yes		
Graphic display	Yes		
Available languages	English, Dutch and other languages on request		
Ethernet connection	Optional		
These models are also available in a budget version. Please note that on the budget versions some of the features are not included, but optional. The cycle time of the budget version is also longer.			