How to dispense qour valuable liquids fast and accurately -







Dispensing machine:

- Fast and accurate.
- Sterilisable by bleach and steam.
- Heated circuit : allows the use of gel as carrier liquid.
- Fully waterproof cabinet, allows external sterilisation by alcohol.



This unique machine is developed to fill a gap in the market of dispensing machines.

By addition of numerous of non standard controls we reach a higher level of accuracy (temperature, air pressure....)

The print on the fly method and high frequency valves allows us to fill a 1536 well plate in only 60 sec with 8 different liquids. By using stainless steel, Teflon an silicone nearly every reactive is allowed. The most sensitive live cells (keratinocytes) survive to fast liquid handling.

Stirring mechanism guarantees an homogeneous cell or bead concentration during the whole dispensing process.

We have 3 sterilisation levels:

• Liquid tank by bleach 8°

- The whole print head is dismountable without any tool in less than 1 minute to be placed in a steam sterilisator at 135°C during 30 min
- The waterproof cabined is designed to be rinsed with pure alcohol: inside contamination is avoided.

Your fingers are important therefore the security system locks immediately the machine in case of danger.

A single match stops the machine without breaking

Friendly user interface: just put the mass you want in each well in an Excel sheet, the machine measures the liquid characteristics and calculates the parameters to deliver the right liquid quantity. This way, viscosity, density and surface tension of used liquid don't influence the delivered mass

Dimensions (foot-print) mm	530(L) x 590(W) x 530(H) Designed to fit in a standard laminar flow cabinet
Power supply	230 V AC +5% -15% 50Hz 110 V AC is an option
Communication	Keyboard, PC and screen out of the laminar flow cabinet
	PC / machine communication by Ethernet
DISPENSING RANGE - ACCURACY	
Range	20 nl to 400 μl (= 1/20.000)
Accuracy	Standard deviation (CV) <5% mass on the full range
LIQUIDS	
Allowed	Bleach 8°; PBS, ethanol 100% and compatible with stainless steel 316, Teflon, silicone
Suspensions	Yes (max size: 50µm)
Live cells	Yes in gel
VALVE	
Frequency	1.000 Hz
DROPLETS	
Minimum Spot diameter	
on Polystyrene plate	0.5 mm
LIQUID TANK ON TOP OF VALVE	
Design	Out of one stainless steel block to avoid gaskets and so possible leakage
	or external contamination
Volume	5 ml
Stirring	Magnetic adjustable rotation speed
Level detection	Optical, generates an emergency signal to avoid aerosols generation
Minimum volume requested	200 μl
Real dead volume	100μ
Heating	Water jacket (20°C to 40°C temperature)
PLATES	
Types	Well plates 96 / 384 / 1536 / 3456 any supplier according to SBS specifications
Glass plates / PS plates	Yes. Standard well plate foot print Format 6144 or more available
Positioning accuracy	0.1mm
SOFTWARE	
Input data	Via Excel file or via keyboard on machine
EXCEL worksheet	The requested weight by well is entered valve by valve in a worksheet.
CE approval	YES



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