

Watch out this year for new developments from the Tecan pipeline



Find out about Tecan's new Pressure Monitored Pipetting and MCA tools

WHAT'S NEW

Tecan's new **Pressure Monitored Pipetting (PMP)** tool is an independent option for Freedom EVO® platforms that brings a number of benefits to biopharma applications, including DNA extraction and screening assays. With PMP, the pipetting quality can be observed online for both aspirations and dispensations, and faults including tip leakage, bubbles, occluded tips or inappropriate dispensed sample volumes can quickly be detected. The PMP can also detect the liquid level of non-conducting liquids (as organic solvents) with pressure Liquid Level Detection (pLLD). The PMP also allows Liquid Level Detection by simultaneously using the conventional capacitive Liquid Level Detection (cLLD) with pLLD (dual LLD).

PMP is an innovative new technology. The PMP algorithm uses known pipetting parameters, such as pipetting speed, volume and tip type, to calculate a model curve. This is then fitted to the measured pressure curve to allow for unknown pipetting parameters, such as sample viscosity or surface tension, prior to failure detection / determination, which is performed by a repeatable and sensitive failure detection algorithm.

The PMP integrates easily into the Freedom EVO 100, 150 or 200 equipped with disposable tips, and comes with its own software module that monitors and analyzes pipetting. The software module is fully integrated in Freedom EVOware®. The measured pressure curves can be stored

by the software, allowing you to retrieve data when you need to. The sample traceability and sensitive error detection of the PMP bring considerably increased process stability and process security to many liquid handling applications.

The PMP has already been verified for serum and aqueous solutions, for the whole volume range from 10 µl up to 1000 µl, and will be developed for other liquid classes. Tecan will release the PMP for research use in biopharma applications by April 2006.

A new option for Freedom EVO – a multi-channel arm

Showing again the evolutionary concept of the Freedom EVO, Tecan is adding a new multi-channel arm to the multi-functional platform. With up to 44 positions on the worktable and integration flexibility on all sides, including below the worktable, Freedom EVO with its new multi-channel arm is fully compatible with existing modules and options, such as vacuum and magnetic bead separation, incubation and reading capabilities. In addition to the multi-channel arm Freedom EVO can have up to two other arms enabling true parallel processing for higher throughput and productivity.

The Freedom EVO with its new multi-channel arm can be seen at the LabAutomation exhibition at Tecan booth #305.



Close up of a tip