

# eVol

## Digitally-Controlled Analytical Syringe



Press the 'down arrow key' or 'click left mouse button' when you see this symbol

Enabled by



**XCHANGE**



## eVol – digitally controlled analytical syringe

### Existing liquid handling problems:

- Pipettors cannot be used for dispensing non-aqueous, viscous or hazardous liquids.
- Only positive displacement devices such as syringes are suitable for dispensing these types of liquids.
- Pipettors can only be calibrated for aqueous liquids.
- Analytical Syringes cannot be calibrated .

### ***General solution:***

***Use pipettors or un-calibrated syringes to dispense non-aqueous, viscous and hazardous liquids.***





## eVol – digitally controlled analytical syringe

**eVol** is enabled by XCHANGE

eVol is the union of two precision devices

a digitally controlled electronic drive  
and

an XCHANGE  
Analytical Syringe





## eVol – digitally controlled analytical syringe

**eVol** is enabled by XCHANGE

*The integrated XCHANGE coupling allows XCHANGE Syringes to be quickly and easily changed*

*XCHANGE syringes offer unique versatility and functionality*

*eVol™ is intuitive and features a familiar Touch Wheel user interface and a full-color screen.*





## eVol – digitally controlled analytical syringe



### eVol

The perfect solution for routine dispensing of:

Volatile solvents (e.g. organic solvents)

Hazardous chemicals

Corrosive chemicals

Viscous samples

These are liquids that can not confidently  
be dispense accurately or precisely  
with pipettors<sup>#1</sup>



<sup>#1</sup>References to the incompatibility of pipettors for dispensing these liquids are commonly found on manufacturers web sites





## eVol – digitally controlled analytical syringe



### eVol

The worlds-first truly calibrated analytical syringe  
*(can be simply calibrated by user to ensure validity of results)*

A simple calibration procedure is used to adjust the plunger drive to compensate for any inaccuracy of the syringe. This system vastly improves syringe accuracy.







## eVol – digitally controlled analytical syringe



### eVol

The worlds-first truly calibrated analytical syringe  
*(can be simply calibrated by user to ensure validity of results)*  
*(complies to GLP and GMP protocols)*

When laboratory operating standards (GLP/GMP) require the assurance of accurate manual dispensing, eVol delivers the most reliable and complete solution.





## eVol – digitally controlled analytical syringe



### eVol

The worlds-first truly calibrated analytical syringe  
*(can be simply calibrated by user to ensure validity of results)*  
*(complies to GLP and GMP protocols)*  
*(improves confidence in reported results)*







## eVol – digitally controlled analytical syringe



### eVol

The worlds-first truly calibrated analytical syringe  
*(can be simply calibrated by user to ensure validity of results)*  
*(complies to GLP and GMP protocols)*  
*(improves confidence in reported results)*

Allows precise and accurate dispensing  
independent of the operator  
*(De-skills all laboratory dispensing procedures)*

eVol is digitally controlled so the correct volume is dispensed every time independent of the skill of the operator.





## eVol – digitally controlled analytical syringe



### eVol

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Allows precise and accurate dispensing  
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*(De-skills all laboratory dispensing procedures)*

*(allows better utilisation of laboratory staff)*





## eVol – digitally controlled analytical syringe



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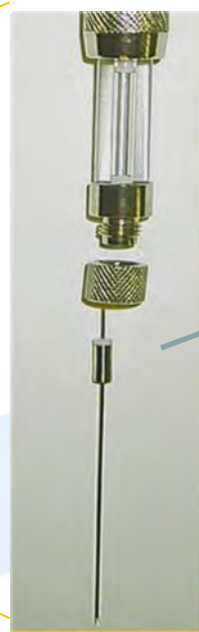




## eVol – digitally controlled analytical syringe



The addition of MEPS (Micro Extraction by Packed Sorbent) to the XCHANGE Syringe used in eVol offers automated sample preparation by SPE (Solid Phase Extraction) in a hand-held system



MEPS can be used with the eVol XCHANGE syringes





## eVol – digitally controlled analytical syringe



eVol features a familiar Touch Wheel user interface and a full-color screen. The clever menu allows all the functions to be accessed logically and quickly. The programming functions are intuitive and include multi-language help screens and prompts.





# eVol – digitally controlled analytical syringe

## Competitive landscape:

There is no direct competitor to eVol.

eVol is the only analytical syringe that can be calibrated.

*The Hamilton repeat dispenser uses a spring loaded ratchet system to move the plunger to a position defined by each of the ratchet steps. It is a crude attempt at dispensing preset volumes with a standard analytical syringe. It cannot be calibrated and the mechanical wear over time results in a variation in dispensed volume.*



*The Hamilton Digital Syringe can only monitor the volume of dispensed liquid by measuring the movement of the plunger in the barrel. This device cannot be user calibrated and cannot be used to aspirate and dispense preset volumes.*







## eVol – digitally controlled analytical syringe

### eVol Value Proposition:

For laboratories that need to repeatedly dispense non-aqueous liquids, eVol is a digitally-controlled positive-displacement device that improves the efficiency of the laboratory and the reliability of results. Unlike other laboratory dispensing-devices, eVol is a unique hand-held digital dispenser that can be easily calibrated to accurately and precisely dispense liquids independent of the user's skills.



Presentation Title







# eVol

## Digitally-Controlled Analytical Syringe

**Will positively change your laboratory work flow**



Presentation Title

