



MEREL
instruments



One of a kind, semi-automated and easy to use dissolution tester washing system with media dispensing capability. Battery powered for superb mobility and fully equipped for exceptional performance.

dissoWASH&DOSE®
Semi-automated
washing and media
handling system

Overview

dissoWASH&DOSE® is addressing foremost the resource-consuming waste removal and cleaning of the vessels in your dissolution testers. In addition, it keeps the prepared dissolution media heated and ready for dispensing and saves you a lot of time with its function of precise volumetric dispensing. This frees up your limited resources and makes this time available for more productive laboratory work.

dissoWASH&DOSE® simplifies and optimizes those monotonous tasks while adding an additional benefit of reducing possibilities for human error, thereby saving time, reducing cost and increasing output of your dissolution laboratory.

Working principle

The unit is prepared at a filling station – media and wash containers are filled, and waste container is emptied – all this via pre-installed hoses with quick connect fittings. Then the easily portable unit is ready to be pushed into a position next to the dissolution tester. The operator uses an easy to operate LCD touchscreen to select the desired program - i.e. mode of operation.

Depending on the program selected, the dissolution vessels are emptied, rinsed and filled with fresh media. All three steps are performed subsequently on each vessel, using only one tool and with no adjustments or additional steps necessary.

The unit can then be moved to the next tester and the procedure repeated. Up to 5 testers with 6 vessels (900 mL) or an equivalent of 9 testers with 6 vessels (500 mL) can be attended to before another stop at the refill station is necessary.

In addition, the upper tester parts (shafts, evaporation covers, cannulas and probes) can be washed using a second handheld tool.

User can switch between methods, selecting from:

- waste emptying and vessel washing
- media dispensing only
- emptying, washing and media dispensing



We have designed an apparatus which suits your needs. A clean, minimalistic design enables simplicity of use, has a modern design with a minimal number of different components and looks great!

System components

1. Easily maneuverable cart (wheels with locking brake)
2. Hand-held tool for vessel washing and media dispensing (nozzle for full 360° rinse)
3. Hand-held tool for shafts washing
4. Separate tubing for waste removal, vessel rinsing and fresh media dispensing
5. Top panel mounted touch display for easy and intuitive operation
6. Side panel with quick connect fittings for waste emptying / wash container refill
7. Large capacity internal battery
8. Internal wash, media and waste containers
9. External water heater for wash container (optional)



Highlights

Mobile (set on robust wheels), **battery powered**, great autonomy

Compatible with all dissolution testers using 1 L and 2 L USP conforming vessels

Vessel removal is not necessary, self-adjusting drain compensates for differences in vessel height

Sequential waste removal, vessel rinsing and precise volumetric media dispensing

Washing (rinsing) with purified water

Low cycle times, repeatable procedures (<1 % dispensing accuracy)

Heated media storage and simplified waste collection

Empty and refill hassle-free via easily accessible quick connect fittings

Environment friendly with minimized water and energy consumption

Low noise, optimal for laboratory environment



Performance specifications

Cleaning time:	Up to 3.5 minutes is all it takes to empty and clean vessels in one dissolution tester with 6 vessels (900 mL per vessel)
Add media:	It only takes additional 75 seconds to dispense the media (tester with 6 vessels at 900 mL)
Additional option:	Just 1.5 minutes are necessary to clean the upper parts (evap. covers, cannulas, temp. probes and shafts (for a tester with 6 vessels)
Autonomy:	8 dissolution testers with 6 vessels or 6 dissolution testers with 8 vessels before wash container refill is necessary. 5 dissolution testers with 6x900 mL vessels (before media refill is necessary) 9 dissolution testers with 6x500 mL vessels (before media refill is necessary)
Unit refilling time:	Approximately 9 minutes (empty waste, media and wash container refill)
Internal battery capacity:	Clean and dispense up to 250 vessels (at 900 mL)

Dimensions and data

Construction materials:	Aluminium, Stainless Steel, Engineered Plastics
User Interface:	LCD Touchscreen
Height:	97 cm (38")
Length:	60 cm (23.5")
Width:	46 cm (18")
Weight:	<50 kg (110 lbs) - empty; <95 kg (210 lbs) - full, ready for operation
Media Container Volume:	2x15 L (2x4 gallons)
Wash Container Volume:	1x13 L (3.5 gallons)
Waste Container Volume:	1x43 L (11.5 gallons)
Fill Port:	Quick Connect/Disconnect Fittings on Side Panel
Battery Charging Voltage:	230 V/50 Hz or 110 V/60 Hz

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