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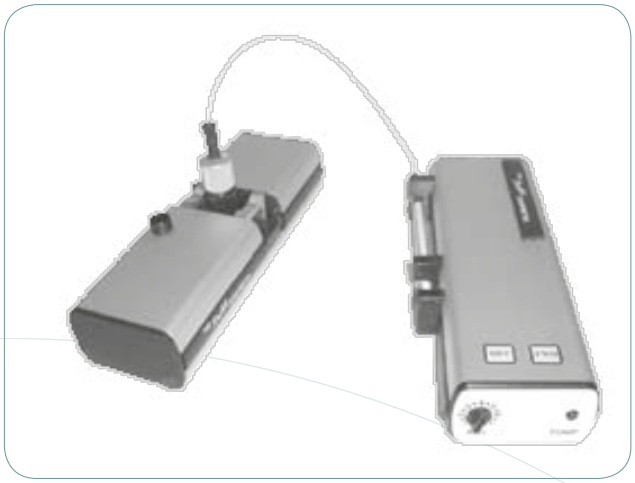
Measure Improve Service

PG DOSING UNIT



The PocketGoniometer product line is a family of scientific testing instruments to determine the interaction between a liquid droplet and a surface. Liquid droplets can be applied by means of a manual dispenser (syringe) or in some of the models an integrated miniature pump. When tacky liquids or many different liquids are used, it is necessary to clean or replace the liquid system to avoid contamination. Our new concept 'Disposable Liquid System' is an attractive alternative to tedious cleaning and replacement of expensive parts. In addition the new PG Dosing Unit will offer new opportunities not available with the standard instruments.

The PG Dosing Unit is based on a standard syringe pump for low-cost disposable syringes.

The complete liquid system consists of a one mL syringe, a dispensing tip and a PTFE tubing. This standard syringe produces more than 200 liquid droplets of four microlitres and when the syringe is emptied or not required any more, the entire liquid system is disposed of. A new syringe is then filled with the new test liquid, a new dispensing tip with tubing is attached and the syringe is put into the PG Dosing Unit. Disposable items like syringes, dispensing tips and PTFE tubings are offered in economical bulk packages.

The PG Dosing Unit can be operated in many modes The most common use is to set the pump to a preset droplet volume and pump out a new droplet for each new test position. The PG Dosing Unit can also be programmed for sophisticated analysis of the "wetting hysteresis" using the advancing/receding contact angles to characterise the surface properties.

Here the dynamic contact angle is measured as the droplet advances across the test surface. The pump flow is then automatically reversed at a user-defined volume and the liquid droplet is now receding on the surface. Finally the droplet will release from the dispensing tip and the test is aborted.

Features

- Disposable Liquid System
- Small & portable size
- Affordable
- Versatile
- Wetting Hysteresis
- tests advancing/receding
- contact angles
- Uses pure PTFE tubings