



BOLTAC INDUSTRIES

Original Equipment Manufacturers

Telephone +64 274 726 980

P O Box 8048
Urlich
HAMILTON 3245
NEW ZEALAND

Attention Water Treatment Operators, Lab Technicians and Managers, Chemical suppliers, Equipment suppliers, Plant designers and consultants.

Re **Jar Test Coagulant and Flocculant dosing device.**
Incl. Description of **equipment to assist/enhance the jar test procedure.**

A lot of you will have thought about dilution accuracy and repeatability while mixing & adding coagulants and flocculants when jar testing.
The argument about accuracy and repeatability has always been present, and ongoing.

Boltac Industries has been supplying and specialising in jar stirrers and associated equipment since 1991 and we are pleased to offer a pipetting device to enhance water treatment technicians' efforts and results while conducting jar tests.

A few years ago, I had an opportunity to use micro pipettes for administering coagulant and flocculant into the jar test jars. *The equipment was either of UK, USA or Europe origin and at the time, cost prohibitive for the average water treatment facility.*

Searching local laboratory supply companies for these devices, the best prices we could find was from \$148.00 (all the way up to \$565.00 **each**)!
Opinion; while now less expensive than ten years ago, that's probably still expensive.

The micro pipette devices we now supply are now much more cost-effective.

The liquid does not contact the metering mechanisms, it stays in the removable, washable (and replaceable) tip. Preloaded and pre-set micro pipettes should be placed in a stand/rack, then it is a simple task to use two pipettes at a time, one in each hand and simply press the dispensing knob with one's thumb, once released, the knob returns to its original position. The tips can be rinsed and reused.

The micro pipettes carry an original manufacturer/supplier statement:

- Adjustment increment 0.5ul. (that's half a millionth of a litre). **(One drop = 50 µl)!**
- Accurate to 0.5% for the 5ml volume micro pipette (50,000ul).
- Max permissible error for the 5ml pipette volume is 0.15%
- Supplied with 5ml tips.
- Each micro pipette has a certificate.

We have no reason to doubt the accuracy of these scientific micro pipettes as they are infinitely more accurate than required for most water treatment applications.

Boltac Industries supplies two volume variations:

0.1ml – 1ml

1 – 5ml, both with excellent accuracy and repeatability.

How many?

We recommend one device/jar (for timeliness of dosing), ultimately a double-up if a second chemical dose was required (i.e., coagulant and then flocculant).

We recommend using a pipette rack as the tips are held off the bench and the liquid stays in the tip, not in the mechanism!

It is important not to allow the liquid into the body of the pipette device.

The micro pipettes are supplied with a range of interchangeable coloured plunger caps.

Spare tips for the 1ml and the 5ml micro pipettes are in stock.

Benefit of Accuracy

Due to the **accuracy** & repeatability of the micro pipette, and the ability to adjust in increments of just 0.5ul, it has been found that dilution of a coagulant working solution is often not necessary.

If using the “plant” coagulant solution, variations in mixing of coagulant in the plant tank is compensated for in the jar test without special testing/calculations.

PRICING:

Please email us for a quotation, bruce@boltac.co.nz

Supply- Goods usually despatched within 2 – 3 working days of receipt of order/payment.

