



LabTIE Seed DISPENSER

Simple. Fast. Reliable.

Version 22.001^a

The LabTIE Seed Dispenser is a manual, modular tool for fast, accurate single-seed dispensing of seeds from 0.2 to 9.0 mm into microplates, tubes, vials, petri dishes and trays. See the full range at www.labtie.com/seed-dispensers.





Introduction

LabTIE Seed Dispensers are used for dispensing seeds in a wide variety of plates such as microtiter and deep-well plates, on Agar, Blot paper, soil etc.

Don't settle for inaccurate and slow methods of plating/dispensing single seeds. Due to its modular design with exchangeable metal seed plates it is used for all types and variations of seeds (0.2mm - 9.0mm).

The Seed Dispenser is perfect for dispensing difficult seeds. It exceeds current competitive systems in speed, accuracy, variety of seed types and especially ease of use. Our Dispensers are used all over the world in research laboratories, universities, pharmaceutical– and biochemical laboratories, institutes and seed breeding companies.

LabTIE Seed Dispensers are mostly used for:

- ✓ Germination
- ✓ DNA extraction
- ✓ Seed Counting
- ✓ Vitality assays

Advantages:

- Accurate Dispensing seeds with sizes from 0.2mm to 9.0mm
- Dispensing in only 30 seconds
- Sterile Dispensing
- Easy cleaning
- Exchangeable seed plates, *"Different seed type? Just slide in a different Seed Mesh plate"*
- Custom made seed Mesh plates available for all types of seed

How does it work?

The LabTIE Seed Dispenser is a manual tool that dispenses seeds accurately. By filling the Dispenser and pulling the slider, a single seed per well is dropped in your 'container' or 'grid'

Containers can be: tubes, microtiter plates, vials etc.

Grid can be: Germination trays, Blot paper, Harmonica blot paper, Agar, Soil etc.

Check out our product videos on our website or for a demonstration

Can I dispense different seed types?

Yes, simply by exchanging your metal seed plate from the Seed Dispenser System. The seed plate determines the type of seed to be dispensed. "Just as simple as changing a pipette tip."

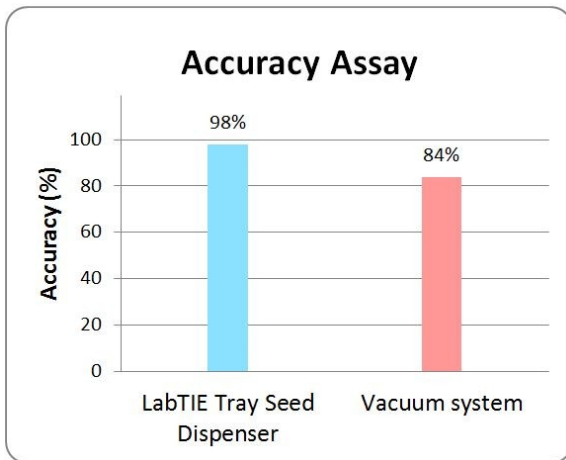
I have a size variety in my seed lots; does the LabTIE Seed Dispenser still work?

Yes, our Dispenser is designed to overcome the issue of size variety and capable of dispensing seeds more accurately than other systems in the market.

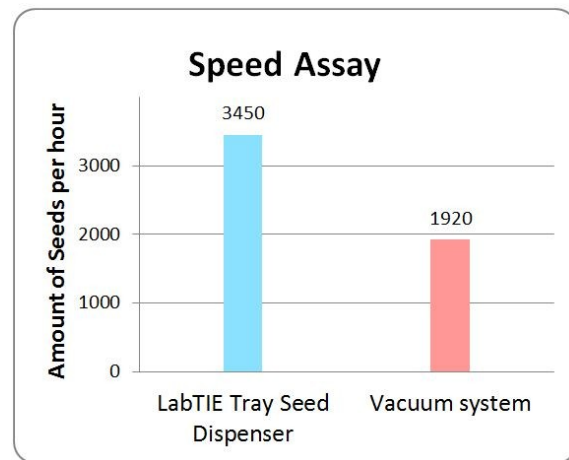
Is your system not listed?

Ask for a custom made Seed Mesh plate or Seed Dispenser.

A



B



The LabTIE Seed Dispenser increases accuracy in seed dispensing compared to other methods and systems while speeding up your process.

A: The LabTIE 96-Well Seed Dispenser was used to dispense batches of 96 lettuce seeds, resulting in a 98% accuracy of a single seed per location/well. Compared to the use of a vacuum dispense system, over 10% of the dispensed seeds contained errors such as double or triple seeds per location (anomalies), or even empty wells.

B: The LabTIE 96-Well Seed Dispenser dispenses 7200 seeds per hour compared to 4000 seeds using the vacuum system. Although the dispense time is roughly the same for both systems (approx. 30 seconds per cycle) correcting the anomalies afterwards was more time consuming using the vacuum system. The LabTIE Seed Dispenser seemed to be 80% faster while being more accurate in dispensing 'difficult' seeds.

Standard Plates, Tubes and Trays supported by LabTIE Dispensers

Is your 'container' not listed? Dispenser can be customized to fit your 'container'

Microtiter and Cell Culture Plates



96-Well Microtiter, Cell Culture, Deep Well Plates and Plates with strips



384-Well Microtiter and Deep Well Plates



24-Well Greiner/Corning/ThermoF Plates

48-Well Greiner/Corning/ThermoF Plates

Tubes



Snap cap tube 0.2mL-1.5mL

Screw cap tube 1.5-2.0mL
Cryo Tube

1.5-2.0mL Autosample (GC)
Vials

Petri Dishes Round and Square



9cm and 10cm
Agar/Blot paper

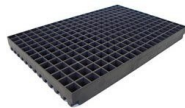


10cm and 12cm
Agar/Blot paper

Trays



Germination Tray
Blot paper/Soil



108-Well Tray
Soil



Tray Soil 35 x 22 cm

Any questions? Feel free to contact us:

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Parts and Article Numbers

The table below lists the most commonly ordered Seed Dispenser components. Converters are available for every plate, tube, vial and tray format listed above; see the LabTIE Dispenser Instruction Manual for the full Converter and Slider article number list, or contact us for a custom Seed Mesh Plate for your seed type.

Component	Article Number
Dispenser Main Unit – Seed (green)	MGLT990036
Mesh Plate Seed (custom, per seed type)	MG0000474
Slider (all standard well formats)	MGLT9024 / 9045 / 9048 / 9104 / 9384
Dispenser Set Standard (complete kit)	MG0003060

Contact LabTIE International at info@labtie.com or +31 (0)611132028 to order.

References

The LabTIE Seed Dispenser is used in published, peer-reviewed high-throughput seed germination screens.

Lacey HJ et al. Nanangenines: drimane sesquiterpenoids as the dominant metabolite cohort of a novel Australian fungus, *Aspergillus nanangensis*. *Beilstein J Org Chem*. 2019;15:2631-2643. [View publication](#)

Li H et al. Hancockiamides: phenylpropanoid piperazines from *Aspergillus hancockii* are biosynthesised by a versatile dual single-module NRPS pathway. *Org Biomol Chem*. 2021;19:587-595. [View publication](#)

A full literature review is available as a separate LabTIE reference document on request from info@labtie.com.

Browse the complete LabTIE dispenser range at www.labtie.com/products.