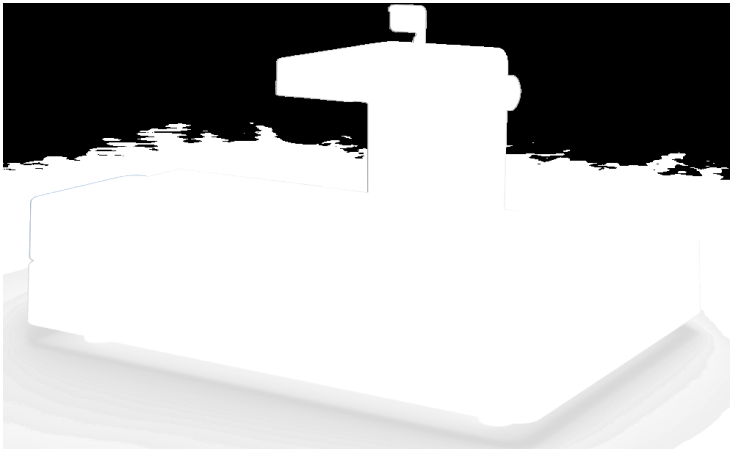# Thermo Fisher launches high precision digital reagent dispensers

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The precise dispensing capability of the Multidrop Pico 1 and Pico 8 minimizes expensive reagent loss

Scientists working across drug metabolism and pharmacokinetics, bioanalytical, pre-clinical and clinical trial applications can now access a range of digital reagent dispensers designed to enable assay miniaturization, boost productivity and improve accuracy of results. Offering enhanced dispensing precision, the new systems use ten times less reagent compared to manual pipetting workflows, enabling significant cost and waste reductions.

The precise dispensing capability of the Multidrop Pico 1 and Pico 8 minimizes expensive reagent loss and the need for re-runs, resulting in considerable cost savings, improved result reproducibility and increased laboratory throughput. In addition, the systems minimize the human error potential and repetitive strain injuries typically associated with manual pipetting processes. Designed to dispense reagent volumes between 11 pico-liters (pL) to 200 micro-liters (μL) in any well, the Multidrop Pico 1 and Pico 8 can meet the requirements of a broad array of low-volume applications, including quantitative polymerase chain reactions (qPCR), dose response curves, drug screening assays, serial dilutions, genotyping reactions and enzyme-linked immunosorbent assays.

"Manual pipetting poses a number of important challenges, from result variability and bias to time and cost inefficiencies and ergonomic stresses," says Sung Dae Hong, vice president and general manager for laboratory plastics essentials at Thermo Fisher Scientific. "The new high precision Multidrop Pico 1 and Pico 8 Digital Dispensers are capable of easily and quickly delivering high quality results, while minimizing reagent usage and waste."

Featuring disposable, non-contact dispensing heads, the Multidrop Pico 1 and Pico 8 eliminate carryover, protecting sample integrity and further optimizing the accuracy of the generated data. The systems operate on an easy-to-use software platform with application-focused wizards and a highlighted loading guide, which allow for effortless and quick plate set-up and operation. When used in conjunction with Thermo Fisher Scientific qPCR reagents, the dispensers provide a complete workflow solution.