

Hitachi High-Tech launches new tabletop microscopes with enhanced usability

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Automation support feature with the TM4000PlusIII allows for observation procedures



TM4000PlusIII

Japan-based Hitachi High-Tech Corporation has announced the global launch of TM4000PlusIII and TM4000III Tabletop Microscopes equipped with support features for automation and stable operation.

The TM Series shrinks the electron microscope to a size capable of being mounted on a tabletop. Thanks to their compact size and ease of installation, desktop microscopes are widely used not only for R&D, but also in quality control at manufacturing sites, science education at schools, and other purposes. In manufacturing environments in particular, there is a need to increase the efficiency of observation tasks and streamline operations so that even users with limited expertise can easily observe a large number of samples.

The TM4000PlusIII is equipped with automation support features that enable users to create recipes for numerous conditions. Recipes can control functions such as stage position adjustment and magnification, which previously needed to be manually configured every time for each sample. In addition, they come equipped with maintenance features designed to facilitate consistent observation. One such function is a monitoring system that checks the condition of the tungsten filament and graphically reports its condition. Since tungsten filaments require regular replacement, this function allows users to track the filament lifetime and plan ahead with maintenance tasks to allow for smooth and consistent operation of the tool.

The TM4000PlusIII and TM4000III will be exhibited at JASIS 2024 at the Makuhari Messe International Exhibition Halls in Chiba, Japan, from September 4 through September 6, 2024.

Hitachi High-Tech aims to ship a target total of 6,000 TM Series units across the global market as quickly as possible to contribute to manufacturing worldwide.