

Genetic Analysis Instrument Innovations Built into the SeqStudio™ Flex

Genomics

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The new SeqStudio™ Flex Series Genetic Analyzer have improved the gold standard for Capillary Electrophoresis (CE) by providing innovative approaches to enhanced hand-free operation, flexibility, ease of use, data quality and connectivity. This newly designed 8 or 24 capillary system supports DNA sequencing and fragment sizing applications providing scientists with medium to high throughput technology for use in research validated environments. The steps from system set-up to base or size-called data have been simplified with hardware functionality and user-friendly software enhancements designed into this new CE system.

We will discuss innovations related to ease of use including one button start-up, an on-board computer with touchscreen, intuitive software, easier to use capillary arrays and desktop and cloud-based plate manager software. Innovations related to increased flexibility include continuous plate loading, automated plate linking that be able to maintain traceability from sample to result when using barcoded plates, urgent sample reprioritization, sequencing and fragment samples be run on the same plate, and multi-user support will also be discussed. In addition, gold standard sequencing and fragment analysis data quality has been enhanced through innovative algorithms providing autospectral calibrations, and off-scale recovery of data for fragment analysis. Innovative service and support functionality including remote troubleshooting with instrument system login capability, and on-board instrument help videos will also be included. Finally, we will touch upon new connectivity, which includes Thermo Fisher connect for remote monitoring, analysis, and data sharing as well as other functionality such as voice commands and Wi-Fi capability that they system will provide. The following summarizes highlights from the developmental validation performed to demonstrate the functionality of SeqStudio™ Flex Series Genetic Analyzer.