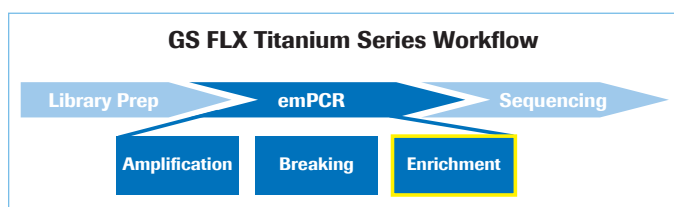


REM e System

Walk - Away emPCR Enrichment for the Genome Sequencer FLX System

Transform your sequencing workflow

The REM e System from Roche/454 Life Sciences combines with most common liquid handling workstations to offer a convenient walk-away automation solution for emPCR enrichment and sequencing primer hybridization in the GS FLX Titanium Series workflow (Figure 1). The REM e System provides the process control to significantly simplify and streamline the emPCR amplification workflow for increased productivity.



▲ **Figure 1.** The REM e System is a liquid handler accessory designed to fully automate the enrichment and sequence primer annealing steps of the GS FLX Titanium Series emPCR amplification process.

- **Time Savings:** Eliminates manual processing, including multiple wash cycles of hand pipetting, centrifugation, bead capture, and vortexing. Reduces up to 5 hours of hands-on work into a simple 15 minute liquid handler setup (Figure 3).
- **Improved Consistency:** Enhances PCR enrichment accuracy and precision by minimizing user error, reducing variability and eliminating potential sources of failure such as mispipetting.
- **Versatility:** Supports all GS FLX Titanium series emulsion oil formats – Large, Medium and Small Volume (LV, MV, SV). Works for a wide variety of libraries including shotgun, Paired End, cDNA and amplicon libraries, with or without Multiplex Identifiers (MIDs). The system can support up to four sequencing runs per day.

Easy Installation on Common Liquid Handlers



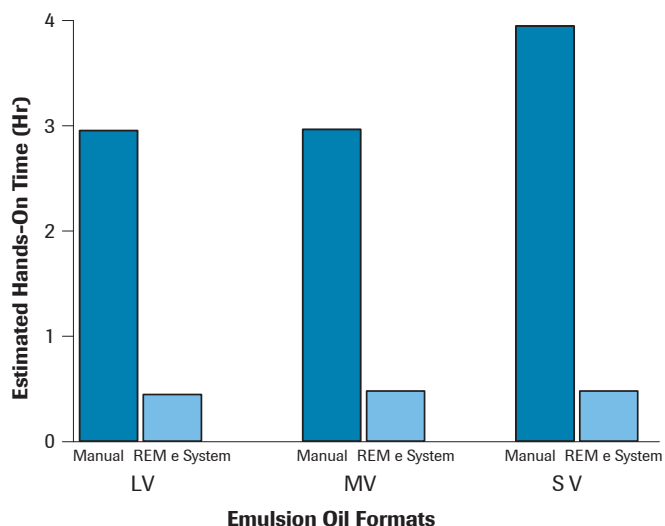
▲ **Figure 2:** The REM e System can be installed onto commonly used liquid handlers, such as the Hamilton STARlet shown above.

The REM e System is designed for use on many common liquid handling workstations. A number of robots have been tested for compatibility, including:

- **Hamilton STARlet** (Figure 2)
- **Hamilton Star**
- **Tecan Genesis RSP 100**
- **Biomek FX**

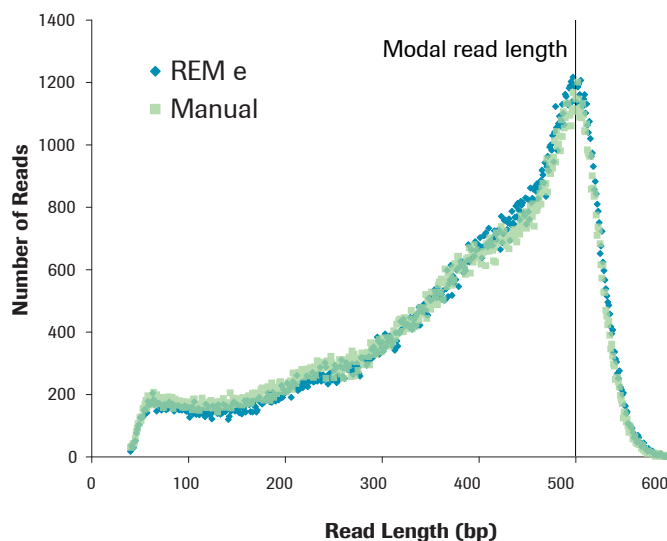
For a list of liquid handlers with demonstrated compatibility and their requirements, please visit www.454.com.

Significant Time Savings



▲ **Figure 3:** Hands-on time comparison of manual vs. automated emPCR enrichment for each of the three emulsion oil formats, LV, MV, and SV. Typical REM e System run time consists of approximately 15 minutes instrument setup and 3-4 hours of liquid handling automation. First time instrument installation and programming is fast and straightforward. Manual processing follows the procedures described in the GS FLX Titanium User Manuals.

High Quality, Long Read Sequencing



▲ **Figure 4:** Sequencing read length distribution of a microbial shotgun library enriched using either the REM e System or manual processes. Results from both methods demonstrate consistent, high quality sequencing with a modal read length of 500 bp. In this example, the REM e System was installed onto a Beckman Biomek FX. Data courtesy of the J. Craig Venter Institute.

Order Information

Catalog Number	Product Description
05 976 120 001	REM e System

For a complete list of specifications & information on the REM e System, please visit www.454.com.



For life science research only. Not for use in diagnostic procedures.

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