Institutes around the world have hundreds of cell lines frozen in stock that are used in screening activities or tissue engineering. Continuous cell culture provides scientists the ability to readily have assay-ready plates available to test potential agents or to have large quantities of multiple cell lines available for therapies research. Through a continuous cell culture Biomek solution, researchers are able to react quickly to requests from assay-development labs for screening or able to provide their team with batches of cell lines; multiple requests are often received in parallel. The need for automation grows as laboratories increase cell culture throughput in an effort to generate data earlier in their research studies. From seeding, feed, and passaging cells to optimizing media conditions, automation aids in maintaining viable, healthy cells for downstream processes.

**Continuous Cell Culture Workflow**

**Manual Process**

1.) Thawing  
2.) Seeding  
3.) Measure Confluency  
4.) Medium Change  
5.) Split Cells  
6.) Upscaling for Plating / Harvesting

**Solutions That Meet Your Needs**

Minimize the labor-intensive bottlenecks in your lab through automation. As your throughput increases, the Biomek automated continuous cell culture solutions enable you to obtain results you can trace and rely on in an efficient manner, while managing multiple cell lines in parallel to increase the efficiency, and reducing the wait time for bulk quantities of cell lines and assay plates for screening.
Have an increasing need to produce cell lines and on-hand assay plates more readily? The Biomek i-Series Workstation minimizes the burden of the upfront preparation tasks and cell culture processing.

Biomek Software: Workflow Intelligence at Every Step

Every time your sample moves, data moves. Cell culture workflows are typically performed over the course of several weeks to months at a time. The Biomek Software Suite ensures data integrity to provide peace of mind and schedules activities to streamline automated workflows.

At the heart of every Biomek is the software. Biomek software provides users with the confidence to know their samples are being treated consistently every run, and with every liquid transfer, the data from your samples is being stored. The intuitive, drag and drop user interface makes setting up and maintaining your workflows easy. To meet the evolving needs of cellular workflows, we also offer:

- **SAMI EX**: provides complete automation and process control by creating planned schedules with the benefits of an optimized, predictable static schedule
- **DART (Data Acquisition and Reporting Tool)**: gathers data and synthesizes runtime information from Biomek log files to capture each manipulation of the sample during the course of the method
- **SAMI Process Management Software (SPMS)**: is a calendar organizational tool that allows the addition, monitoring, and planning of SAMI EX methods and other events as part of user-defined processes
- **PowerPack**: features advanced tools to make programming data-intensive methods easy

---

Figure 1a, 1b and 1c. Biomek i-Series solutions provide reliable pipetting, integrated data management, and management software for the week to month long processes. In addition, Biomek solutions are developed based on your laboratory’s workflow. From providing a sterile laboratory personal working space to managing the preparation of materials, media system supply solutions, fixed and disposable pipetting requirements, centrifugation, incubation, long-term storage, and integrations that enable monitoring of cell viability and counting, and imaging.