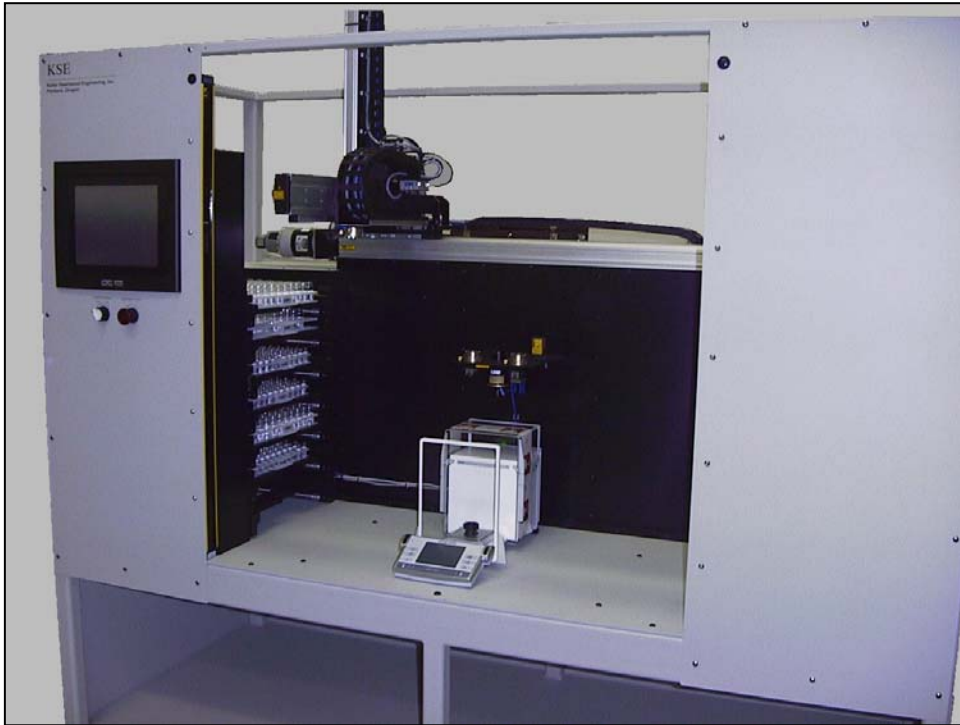


# KELLER SWARTWOOD ENGINEERING, INC.

Automation ▪ Custom Machines ▪ Tooling & Fixtures ▪ Product Development

## Project Highlight: Biotech Automation



*Automated machine for weighing empty and filled vials. Values from the high precision balance is stored in a database along with individual vial information fields. Cartesian robot performs all vial transfers.*



*Vials are transferred to receiving racks after being weighed.*



*A hotel system is used to increase the capacity of the machine.*

This machine is used to weigh vials and store the information in a database. Vials are weighed both empty and full, the difference giving the actual chemical mass that is in the vial.

The machine operator loads trays of vials into the hotel system on one end of the machine, and loads receiving racks into the hotel system on the other end of the machine. The hotel system allows the machine to store a large amount of vials, enabling the machine to operate continuously for an extended period of time without operator intervention. The machine utilizes a cartesian robot, barcode readers, and a high precision balance. Custom software and a touch-screen GUI (graphic user interface) simplifies machine operation.

# KSE

Oregon Office: 15812 SW Upper Boones Ferry Rd, Lake Oswego, OR 97035

Ph: 503-968-7059; Fax: 503-968-2651

Washington Office: 4044 NE 58th St, Seattle, WA 98105

Ph: 206-525-2526; Fax: 206-523-3316

[www.ksepx.com](http://www.ksepx.com)