

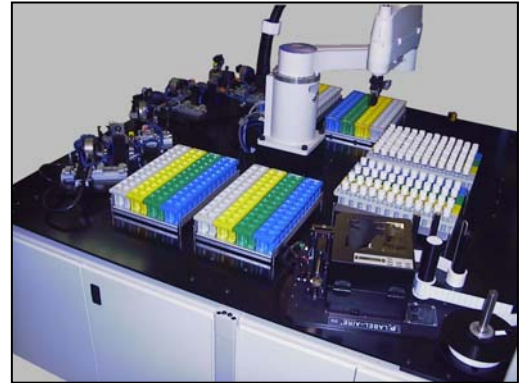
KELLER SWARTWOOD ENGINEERING, INC.

Automation ▪ Custom Machines ▪ Tooling & Fixtures ▪ Product Development

Project Highlight: Automation for Fruit Fly Transfer *(patent pending)*



Fruit fly transfer machine, fully automated. Transfers live fruit flies from old vials to new vials with fresh food.



Machine platform with dual transfer stations and custom molded racks.



A prototype machine was made for proof of concept and to address immediate needs.

This machine transfers live fruit flies, used in genetic research, to a new vial with fresh food. The transfer is made every three to four weeks, coinciding with the fruit fly's life span. Transferring fruit flies is typically done by hand, but when the library of fly families reaches tens of thousands of vials, automation is a key to the success of the project.

The machine utilizes a SCARA robot, multiple barcode readers, a barcode printer and label applicator, and dual transfer stations to utilize the full capacity of the robot and reduce cycle time. The safety light curtain gives the operator full access into the machine for loading. Custom software and a touch-screen GUI (graphic user interface) simplifies machine operation. A database is continually updated with fields such as vial identification, location, date of transfer, and genomic data.

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.ksepdx.com