



MEDICAL / PHARMACEUTICAL

TWO-AXIS PICK-AND-PLACE FOR CHEMICAL PROCESS DEVELOPMENT



HYGIENIC



CUSTOM-DESIGNED



PRECISION



MULTI-AXIS

Custom engineered solution for automated chemical process development.

The Process Chemistry Workstation is a modular, multi-reactor system designed to automate chemical process development. This workstation automatically captures and documents process chemistry workflow. The reporting functions are designed to meet the needs to departmental review, scale-up, data archiving and FDA referencing.

CHALLENGE

To provide a light weight two axis pick and place positioning system for chemical process development. Both axes were to be belt driven, with the requirements that the top horizontal axis could not carry a motor and cable assembly. The application is in a lab environment, so it is relatively clean, although there is a potential for the system to be exposed to some chemical vapors.

SOLUTION

A custom-designed two axis system utilizing QuickTrak® (size 1) rail and wheel components. The bottom axis is belt driven with drive ends. The top axis is also belt driven, but the QuickTrak® is inverted and there are no drive ends as the belt is attached at the ends of the track plate. Underneath the top axis is a Bishop-Wisecarver® engineered pulley box which houses the drive pulleys for the top axis. A spline shaft running through the center pulley drives the top axis QuickTrak®.