

# RF-2415

Filling - Tipping - Capping - Assembly System



## RF 2415 SERIES

# Robotic Filling & Capping System

# A Just Right "Solution"



Generous 24" x 16" Travel Area in a truly space saving compact bench top package

## Streamline Your Production

The RF Dispensing system is a unique solution for automating your manual filling and capping operations with one precise and affordable bench top package.

The machine features big performance and is available in several configurations to best suit your unique requirements for filling, tipping and capping.

## Overhead Gantry

A programmable gantry robot is used to position the filling / capping head over each pallet position performing the required operations. All stations are directly controlled in one program.

Hundred of programs may be saved on the CF memory card for quick change over.

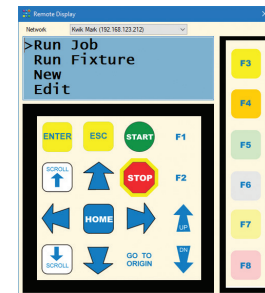
## Latest Embedded Control Technology

The system includes an embedded (dual memory) processor and CF memory card for true multi-tasking & real time performance. The machine is connectible to your network (LAN) or RS-232. Dual USB ports are also included. Hundreds of files may be stored on the machine for quick changeover. Built-in step & repeat "Pallet" files simplify setups. Bar code scanner input will allow selecting jobs by simply scanning a work order or label.



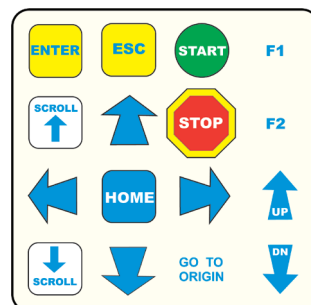
## A True File Based Solution

The file based system will allow you to create and name recipes, on the PC end, then download them to the machine's CF memory card for quick access. The ability to upgrade the machine's software by downloading a single file, ensures that your investment will be as prudent as it is productive.



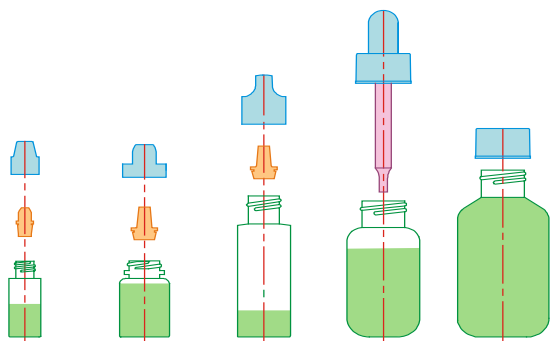
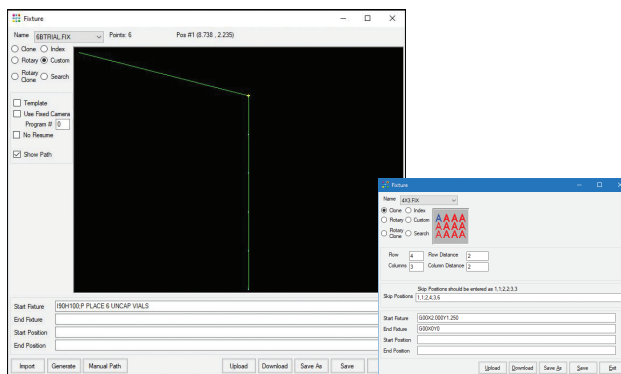
## Front Panel Touch Pad

The RF machine is menu driven and may be controlled from the front panel touch pad / LCD or the "virtual pendant" on your PC. Internal jobs are listed alphabetically and may be scanned in with a bar code scanner from a work order or label.



## The Operator's Choice

Just press the foot pedal. Your operators will appreciate the ergonomics and ease of use with the machine, its setup, calibration and file management system. Your techs will love the zero maintenance, machine tool quality construction.



## Ideal for Screw-On or Snap-Fit Caps

Containers may be processed with their caps screwed on or with the caps supplied loose. Software logic is included for either scenario.

- Automate Vial and Bottle Filling
- Tipping and Capping Operations

## Bottle Shapes

Bottles may be processed with caps assembled or supplied loose. Software logic is included for either scenario.

Quick change ring dial accommodates hundreds of container shapes and sizes:

- Square
- Round
- Cryo Vials
- Special Shapes

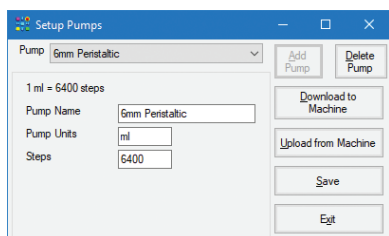
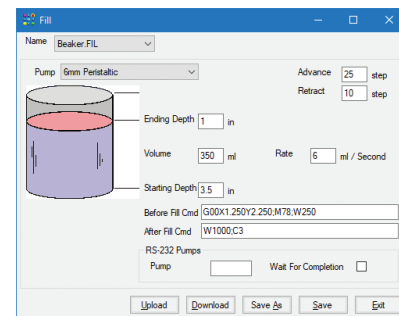


# Pre-Programmed Functions

## Advanced Filling Performance

Fill files control the peristaltic (or positive displacement) pump with simple graphical menu entry. Built-In digital pump control.

- Fill Volume
- Pallet Position
- Diving Nozzle (Servo) Programmable
- Snuff-back Control
- Additional Logic



3mm Peristaltic  
Expect: 45.00  
Actual: 44.98  
Calibrate (Y)

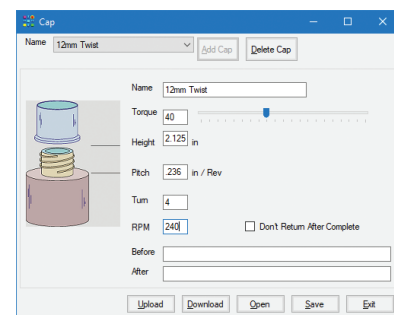
## On Board Pump Calibration

Built-in Pump for advanced filling allows calibrating the peristaltic pump with the system controls. Just enter the actual weight from a sample. Automatically adjusts all encoder values. A limitless number of pump files may exist in the machine for different tubing sizes, nozzles, etc. Ideal for future expansion.

## Control Capping Torque & Cap Pitch

Cap files control the station with simple, graphical menu entry of pre-programmed parameters:

- Bottle Height
- Cap Thread Data
- RPM & Number of Turns
- Programmable Torque (Servo)



## Track Your Production Data

Production information is stored during & after each cycle. This includes the volume of each filled bottle. Other captured information is the date, time, production count and cycle times.

The History file may be accessed from our Windows Software Suite and then printed, copied into a report or saved as a spreadsheet file. Other "flags" such as a pause or any interruptions during production may be tracked as well.

Date	Time	Job	Count	Run Time
07/14/21	19:20	CLONEX3.TJB	0001	00:00
05/02/21	11:42	CINCINNA.TJB	0029	00:03
03/23/21	16:38	SENIOR.TJB	0041	00:11
01/11/21	11:20	SC.TJB	0007	05:11
01/07/21	14:41	3932-J4.TJB	0012	00:07
12/08/20	06:09	ABC.TJB	0006	00:12
11/18/20	01:59	SF.TJB	0003	00:36
11/18/20	01:45	SF2.TJB	0002	00:08
11/18/20	01:39	SF.TJB	0002	00:13
10/29/20	03:31	EXPRESS.TJB	0001	00:08
10/29/20	03:28	TRIPLE_R.TJB	0004	02:36
10/27/20	05:45	ERIONL.TJB	0019	00:23
10/07/20	21:18	EXPRESS.TJB	0001	00:04
10/03/20	02:21	SCHALLER.TJB	0017	00:15
09/10/20	22:59	EXPRESS.TJB	0003	00:02
09/10/20	06:29	EXPRESS.TJB	0027	00:07
09/06/20	03:58	EXPRESS.TJB	0036	00:05

Production History File

# A Modular Design



## Machine Tool Quality

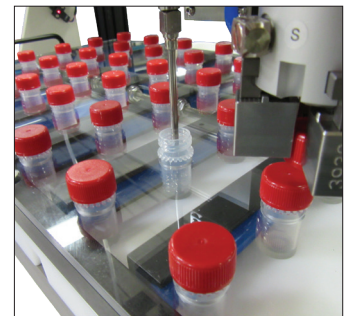
The RF Series features pre-loaded lead screws and ball slides driven by digital brushless servo motors. Speeds and accelerations are controlled for the smoothest motions and to provide programmable adjustments of:

- Bottles of varying heights
- Diving nozzle position and stroke
- Fill speed and snuff back
- Capping depth, pitch and torque

## Dozens of Pallet Solutions

Tubes are accurately positioned on pallets and remain stationary during the entire operation, only the nozzle and cap gripper move on a precision overhead gantry system.

Supplied with two pallets allows the operator to load & unload one pallet while the machine is processing the other pallet.



## Mechanized Pallets

One lever locks in all the tubes. Each tube is gently clamped against a precision reference surface with a soft compliant elastomer to prevent lift out and eliminate rotation during the filling and capping process.

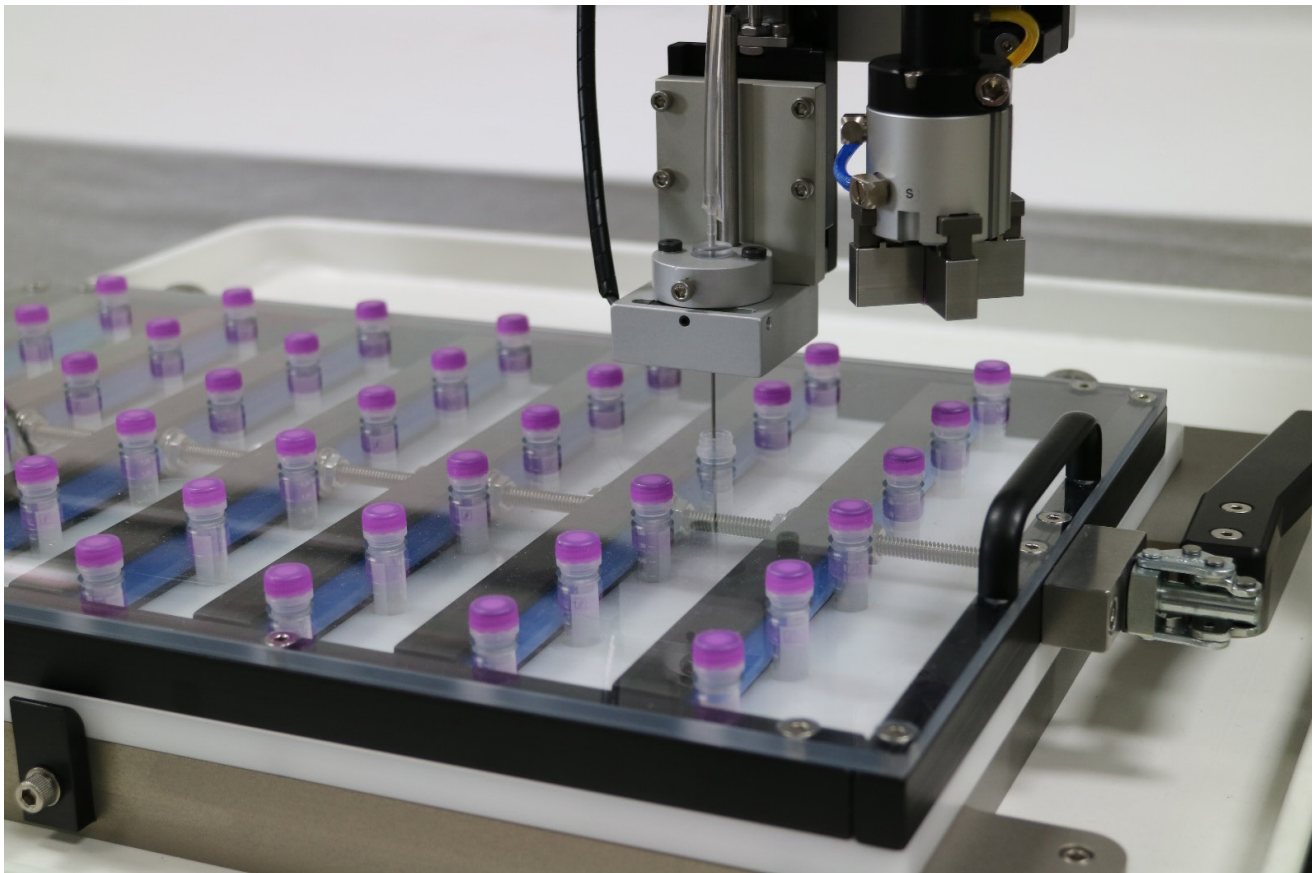


# A Modular Design



## Active Base Plate Option

Available as a hot plate or cold plate. Both feature digital closed loop PID control with dual alarms.



Fill station features diving nozzle with quick change, tool less mount and magnetic safety breakaway

Cap station features 4 jaw gripper with programmable torque, grip force and thread pitch following

# Simple Palletized Production



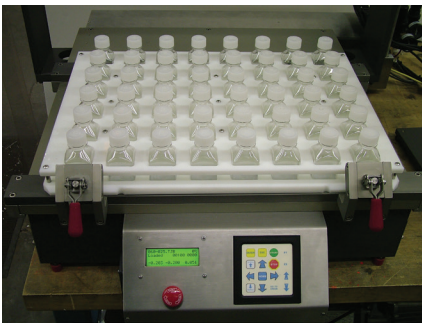
650 ml Square Bottle



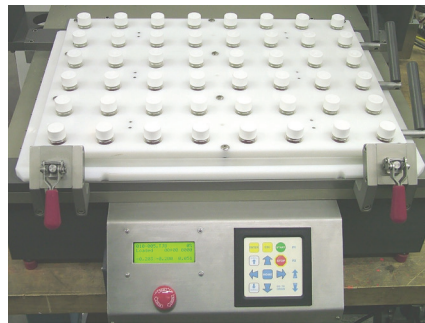
125 ml Square Bottle

## Quick Changeover Time

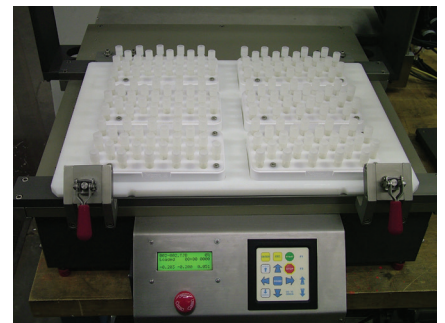
The Pallets are removable for quick changeover and the tooling is designed for quick release requiring no previous technical experience. Great for processing families of small bottles and vials.



60 ml Square Bottle



10 ml Round Vial

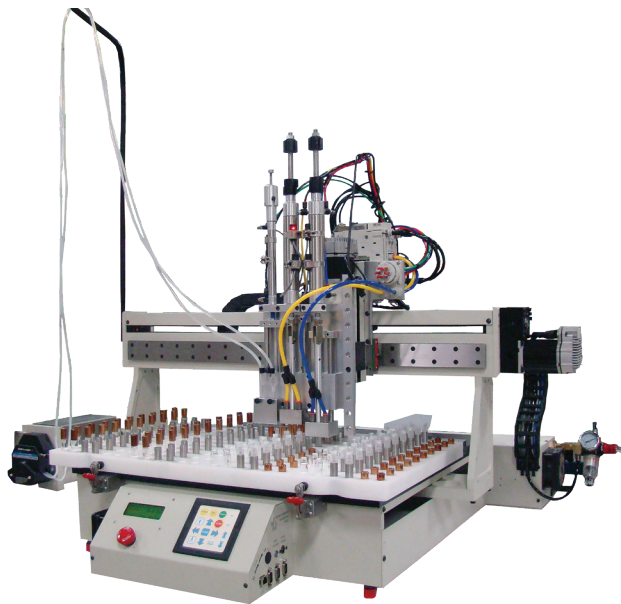


2ml Cryo Vial

Shown with Options: Custom Dual Pallet System



# Custom Systems are Available



Electric Cigarettes



Conductive Ink Pens



Bio Medical Fluid



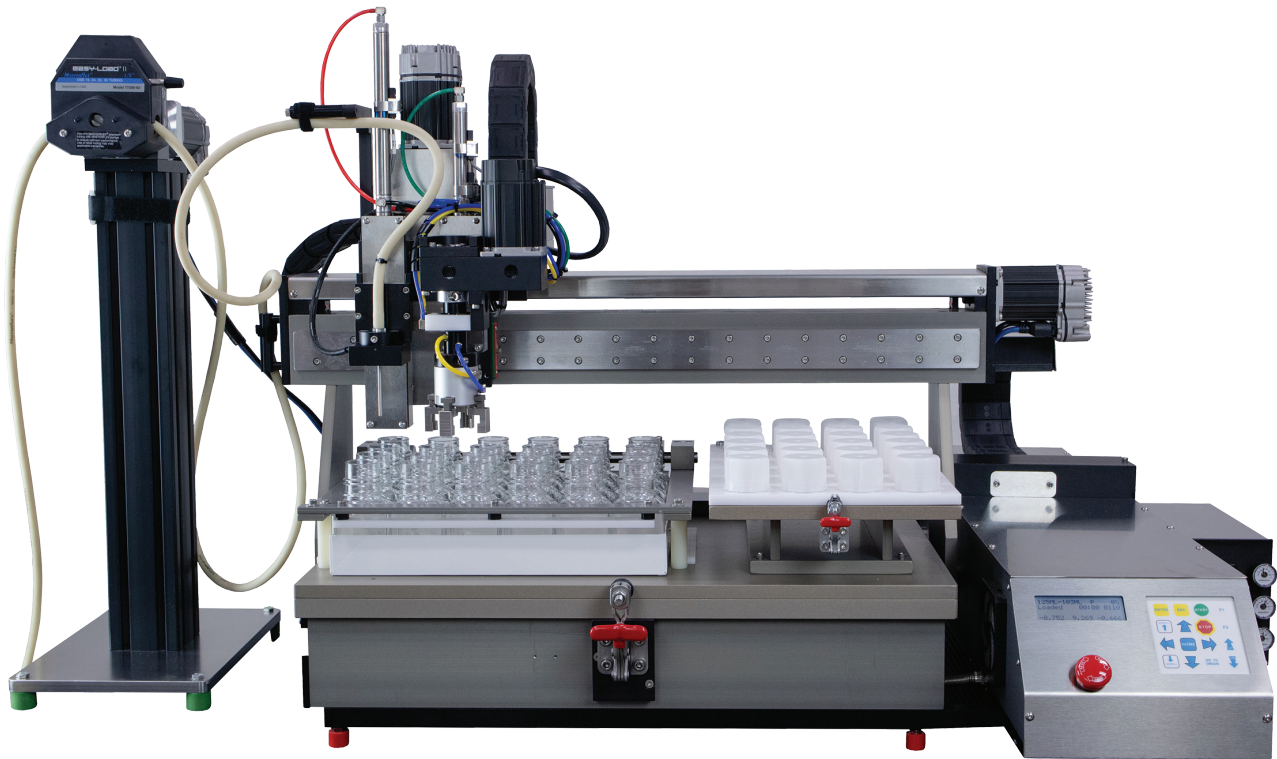
Covid Testing Tubes



# Proven Design or Customize

## Versatile and Affordable

Automate your vial, tube and bottle filling, tipping and capping operations with a precise and affordable bench top robot. These versatile, fully programmable robotic dispensing systems will automate and streamline that tedious manual operation, with accurate and repeatable results. Choose from one of our time proven designs or let us customize a precision automatic vial and bottle filling solution to meet your needs.




## About Us

All systems are designed & manufactured in our clean, state of the art facility on modern CNC equipment to the industry's most stringent quality control. Over 25,000 sq ft is dedicated to research / development & high tech assembly. Systems feature time proven designs with pre-engineered stations requiring minimal "custom" tooling for low risk, rapid deployment. In the effort of constant improvement, these specifications are subject to change. Photos are for reference only; machine styles may vary.

## Contact Us

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