

RING DEX

Filling - Tipping - Capping - Labeling - Assembly



RDX 2100 SERIES

Filling Capping Production Systems

A Just Right "Solution"



Ideal for quick changeover, high mix, low volume applications in a truly space saving compact package

Streamline Your Production

The Ring Dex system is a unique solution for automating your manual filling, tipping and capping operations with one precise and affordable bench top package.

The machine is available in several configurations from manual load bench top design, to full hopper / feeder solutions to best suit your unique requirement.

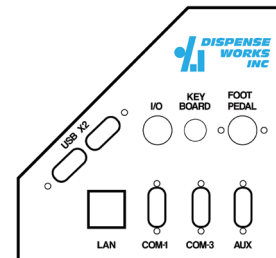
Powered Work Stations

Each tower is self contained with it's own fully programmable controller. All stations are connected through an internal network hub to the central processor.

This means greater processing horsepower and real multi tasking performance that controls all logic, motion, and file management.

Latest Embedded Control Technology

The embedded (dual memory) processors provide real time performance in sharing the processing burden. External interface includes Ethernet (LAN), RS-232, Four com ports, dual USB ports, additional I/O and 6 axis servo expansion. The bar code scanner input will allow selecting jobs from a printed label or work order.



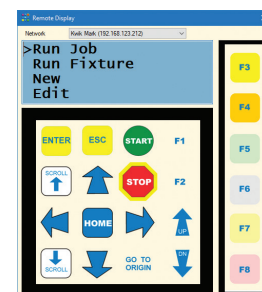
A True File Based Solution

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.



The Operator's Choice

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

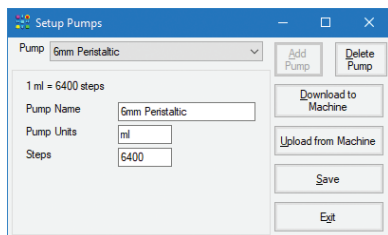
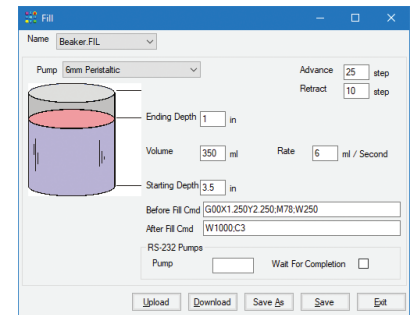


Pre-Programmed Functions

Advanced Filling Performance

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

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



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

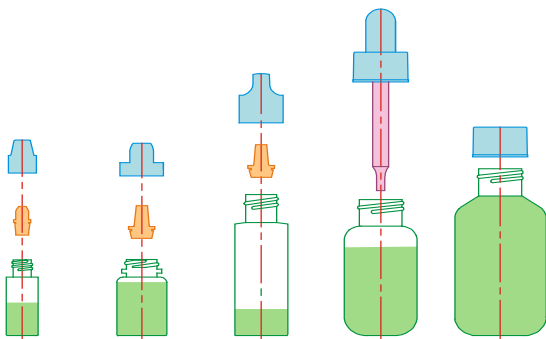
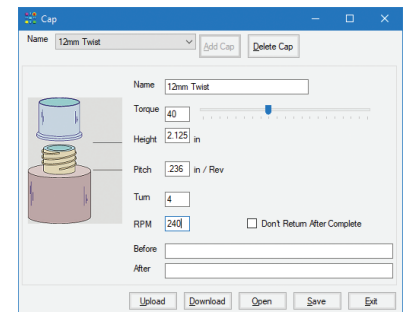
On Board Pump Calibration

Built-in Pump files allow 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)



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.

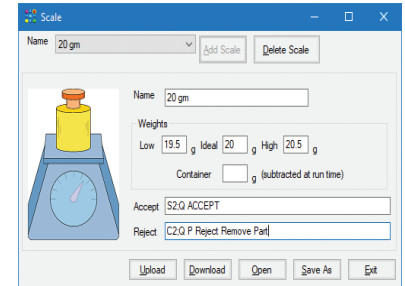
Track Bottle Filling Production

Check Fill Volumes

Scale files control the station with simple, graphical menu entry of pre-programmed parameters. Scale files record each bottle's weight every cycle (auto tare) with ultra-precision.

Scale is settable in: ounces, grams, etc. Product must weigh between set high/low values to pass.

- Set Ideal Weight
- Set Acceptable Range
- Provide Logic for Over Weight
- Provide Logic for Under Weight



Track Your Production Data

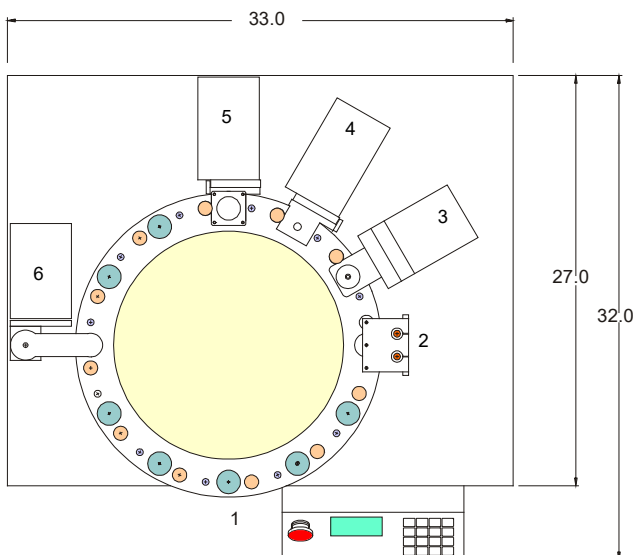
Production information is stored during & after each cycle.

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	13:20	CloneK3_TJB	0001	00:00
06/02/21	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	01:46	SF2_TJB	0002	00:08
11/18/20	01:38	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	SATON1_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



Dual Mode of Operation

On Demand:

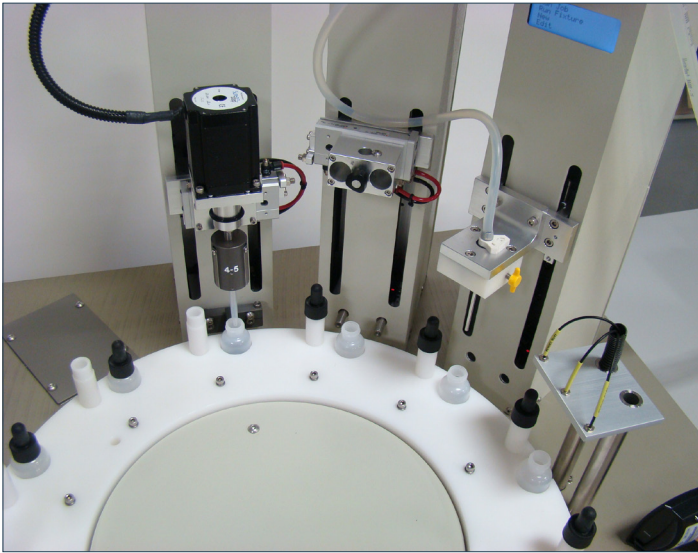
Press the touch pad (or foot pedal) to start the machine cycle. Operator controls the production rate.

Pace the Operator:

Machine is set to cycle every X seconds. After a time period, and with a soft "beep", the machine cycle begins.

Either way, if a missing part is detected, the machine will pause for the operator to load it and acknowledge to resume.

A Modular Design



- Fill Station features Diving Nozzle with tool less mount and magnetic safety breakaway.
- Cap Station features 4 Jaw Grippers with adjustable torque, grip force and thread pitch following.

Machine Tool Quality

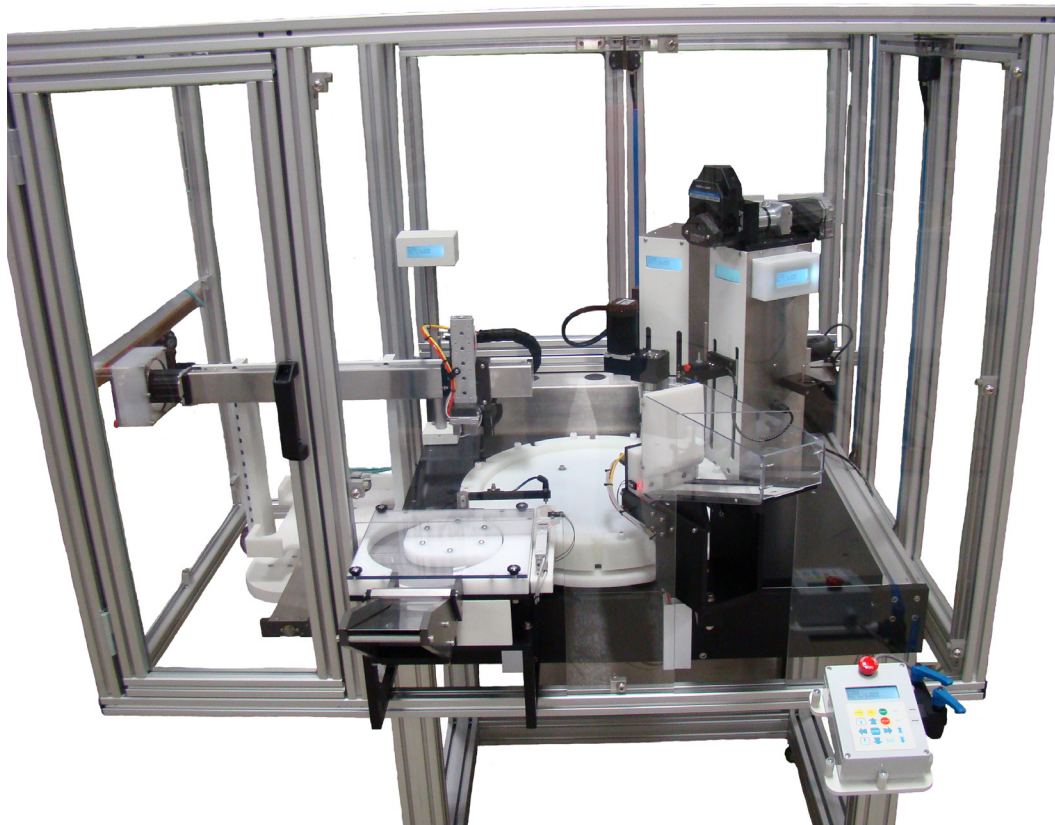
Each work station tower features pre-loaded lead screws and ball slides driven by digital brushless servo motors. Speeds and accelerations are controlled for smooth motions and to provide programmable adjustments of:

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

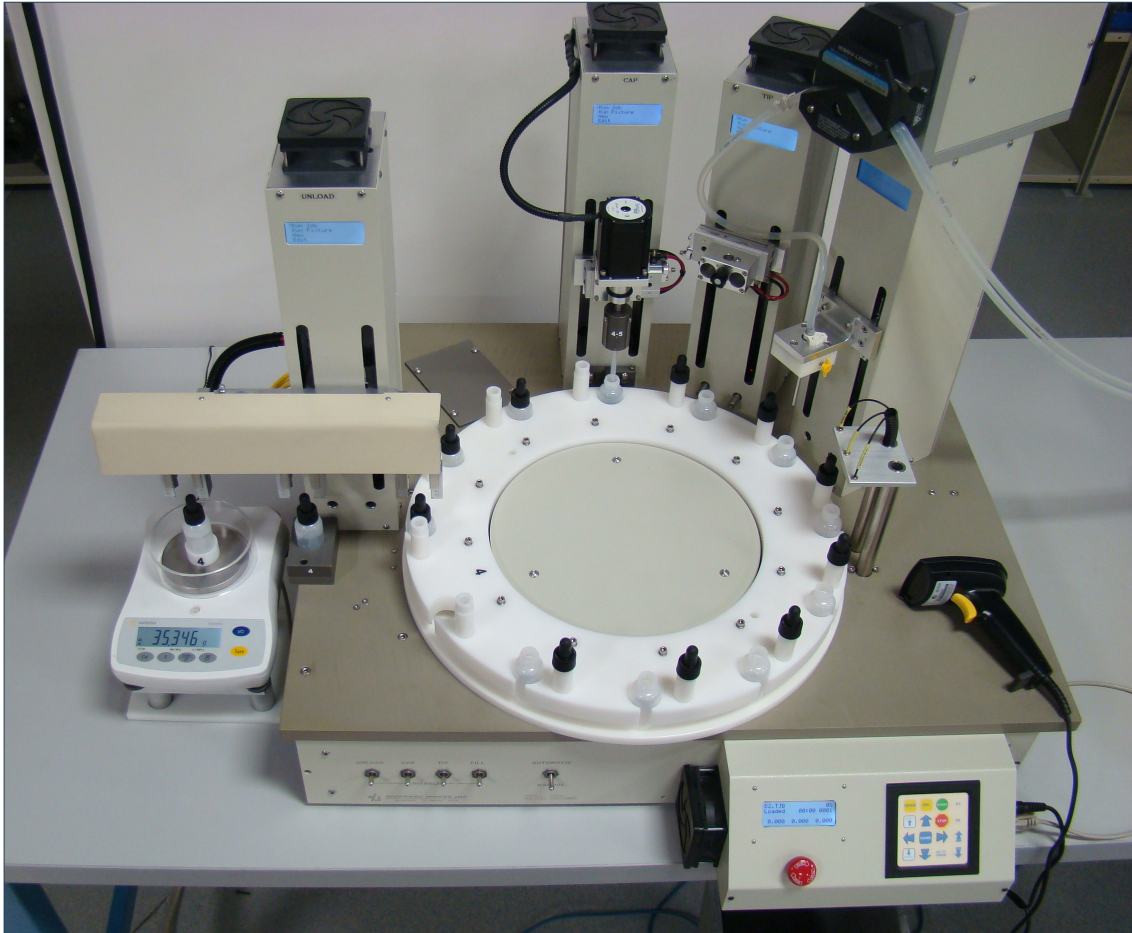
Fill & Cap Work Stations

The machine consists of work stations mounted around a centrally located indexing ring.

- Programmable
- High-Speed Dispensing
- Pre-programmed Station Cycles
- Smooth & Quiet Operation
- Look Ahead Motion Technology



Ideal for R&D Lab or the Production Floor

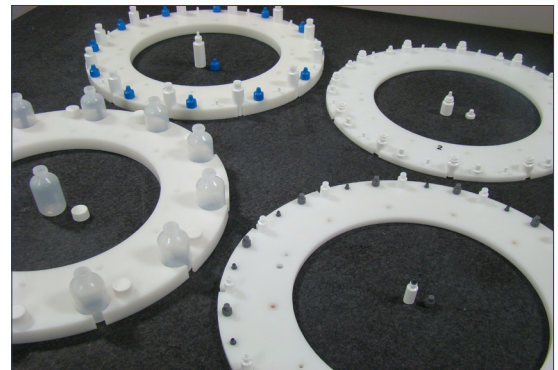


Quick Changeover Time

The Ring Dex dials are removable for quick changeover requiring no previous technical experience. Great for processing families of small bottles and vials. Changeover means just loading a new file

Our included Windows Software Suite provides a "fill in the blanks" graphical and intuitive operator interface. The exclusive "Soft Torque" dial features adjustable speed and torque control.

The indexing rings, gripper jaws, clamps may be purchased at a later date as needed and installed in the field using only a few hand tools.



Ring Dex Custom



Shown with options: Bulk tube load magazine, cap feeder, programmable XY tray packaging.

Bottle Shapes

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

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

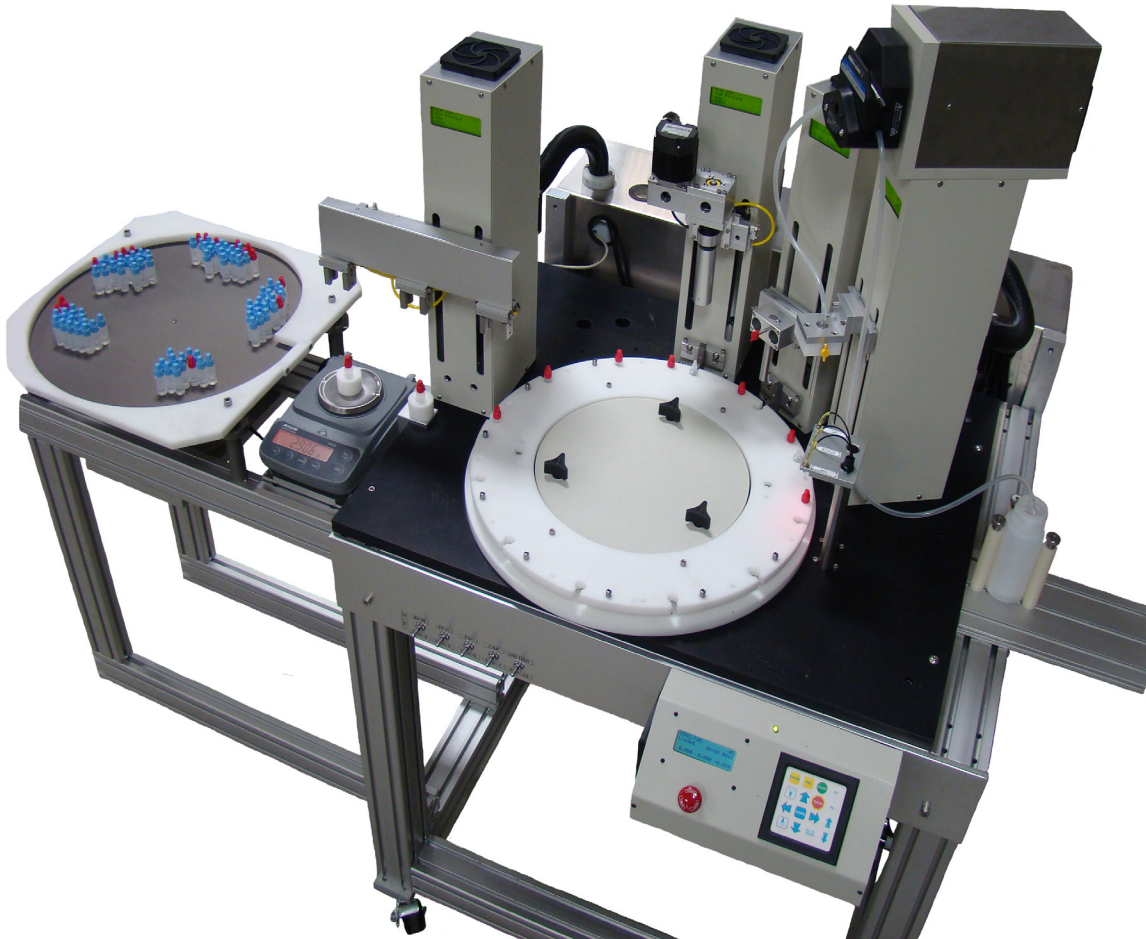
- Square
- Round
- Cryo Vials
- Special Shapes



Proven Existing Designs or Custom Solutions

Versatile and Affordable

These versatile, yet affordable robotic dispensing systems will automate and streamline your manual bottle or vial filling and capping operations. 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.

Contact Us

For more information contact us at: