

Pharmaceuticals • Nutraceuticals

Cosmetics • Consumer Goods

Diagnostics • Medical Devices



## Features

- FANUC Clean Class Multi-axis Robots
- Rotary Filling Pump
- Integrated RAB System
- Vision-guided Flexible Feeding System for Syringes
- Pick-and-Place Capping System
- Closed Loop Torque for Caps



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# TaskMate<sup>®</sup> Syringe Filler



ESS Technologies's TaskMate<sup>®</sup> Robotic Syringe Filler and Capper integrates two (2) FANUC clean class LR Mate robots with OEM-supplied RABS (Restricted Access Barrier System) to meet the stringent requirements for 503B sterile pharmaceutical compounding applications. Empty syringes are manually fed through a sterile rapid transfer port into the ESS-supplied, vibratory hopper, which drops them gently onto a flex feeder with a powered, backlit spreading tray. The spreading tray moves parts forward to a FANUC 2D guidance vision system which allows the first LR Mate 200iD robot to pick syringes one at a time using a custom-designed vacuum style end-of-arm tool (EOAT) and place them at the filling station.

The filling system uses a stainless steel, servo driven, volumetric pump to dispense a precise amount of liquid from the bottom, up. Caps are manually fed via a drawer that can be pulled out from the RABS to load and unload trays of caps. The second FANUC LR Mate 200iD robot with custom-designed vacuum style EOAT, picks a cap from the tray and places it into the torque station. A servo driven pick and place unit transfers the syringe from the fill station to the final torque station. For screw type Luer-Lok caps the system will rotate the syringe to apply torque. A precision force sensor will detect the correct amount of torque and supply a pass/fail signal to the system. The robotic system discharges the filled and capped syringes via a divided gravity chute to a customer-supplied discharge bin. In the event of a station error, bad syringes are discharged via the opposite side of the chute for customer inspection. The system can fill and cap up to 15 syringes per minute.

## Technical Specifications

Item	Specification
Standard Voltage	208VAC, 3-Phase, 60Hz
EOAT	Vacuum, Gripper, Hybrid
Guarding	PLe-rated interlocked tempered glass RABS
Size Changeover	10-15 Minutes Typical
Production Speed	15 Syringes per Minute
Filling Range	50 $\mu$ l to 60ml

## Options

- Vision Inspection System
- Push-on Capping System
- Integrated Labeler
- Voltage Options Available
- Vial Filling/Capping
- Netweigh Filling with Weigh Cells
- Sartorius Aseptic Rapid Transfer (SART) for Product



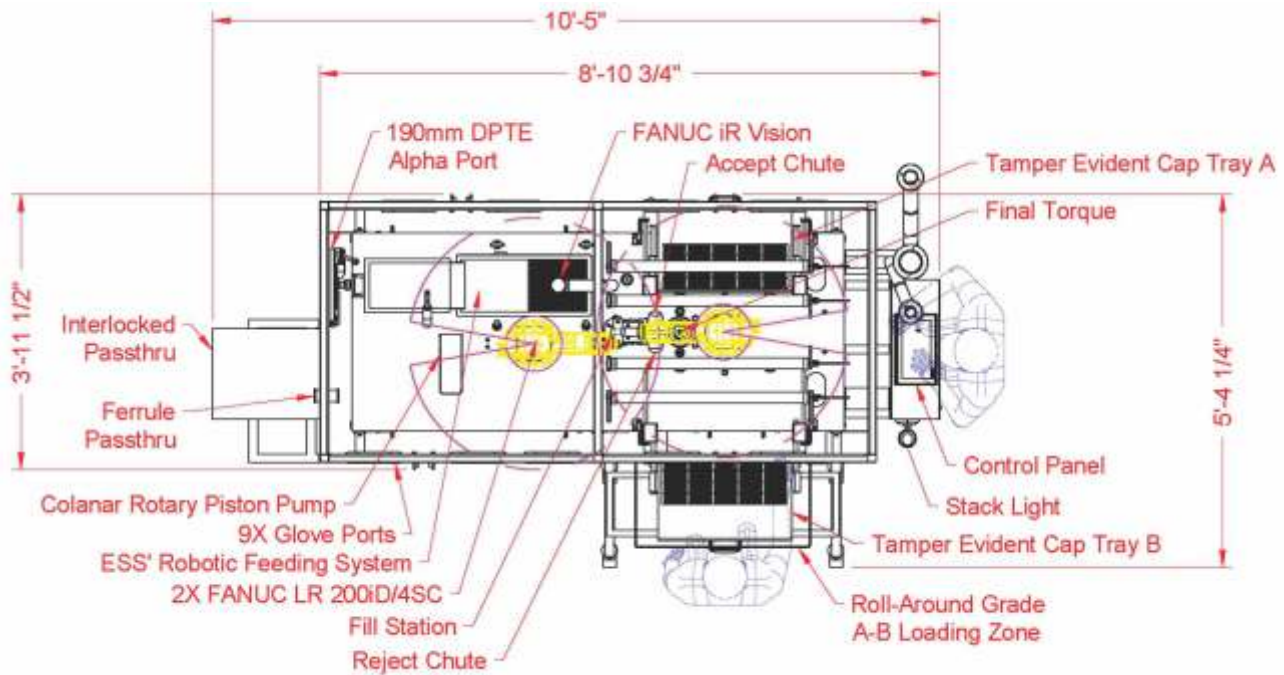
Syringe Flex Feeder



Syringe Filling Station



Syringe Capping Robot



Syringe Filling System Layout

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