

## Liquid Filling Concepts & Applications



# Our Story

Since 1969, Specialty Equipment Corporation has positioned itself as the leading manufacturer of American-made liquid filling systems.

We have built our reputation on manufacturing high end packaging machinery and material handling systems including liquid fillers, dry solid fillers, drum and pallet conveyors, palletizers, and IIoT software.



# Our Brand

Over 50+ years, Specialty Equipment has evolved into one of the leading manufacturers of high quality, rugged equipment, and our worldwide brand has evolved along with our reputation.

Originally called Specialty Equipment Fabrication Company, we started as a two-man shop, manufacturing custom conveyors before rebranding to Specialty Equipment Conveyor Company in 1987.

In 1998, we changed our name to Specialty Equipment and created a new division Specialty Equipment Filler Company, adding drum, pail & tote filling machines to compliment the conveying and palletizing systems.

In 2019, we launched our new IIoT software solution, Drum Filler in the Cloud allowing customers access to filling information from anywhere in the world.

Now, we continue to provide high-quality packaging systems to fortune 500 companies and have developed an intuitive software to improve the filling operations for companies of all sizes.



# Liquid Filling Concepts & Applications

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**Food Grade Filler**

This all-stainless filler was built for a wash-down, food grade application, filling drums and collapsible bins. Some of the accessories include, a see-through splash shield, fiberglass platform for wash down and a spreader bar with a lance port for the bin.



**Most Popular Filling System**

This model DF-5540, is the most popular drum and tote filling machine. An air cylinder raises and lowers the lance. A hydraulic cylinder raises and lowers the boom and lance carriage. The conveyors are powered 5' zones. The machine typically fills 55-gallon drums and IBC's up to 550-gallon.



**Stand Alone Drum Filler**

This is a basic palletized drum and tote filler model DF-5540 without conveyors to feed it or take away loads. The boom pivots to the side to allow loading and unloading the pallet, which sits on a 5,000 lb. platform scale.



**Filling Drums & Tall Totes**

With this drum and IBC filling system is an extra-long lance to descend within a half inch of the bottom of the tallest container, to speed up the filling cycle and control foaming. The boom and lance carriage will raise and lower to accommodate 55 to 550-gallon containers



### In-Line Drum Filling System

This standard, model DF-5540 semi-automatic filler is a top and sub-surface filler that uses a rod-less air cylinder to raise and lower the lance for various size containers from 55 to 550 gallon. Gravity conveyors bring on the empties and powered 5" zone conveyors handle full loads. The machine requires only 2 CFM of air at 80 PSI and typically fills a 55-gallon drum in less than a minute.



### Automatic Drum Filling System

The model ADF-5540, automatic drum filler is designed to fill four 55-gallon drums, one at a time. It can achieve a production rate four drums every five minutes, (48/hour) depending on viscosity. The lance will automatically find the bung opening of each drum by optics and all four drums will be filled in sequence.



### Back to Back Concept

This back to back, straight-line concept allows continuity of filling operations, controls product flow and reduces fork truck traffic. Both fillers are identical, designed to handle 55-gallon to 550-gallon containers. Each filler uses plastic wetted parts to handle corrosive chemicals. Empty containers are loaded at the south end and all full loads picked-up from the north ends. Powered roller conveyors use corro-duty motors.

### Straight Line Concept

This straight-line is the most popular concept for filling drums and totes. Typically mounted along a wall, fork trucks can load from one end and pick-up at the other end. The amount of accumulation is just a matter of additional conveyors. This model DF-5540 filler can accommodate containers from 55-gallon drums to 550-gallon totes. Here, a bung and capping station is placed after the filler. The conveyors are all powered and the platform has two-way access, hand rails, toe guards and adjustable height supports.



### U-Line Concept

When linear space is not available, a U-Line configuration can be used to accumulate containers. With the pallets running the wrong-way, two-strand chain conveyors are used on the infeed and three-strand chains on the discharge. The pick-up and drop-off stations are 5' apart to minimize fork truck traffic.

### In-Line Tandem Concept

Arranging fillers along a wall is the most effective use of floor space. In this concept, a fork truck drops off empties between the two fillers, with each load to be conveyed left or right depending on need or product being filled. Either filler can handle drums or totes. Pick up points are at each end of the system. This system will fill a variety of chemicals into 55-gallon drums and 275-gallon totes, or containers from 20" to 80" tall.





### Dual Scales

This sub-surface dual filler system was made for use outdoors. It's an all-stainless-steel construction and can be loaded and unloaded from the front or sides of each filler scale. Additional features include; Type X controls, two low-profile 5,000 lb. scales, grounding clamps, and a special length boom.



### Automatic IBC Filler

Here is a model ATF-5000 automatic tote filler. The poly tote conveys to an air operated blade stop. A photo eye signals the conveyor on the scale to stop and the tote filler to tare the load then start automatically filling. When completed, the lance retracts and signals the conveyor to discharge the load.



### Bag-in-a-Bin Filler

Here is a plastic bag inside a collapsible food bin being filled with food products. A special spreader bar with a cam lock clamp is placed across the bin to lock the throat of the bag in place while filling, and to create a seal against contamination. The lance sprays like a faucet allowing the bag to unwrinkled as it is filled.



### Food Grade Filling Application

This all-stainless machine is filling a 220-gallon plastic totes with liquid food additives. However, since the inner mast can raise and lower the lance carriage, it will accommodate containers from 55 up to 550-gallon. All components are rated for food grade and wash-down duty.





### L-Line Concept, Quad Drum Filler

Installed at a corner of the building, this L-Line concept saved valuable floor space and still allowed fork truck access to the infeed and discharge ends. Because it was a very slow fill with a thick product, the operator was allowed to perform other duties during the two-hour fill cycle



### Automatic Quad Drum Filler

This all-stainless, model AQF-5540, automatic quad drum filler is the fastest drum filling machine available, designed to fill four 55-gallon drums simultaneously, in 60 seconds, (depending on viscosity). Allowing for time to convey in and out of the filling station, the cycle rate is 90 seconds, which means an actual production rate of 160 drums per hour.



### Automatic Four Drum Filler

Ideally suited for filling viscous products into open-mouth drums this in-line quad filling system will automatically fill four drums, sequentially. It uses electric, heat-jacketed lances because the viscous liquid must remain hot to flow. A photo eye on the scale conveyor recognizes the arrival of the pallet at the filling station and starts the filling cycle.



### Drum Alignment Station

Before automatic filling, four empty drums are aligned on a pallet. A bar rises between rollers to square-up the pallet then side pushers capture and lock the pallet. The operator arranges the bung openings of the four empty drums. A four-plug platen is lowered to lock the drums in place. The load then accumulates before the automatic filling station.





### Portable Drum & Tote Filler

The model PDF-5540 is designed for batch filling operations at multiple filling stations. Every portable drum and tote filling machine is built with a fork-truck-able base.

This is both a top and sub-surface filler where the inner mast moves up and down to adjust the lance carriage from 55-gallon drums to 550-gallon IBC's. Grounding clamps and a Type X purge is included for class 1, division 1 application. Once the machine is set down, the set-up time is estimated at 10 to 12 minutes.



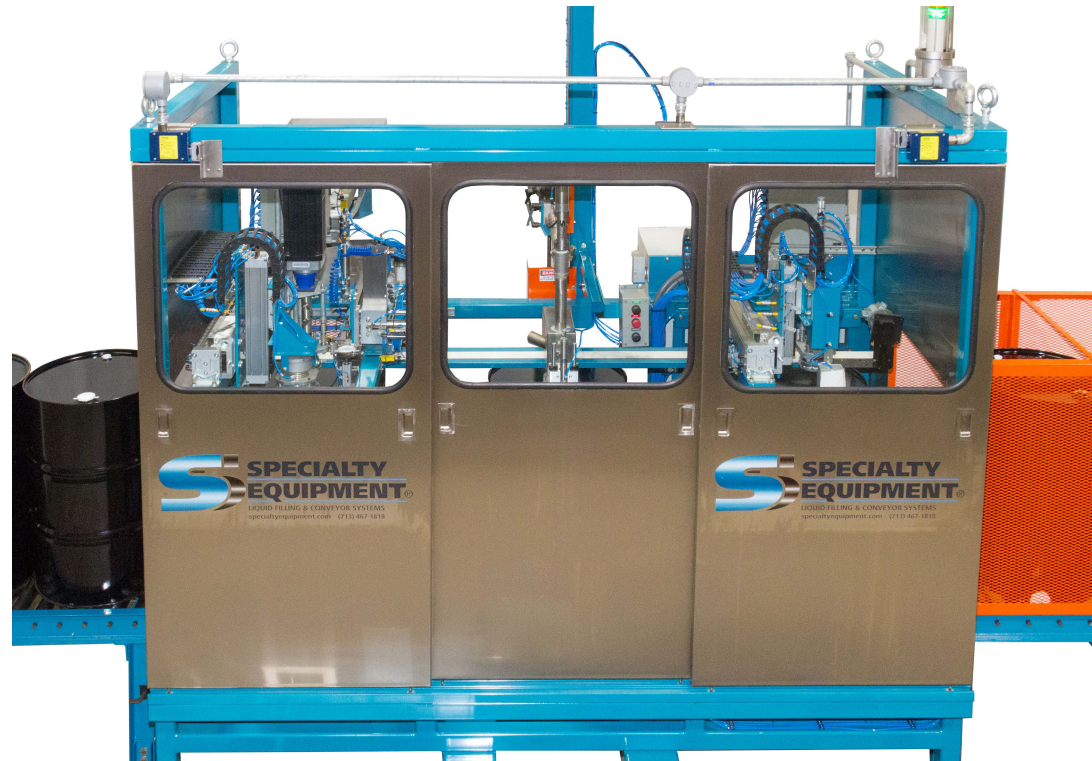
### Fork-Truck-Able Base

The model PDF-5540 has a welded base assembly using 6" rectangular steel tubing, which allows the forks to enter from the front or either side. Picking up from the side is recommended, because of the center of gravity. Leveling pads are included, each with a screw crank and bubble indicator for easy leveling. Two flip-up outrigger stabilizers are provided for additional stability. Overall dimensions are 9' wide x 8' long x 11' high and the weight is 3,300 lbs.

### Dual-Scale, Portable Drum & Tote Filler

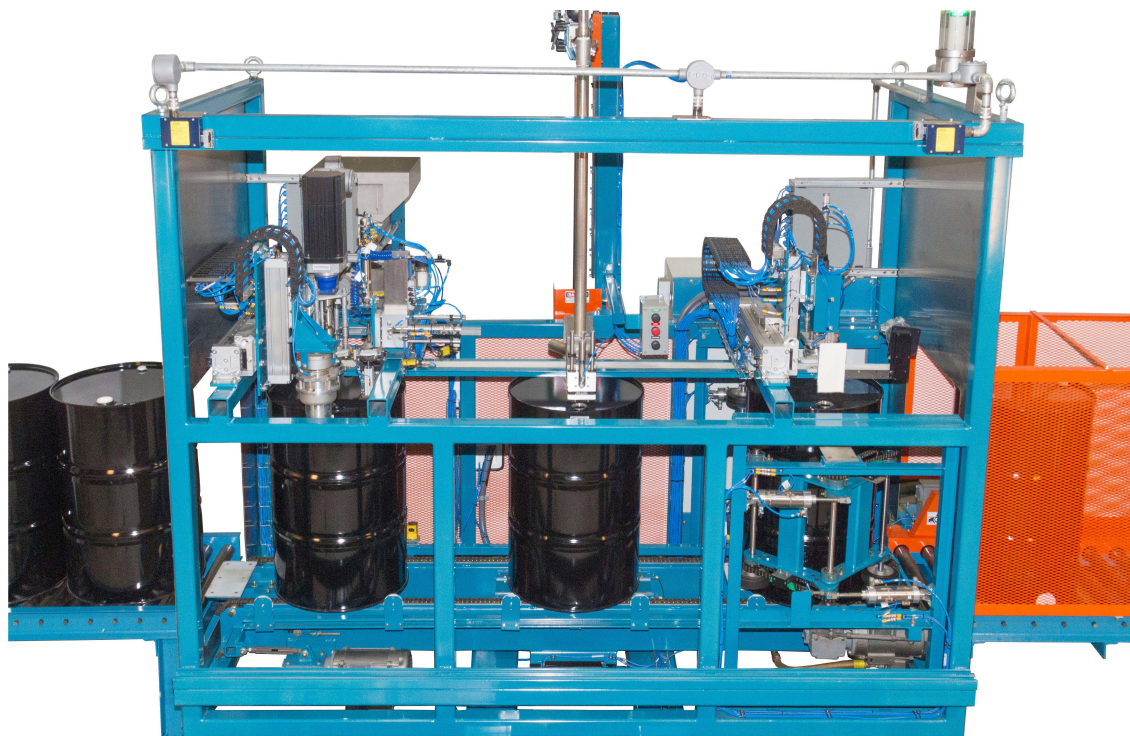
This is another type of portable drum and tote filling system. This system uses two 5,000 lb. capacity scales to increase production of this batch-filling operation. In either case, the scale will tare the weight to zero before filling can be done. This way, filling accuracy can be held withing plus or minus one pound. Also, containers can range in size from 55-gallon drums to 550-gallon IBC's.





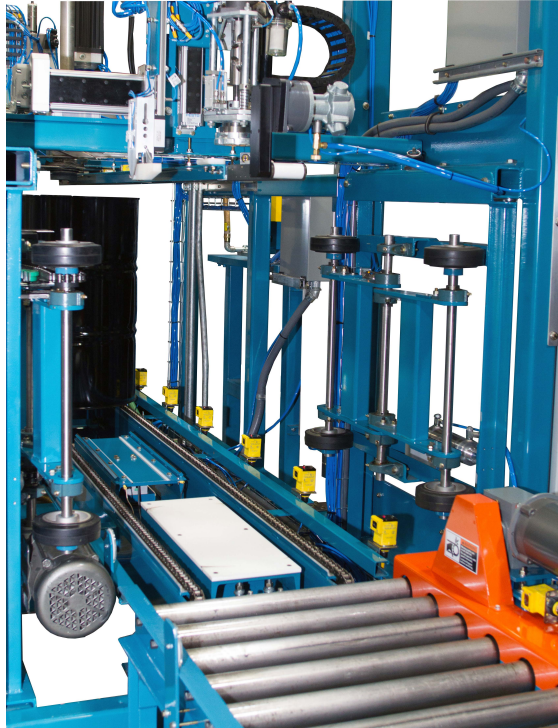
## Fully Automatic Drum Filling System

This three-station drum filling machine is capable of filling 55-gallon steel drums at a rate of one per minute, (60/hour) using water pumped in at 80GPM. The stainless-steel safety guards slide to the side. The entire system is built on a structural steel, all-welded superstructure.



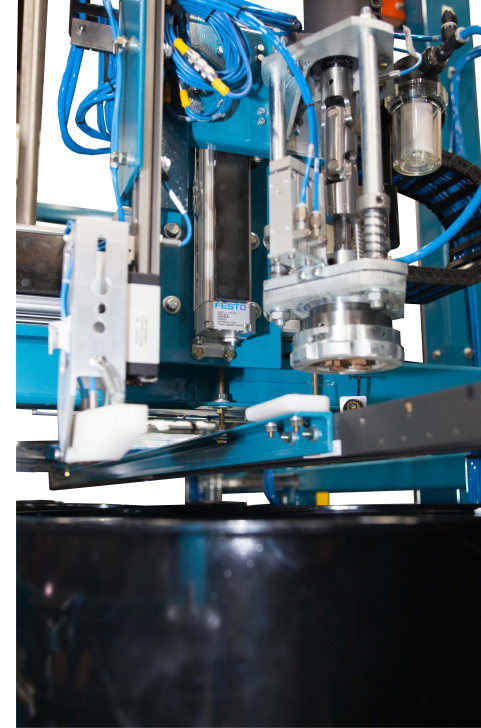
## Fully Automatic Drum Filling System - (without safety guards)

The first station, the bung remover, lifts the empty drum then rotates it to find the bung at six-o'clock. After removing the bung, the drum is lowered and conveyed to the filling station. Again, the drum is lifted, the weight is tared to zero and the filling is automatic. When filled, the drum is lowered and conveyed to the bung and capping station.



## Drum Rotator Station

Each empty drum will enter this first chamber and be lifted off the chain conveyor to be rotated, to find the bung plug. A set of four powered wheels on one side and four idler wheels opposite will rotate the drum.



## Bung Removal

Once the empty drum has been rotated, with the bung at six o'clock, the air wrench lowers and removes the bung plug. The plug is then placed on a small belt conveyor to meet up with the drum after it is filled.

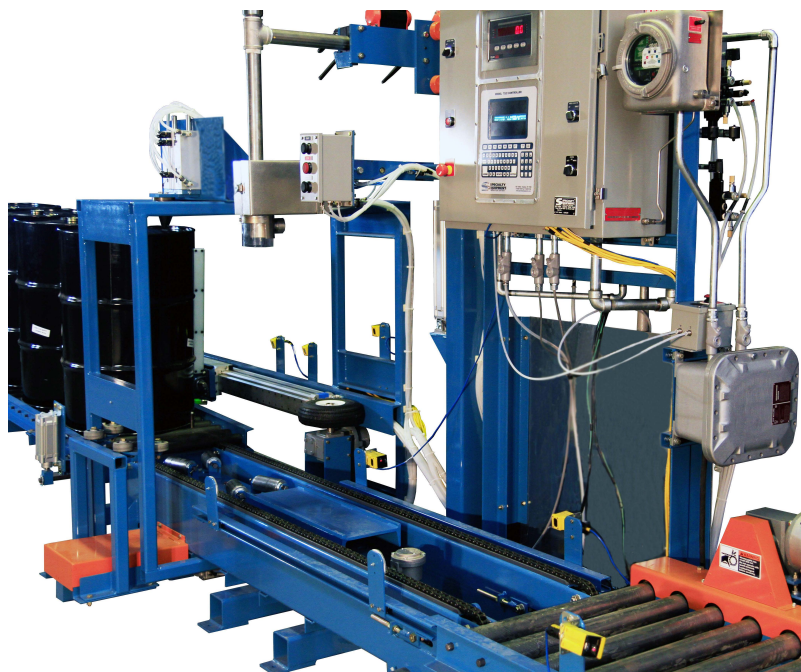


## Three Automatic Stations (without safety guards)

Here is another view of the three automatic stations. Three drums are in process all the time, moving at a rate of one per minute, (depending on viscosity). The panel at the end of the catwalk allows access to the controls and reprogramming while the machine is in full view. Maintenance has access to all stations from below, above and both sides after removing the front panel safety guards.

## Automatic Drum Orienting Filler

This model ADO-5510 drum filler is designed to fill 55-gallon drums with the bungs previously removed. The system starts with a drum escapement then a drum indexer that positions one drum at a time at the rotator. A raise/lower scale platform lifts the drum off the conveyor then signals the fill cycle to begin. The full drum will convey to the manual bung and capping station then through a wig-wag diverter that sends drums to accumulate, left then right, automatically.



## Two Automatic Stations (unguarded view)

Bung location and filling are both automatic functions. Every ADO-5510 filler has an empty drum rotator before the filler to orient the bung opening at six o'clock. As it enters the rotator, the drum is raised by a cradle of skewed rollers then captured between a tire and pivoting wheels moved in and out by an air cylinder under the machine. A signal is then sent to start the rotation. When the bung is located, a tapered plug is lowered into the bung opening to lock the drum in position. The drum is then lowered and conveyed directly under the filling station lance. The chain conveyor moves the drum through the stations.

## Three Stations

Here the automatic drum orienting filler is shown with the standard safety guards at the infeed. Empty drums enter from the right, into a rotation station then to the filler station. The safety guards prevent people from reaching into the rotator station. After it is automatically filled, the full drum moves to the manual bung and capping station.





## Standard Drum & Pail Filler

This is the standard, model DF-5510, a semi-automatic drum filler. It can top fill and sub-surface fill using a rod-less air cylinder to raise and lower the lance. The filler requires only 2 CFM of air to operate. A typical fill cycle for a 55-gallon drum is one minute.



## All Stainless Drum Filler

This is an all-stainless steel, sub-surface, model SDF-5510, semi-automatic, food grade drum filler with a sanitary lance and two infeed valves. The stainless conveyors have wash-down duty motors and the rollers have splash guards to prevent contamination.



## Filler for Various Containers

A single drum filler is used whenever filled drums will be picked-up by a fork truck, or palletized. The filler is a model DF-5510, top and sub-surface, drum and pail filling machine, designed to fill 5 to 55-gallon containers. However, if open mouth containers are used, this filler can run automatically.



## Bung and Capping In-Line

The single drum filler is built with a bung removal station prior to the filler and a bung replacement station after the filler. The operator will remove and replace bung plugs while a third drum is filling.



## Automatic, Four Head Pail Filler

This is a top-fill system for five-gallon pails. The first row of pails is already filled and being conveyed to a lid press. The second row is positioned under the filling heads. The third row is accumulated behind them, ready to move in when filled pails move out. The fill rate of water is sixteen (16) pails per minute.

The row of filled pails drives away where lids are automatically placed on top then they convey through a tunnel where lids are pressed on-the-fly. If a label is required, it would sequence after the lid press. The last machine in line is the automatic palletizer.



## Automatic, Four Head Pail Filler

This automatic pail filling system is built to operate 24/7 filling liquids into 5-gallon open-top pails. Two ball valves per lance are used for greatest efficiency. System is shown without the standard safety guarding.

Four empty pails are ready to convey into the filling stations. After a fill cycle, the row of full pails drives out the front. Powered roller drive pails in and out of the system. Four chain conveyors transfer the row of pails under the filling heads as full pails are discharged at the same time. Pails are raised off the roller conveyor, tarred to zero weight then filled to the programmed weight.

Full pails convey to an automatic lid station then a palletizer. The five-gallon pail filling rate, (using water) is 16 pails per minute, up to 960 pails per hour.



### Jug Filling Line

This line will fill 2.5 to 5-gallon jerrycans all day long. A drop-down metal tool is used to capture the jug opening directly under the lance. A tool is made for every shaped container. The operator simply pushes the start button to fill it and again to discharge it, calling another into the station.



### Multi-Lance Pail Filler

This four-lance, in-line pail filling system is designed to fill 5-gallon containers at 16 pails per minute. A powered belt moves each pail into position under each lance. Downstream, a metal lug crimper machine is used to seal lids onto these metal containers.



### Standard Pail Filler

This semi-automatic, sub-surface pail filler is designed for filling 1 to 7-gallon containers. It will use 3/4" to 1.9" diameter lances, depending on the opening of the container. Plastic belt conveyors are used, one on the scale and one after the fill station, for lid and labeling.



### Sanitary Pail Filler with Lid Press

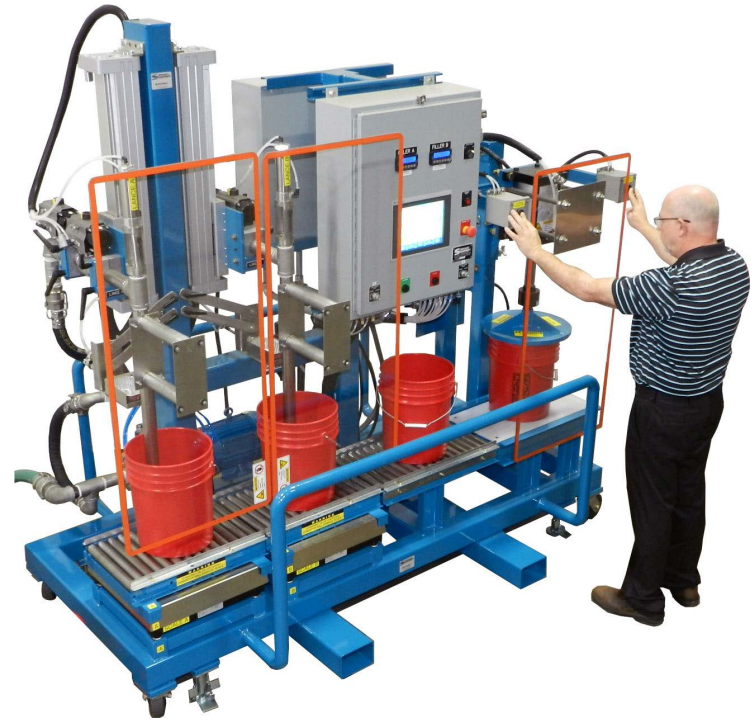
This model SPF-510, all-stainless-steel food grade filler is designed for filling 4 to 7-gallon containers. Plastic food-grade belt conveyors are used throughout the line. An air-operated lid press is included after the filling station.





**Mobile Pail Fillers**

This model MPF-510 mobile pail filler is ruggedly built from welded structural steel with swivel casters and foot locks. It has a power cord and special wall plug to fill 1 to 5-gallon pails. A lawnmower type bar in back is used to push it from station to station with only 10lbs of force.



**Mobile Pail Filler - Dual Lance**

This dual-head, mobile pail filler was created for a batch filling operation at multiple filling locations filling 4 to 7-gallon containers up to 19" tall. It is built to move around a level plant floor on casters and can be fork lifted to move to another building. Two clear safety shields and an air-operated lid press are included.



**Portable Filling & Lidding Station**

A fork truck will relocate this filler to multiple filling stations. This unit includes a pneumatic lid press station. The filler, conveyors, control panel, and lid station are all contained on a structural steel, welded superstructure.



**Stainless Mobile Pail Filler**

This all-stainless food grade pail filler will move around a food plant on casters, filling liquids into 4 to 7-gallon pails and jugs. It includes a 120 volt power cord. The system is rated for wash-down.





### Filling & Cooling Booth

This rugged, all-stainless steel system has a drum filler with heat-jacketed lance for filling liquid at 300 degrees. The first booth fills the drum, the second lets it cool-down. Features include; pneumatic sliding doors, five windows, thermal operator gloves, powered conveyors, and temperature controlled heating.



### Hot Liquid Filler

A drum filler with a heat-jacketed lance is filling a fiber drum with liquid at 275 degrees. Additional features include; an air-operated hood lowers over the drum, pneumatic sliding doors, thermal operator gloves, four windows, and a pull-out overflow pan.



### Stainless Steel Fume Booth for Pallet Loads

Here is a custom-made palletized drum and tote filling system within an all-stainless fume booth. The entry and discharge have air operated guillotine doors. Two operator work stations are included, a de-bunging and nitrogen purging station then the drum and tote filler, plus bung and capping operation. The see-through panels are Lexan. A pivoting panel at each station has flexible walls and rubber gloves to allow the operator to safely lean into the booth. The system operates with four all-stainless powered roller conveyors.





## Scaldis Automatic Inline Bottle Filling & Capping System

The Scaldis is a fully automatic, inline, sub-surface bottle filling system, with 4-14 filling heads, built to operate 24/7 filling liquids into 2 oz to 5 gallon bottles or F-style jugs. Fills up to 100 bottles per minute by dosing with pistons, flow meters, or peristaltic pumps. This filler can easily convert to fill a variety of container sizes, includes a clean-in-place functionality, and product adapted dosing techniques.

The Scaldis bottle capping machines close bottles with screw on and press on caps. This automatic capping machine with a stainless steel frame is very user-friendly. Some options are cap presence control, cap alignment control and a rotating operator panel.



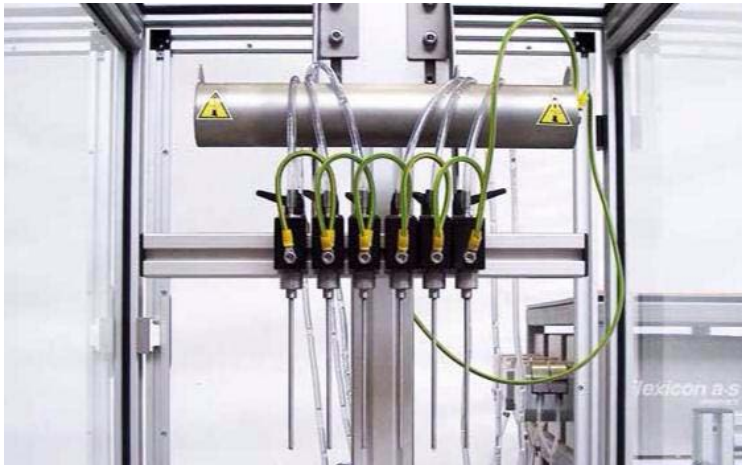
## Wisla Automatic Rotary Bottle Filling System

The Wisla is a fully automatic, rotary, sub-surface bottle filling system, with 1-4 filling heads, built to operate 24/7 filling liquids into 2 oz – 1.25 Quarts. Our rotary filler fills up to 50 bottles per minute by dosing with pistons, flow meters, or peristaltic pumps. This filler can easily convert to fill a variety of container sizes, includes a clean-in-place functionality, and product adapted dosing techniques.



## Fluminis Automatic Inline Bottle Filling System

The Fluminis is a hydraulic driven, fully automatic, subsurface inline bottle filling system, with 4-10 filling heads, built to operate 24/7 filling liquids into 2 oz to 5 gallon bottles or F-style jugs. Fills up to 67 bottles per minute. This filler can easily convert to fill a variety of container sizes, includes a clean-in-place functionality, and product adapted dosing techniques.



## Tigris Automatic Inline Bottle Filling & Capping System

The Tigris is a fully automatic, sub-surface inline bottle filling system, with 1-4 filling heads, built to operate 24/7 filling liquids into 2 oz up to 1-gallon bottles and F-style jugs. Fills up to 22 bottles per minute, dispensing via flowmeters, pistons or peristaltic pumps. This filler can easily convert to fill a variety of bottle sizes or jerrycans, includes a clean-in-place functionality, and product adapted dosing techniques.

Tigris Cappers are the perfect machine for small batches. A simple bottle clamp grips the bottles while caps are tightened. Quick adjustment times ensure flexible deployment. An integrated cap elevator makes the system very compact and very user-friendly.



## Amazon Automatic Jug Filling System

The Amazon is a calibrated weight, fully automatic, sub-surface inline bottle filling system, with 1-4 filling heads, built to operate 24/7 filling liquids into 1-7 gallon bottles or F-style jugs. Fills up to 15 bottles per minute. This filler can easily convert to fill a variety of container sizes, includes a clean-in-place functionality, and product adapted dosing techniques.



## Brenta Semi-Automatic Bottle Filling & Capping Machine

The Brenta model is a portable, semi-automatic bottle filling machine designed for small batches. This sub-surface, compressed-air filler is ideal for small to medium scale production requirements. Features fast container changeovers, clean-in-place functionality, and product adapted dosing techniques.



### Four Drum Filler, Position 1

This rotating base filler was made for sub-surface filling 55-gallon drums on a pallet. A manual turntable is mounted on a platform scale. With the lance assembly pivoted aside, a fork truck can now load a pallet of empty drums.

### Position 2

The operator will align each bung opening under the lance before filling four drums sequentially. He rotates the base after each drum is filled then repeats the cycle.



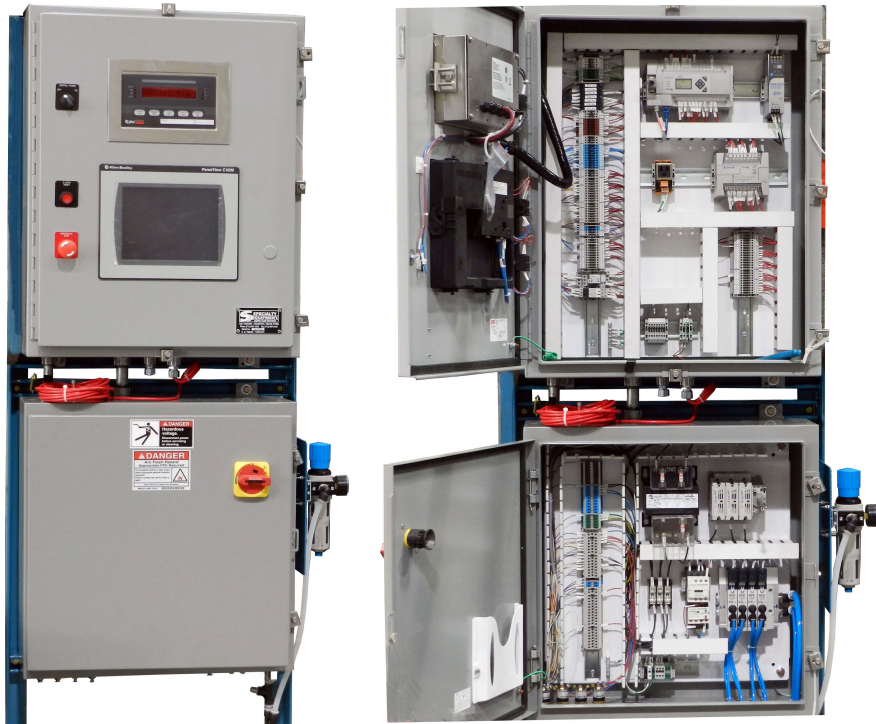
### Hot Viscous Liquid in a Box

Here we are filling a very sticky product into a box. The 4" diameter lance and valve are electric, thermal jacketed to constantly heat the viscous product. The operator stands outside the protective splash booth while a light tree monitors the boxes conveying in and out. A special lance was made with an "air knife" that shoots a blast of compressed air to blow away any residue streamers from the end of the lance.



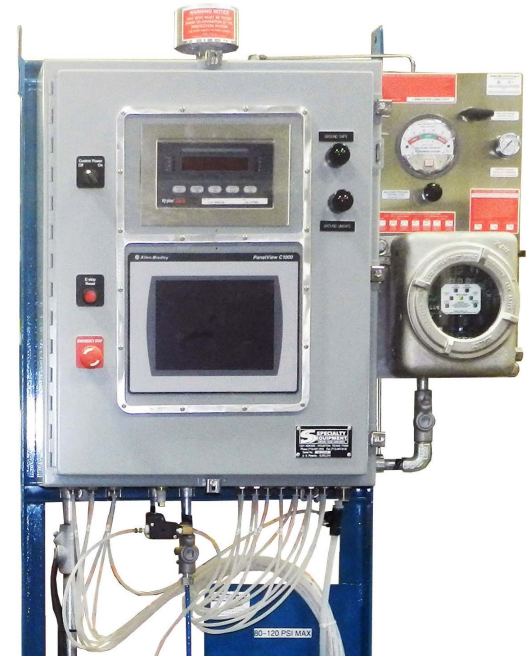
### Special, Four Drum Filler

This special quad drum filling machine was made for hot, (400 degrees) tar-like liquid into 55-gallon drums. It uses four lances, each 4" diameter, wrapped with heat insulation to keep the product moving. A scissors lift raises the drums to the heat-traced lances. The welded superstructure is spliced for two sections because the machine is 12' tall.



### Standard Control Panel

The is the standard NEMA 4 control panel with an Allen Bradley PLC and DC inputs and relay outputs. It is also Ethernet capable. Also included: a 10" color touch screen, an NTEP approved Rice Lake weight meter, all Allen Bradley components with a power distribution block, step-down transformer, fused disconnect, troubleshooting prompts, 250 product menus, E-stop button, and 120 VACS from step down and 24volt DC power supply. All wires are numbered and tagged at each end. The pneumatic panel is mounted below the electrical panel.

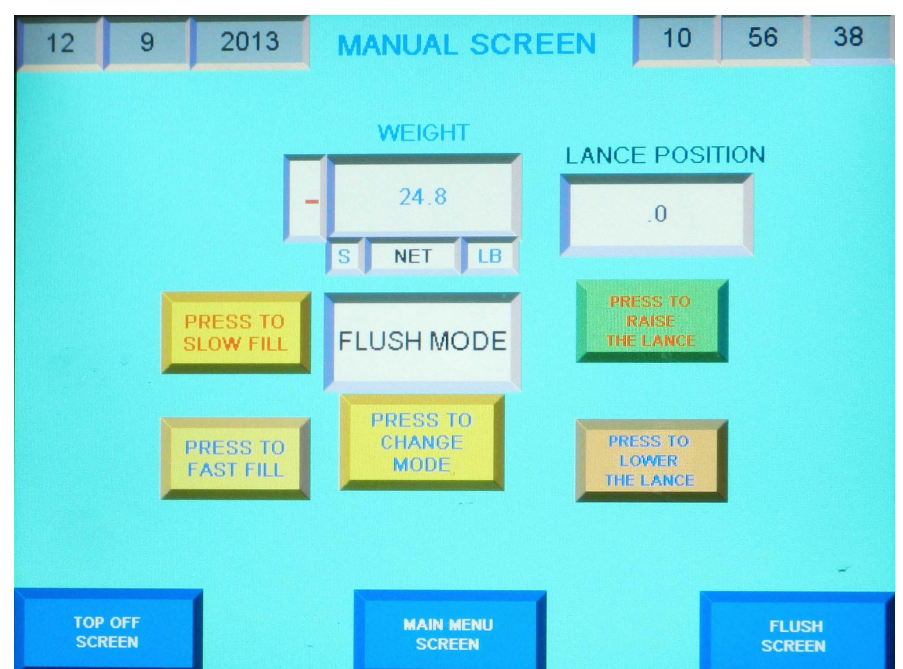


### Type X Control Panel

This is a typical NEMA 4X, nitrogen purged panel, rated for Class 1, Division 1 electrical code. It uses an Allen Bradley PLC controller and touch screen and all other components. The pneumatics are included in this panel as well.

### Operator Touch Screen

This is a standard item with all drum, pail and IBC fillers. It is an operator friendly, Allen Bradley, 10" panel view, multi-colored touch screen. This entire filling operation can be controlled from this panel location. It is equipped with multiple languages as well as English and Metric measurements. The screen is also rated to handle all electrical classifications.



### Standard Lance

This is a 316, stainless steel, 1.9" OD x 40" long drum filling lance. A 3/8" rod inside raises and lowers the foot valve by the air cylinder above. Chevron packing seals prevent backflow.



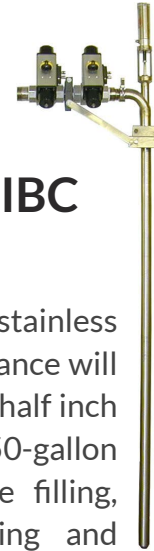
### Plastic Lance

This is a Kynar lance with two Kynar valves, used with highly corrosive liquids where stainless steel is not sufficient. PVC or Teflon can also be provided.



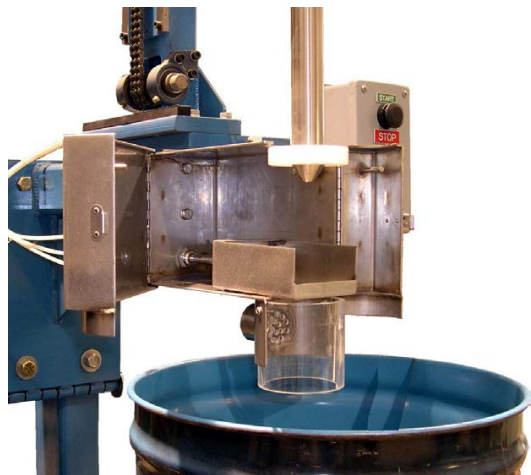
### 550 Gallon IBC Lance

This extra-long, 316 stainless 1.9" OD x 78" long lance will descend to within a half inch of the bottom of a 550-gallon IBC for sub-surface filling, to minimize foaming and increase fill rates.



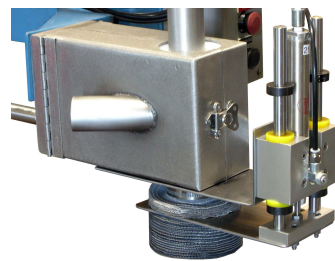
### Sanitary Lance

A sanitary lance with Tri-Clover couplings, seals and O-rings, all 316L stainless steel with quick disassembly for sanitary applications.



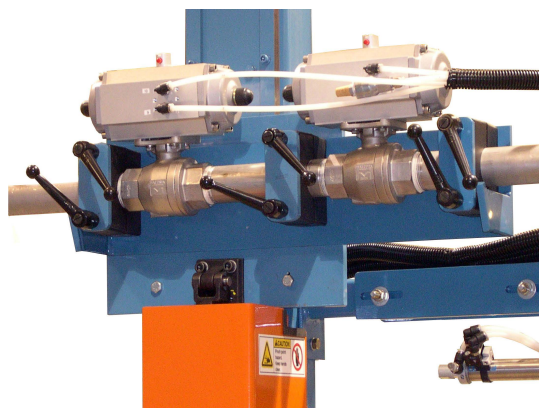
### Fume Box

A view of the standard, stainless steel fume box with an air operated drip pan and Teflon wiper ring. The adjacent photo shows a retractable fume bellows activated by an air cylinder. The side exhaust port is for fume collection hook-up.



### Foot Valve

The valve at the end of each lance has a 316 stainless steel, machined spool with a glass-filled Teflon seal, attached to a push rod. An air cylinder raises and lowers the rod to open and close the valve.

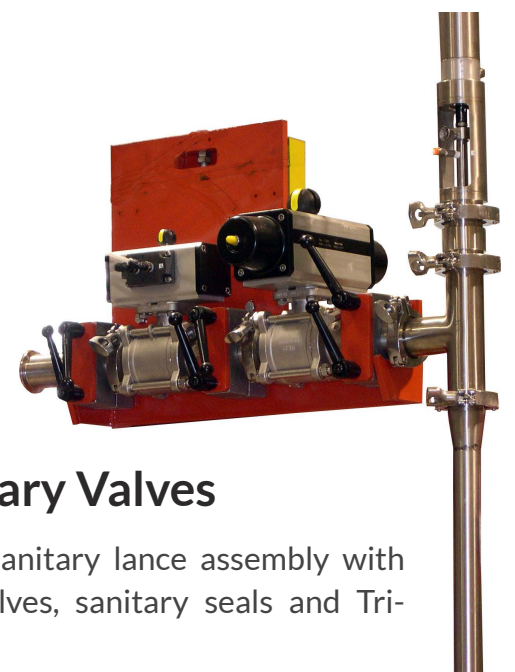


### Standard Infeed

Standard fillers include two, 316 stainless ball valves with air actuators. One valve stays open while the other fluctuates for slow and fast speeds. Twin valves control foaming and also eliminates product hammering.

### Sanitary Valves

This is a common sanitary lance assembly with twin infeed ball valves, sanitary seals and Tri-Clover clamps.



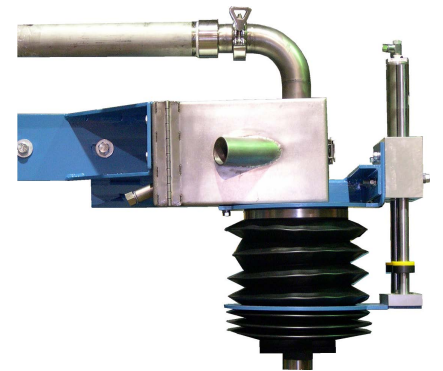


### Sampling Valve

This comes in handy when an occasional liquid sample is required for testing. A sampling valve is built into the lance. The operator can open the valve before, during or after the drum filling cycle and extract a sample for testing. The computer adjusts the liquid filling weight accordingly.

### Retractable Fume Skirt

This device will recover 99% of fumes while preventing splash-back. A Teflon bellows is raised and lowered by air cylinder, making a positive bung seal. Fumes are drawn out through the side exhaust pipe.



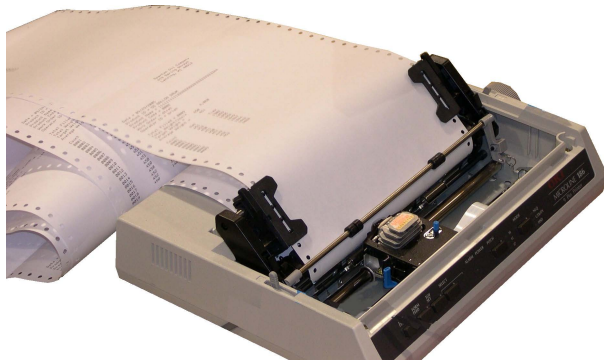
### Lance Rack

A lance rack allows for storing and draining of extra lances. It can be mounted along the conveyor, or on the plant floor. Lance racks can be built for up to ten filling lances and can be made mobile as well.



### Pivoting Flush Adapter

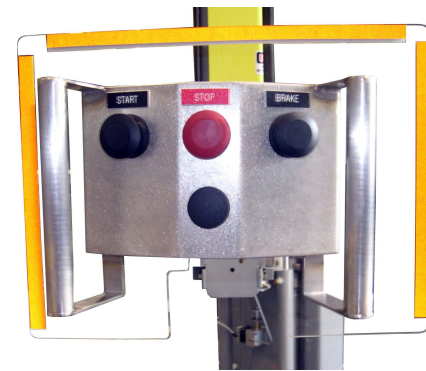
A pivoting steel arm is mounted to the upright frame and moves 90 degrees to bring the flush adapter under the lance. It then locks in place. The stainless steel, clean-in-place flush adapter rotates 360 degrees to accommodate the operator. It has precision machined couplings, adjustable throat assembly and high temp, chemical resistant seals. The operator presses a button to lower the lance into the adapter. A pair of draw latches locks it in place. By pressing a button on the panel, the flush time can be set for 1 to 999 seconds, or 1 to 999 minutes.



### Data Print-Out

Filling operation data can be printed out directly at the filling station. Printed data includes:

- Up to 250 product codes
- Operator & product names
- Container count
- Number of containers filled
- Time & date of operation
- Gross, net & tare weights
- Sub-total & gross total weights
- Average container weights
- Number of partial filled drums



### Safety Windshield

This see-through windshield is mounted behind the operator's handle to protect him from potential liquid splash-back during the filling operation.



### Bung & Capping Station

This is an easy access bung and capping station built for a palletized drum filler. With the platform, the operator is at the same level as the pallet to maneuver the various balancing tools, for placing bungs and caps while another drum is typically being filled.



### Bung & Capping Tools

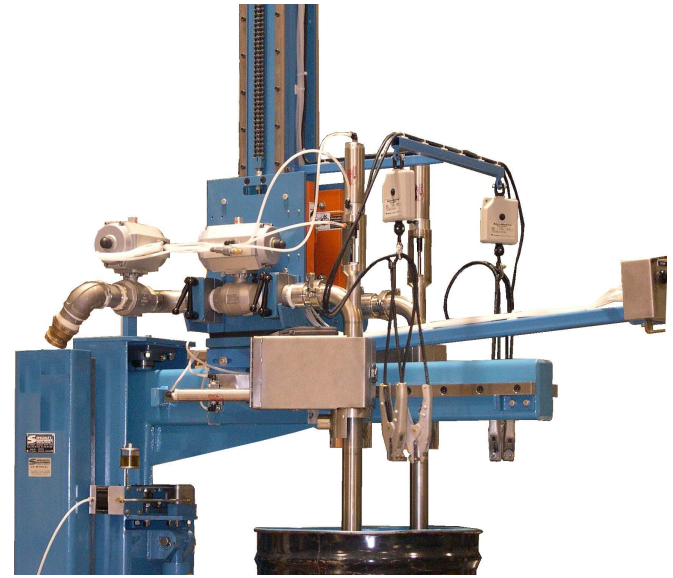
A standard air operated bung tool is hanging alongside a pneumatic dust seal capping tool. These can be purchased separately, or as part of a bung and capping station, as seen adjacent.





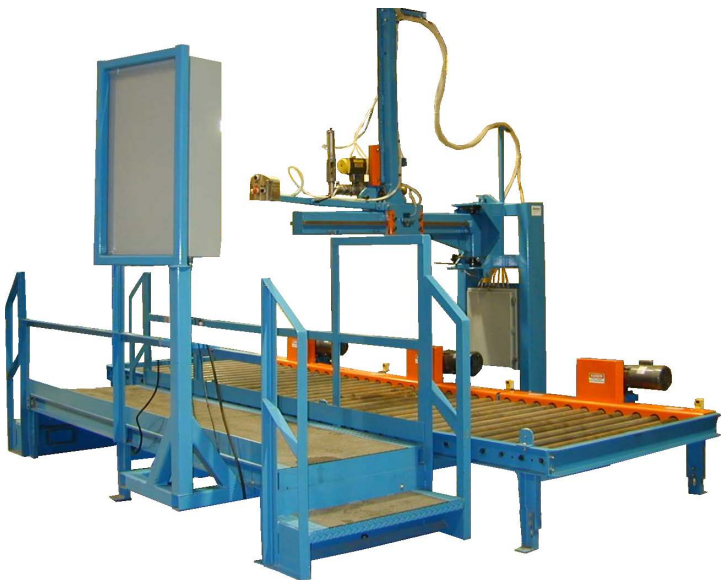
### No-Foam Package

This proprietary device is made for customers filling containers with highly foaming liquids. Typically floor mounted behind the filling station, it will reduce foaming by as much as 60%, which will more than double the filling production. The components include; a special lance, motor, special pump, ball valves, flow meter, NEMA 4 controls, couplings, hoses, fittings, and programming.



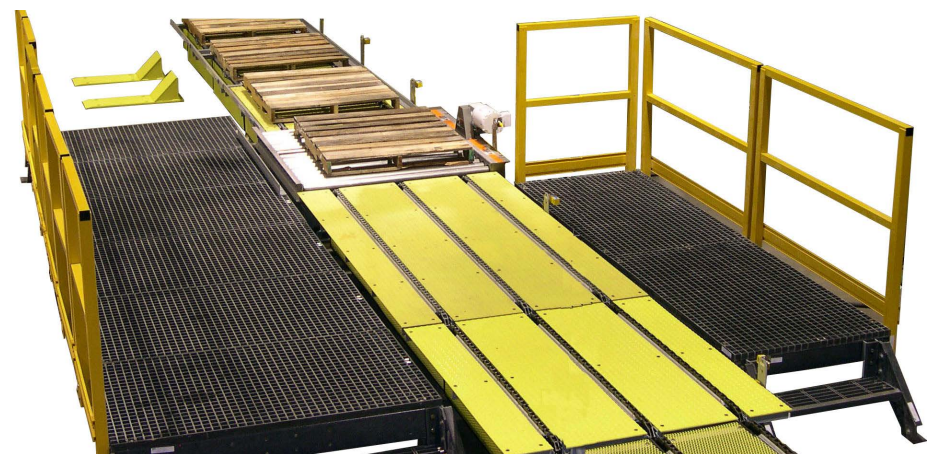
### Grounding Fault Interrupt

Designed for filling flammable liquids, a four clamp, manual grounding assembly is mounted on this twin lance drum filler. The battery type clamps hang from a wire reel. The fill cycle won't start unless a proper ground is made, and if the ground is lost, the filler will automatically stop.



### Standard Operator Platform

This is a typical 4' x 15' steel operator platform with two-way access, full length toe guards, handrails, galvanized deck grating, and adjustable height supports. The operator can remove or replace bungs while a drum or tote is being filled.



### Fiberglass Platforms & Walkover

Made especially for a wash-down area, this operator platform was made from fiberglass grating and handrails. The main platform is 5' x 18' and the other one is 2' x 10' long. Three strand chain conveyors have diamond tread walk plates between strands of chain. The platform has three way access, full length toe guards and adjustable height supports. The operator can step across the conveyor to get at containers to remove or replace bungs.



# What Can You Drum File

## Finance

- Plan, direct and coordinate financial operations
- Gain real-time financial insights - product-by-product, machine-by-machine
- Track operational, product, and employee costs
- Project operational and employee costs
- Evaluate opportunities for cost reduction

## Human Resources

- Monitor employee operational analytics
- Access operator/shift/location performance information
- Identify opportunities for training and employee development
- Monitor and report operator goals alongside company goals and objectives

## Strategic Management

- Organize micro and macro goals
- Adapt to market and operational changes
- Forecast production & production scheduling

## Project Management

- Plan, project, and analyze specific projects
- Monitor operational resources and optimize resource management
- Analyze project time and expenses by operator/shift/location/product

## Production Management

- Monitor and analyze production by product/operator/shift/location
- Improve quality control and quality management measures
- Monitor inventory and better predict inventory requirements
- Production schedule



# You Do With er Data?

IM  
LER  
CLOUD

## Multi-Location Operation Management

- Plan, direct and coordinate financial operations
- Gain real-time financial insights - product-by-product, machine-by-machine
- Track operational, product, and employee costs
- Project operational and employee costs
- Evaluate opportunities for cost reduction

## Business Intelligence & Analytics

- Monitor employee operational analytics
- Access operator/shift/location performance information
- Identify opportunities for training and employee development
- Monitor and report operator goals alongside company goals and objectives

## Data Management

- Organize micro and macro goals
- Adapt to market and operational changes
- Forecast production & production scheduling

## Operations

- Monitor filling times for containers, batches, days...
- Determine opportunities for operational efficiencies
- Plan & optimize manufacturing capacity
- Plan & monitor costs and variances across different locations
- Monitor and analyze operational costs
- Optimize operations to reduce overfilling / underfilling containers

## Supply Chain Management

- Improve projected purchasing requirements
- Manage inventory & materials by integrating with an ERP
- Optimize packaging and freight management in multiple locations
- With global access to products, you can accurately schedule products with the lowest shipping / freight costs [closest to location]
- Monitor warehouse operations
- Monitor and respond to changes in supply and demand
- Maximize cost savings for procurement and logistics



## Drum Filler In The Cloud, a critical services organization, is offering a cloud-based solution for all your drum, pail and tote filling analytics.

All the process data from your drum, pail, and tote filling operations is collected and can be accessed by you from anywhere; on your tablet, mobile or desktop computer simply by connecting to a “secure” channel in our cloud-based network.

### WHAT YOU GET!

- *Easy to navigate application, search information about your products or batches at any point in time*
- *Unlimited product recipes which can be shared across all your machines*
- *Automatic and customized reports in various formats (CSV, PDF, etc) with information about every container filled*
- *Alarm Historian. Check the status of your filler at any time*
- *Unlimited and reliable data backed up with Zone-Redundant Storage*
- *Preventive maintenance and remote technical support for your machine*
- *High speed edge IIoT device with store and forward capabilities, never lose your data*

### Tell us about your needs.

We offer customizable visualization templates for PC and mobile!

**DRUMFILLER IN THE CLOUD** is a subscription-based solution.

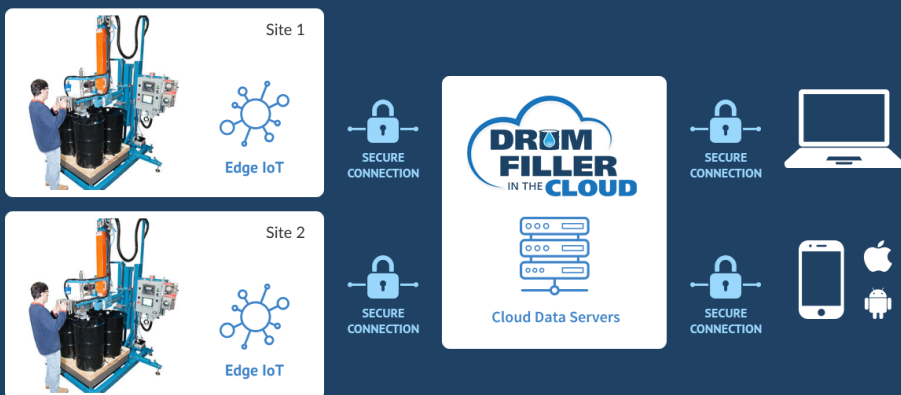




## System Architecture

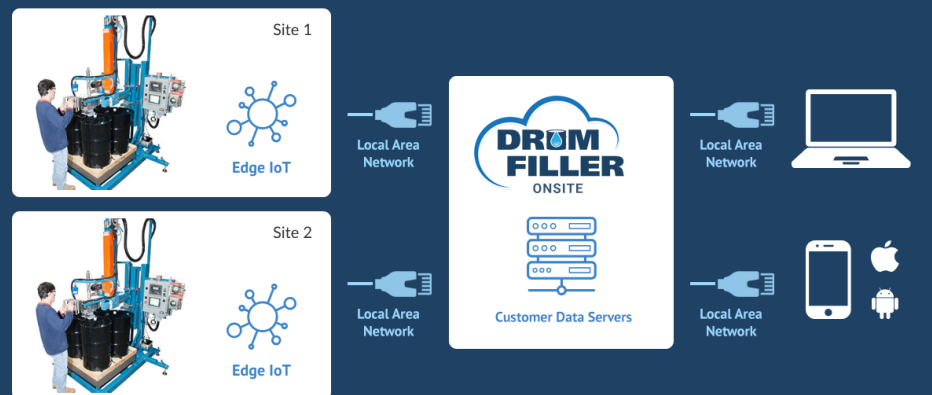
With Drum Filler In The Cloud, we give you the power to determine where you store, monitor, and analyze your data.

### How the Cloud-Based Software Works



- ✓ Historian & Analytics Software
- ✓ Unlimited Storage on cloud
- ✓ Remote Accessibility
- ✓ Able to Compare Data at Multiple Locations
- ✓ Data accessible in real-time
- ✓ Edge Device included
- ✓ No server maintenance costs
- ✓ No additional equipment required
- ✓ No additional IT / Set Up support required
- ✓ Does not wear out over time

### How the Local Server Works



- ✓ Historian & Analytics Software
- ✗ Storage limited by server space
- ✗ Only access on Network
- ✗ Single location data available only
- ✗ Data accessibility dependent on server
- ✓ Edge Device included
- \$ Additional server required
- \$ Server maintenance costs not included
- \$ Additional IT / Support required
- ✗ Wears out over time

✓ Benefit of Cloud

\$ Additional Costs Required

✗ Limitation



# BUILT TO FILL BUILT FOR LIFE

Just built better...



## Preventative Maintenance Annual Contract P.M.A.C.

Servicing all of your liquid filler and conveyor needs



Reduce Machine  
Downtime



Maintain Cost  
Expectations



Reduce Unexpected  
Repairs



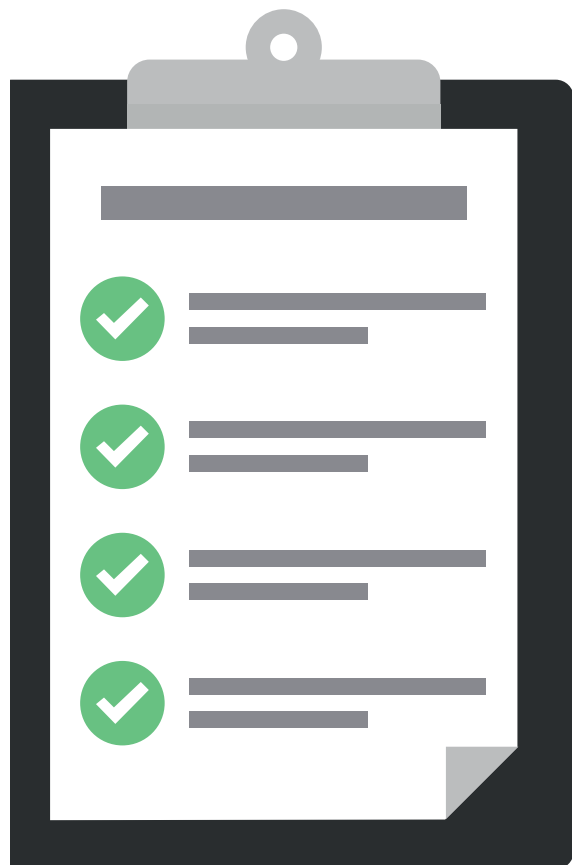
# BUILT TO FILL BUILT FOR LIFE

Just built better...



## 25 Point Inspection

Our certified technicians will cover a 25-point inspection and provide a detailed report. The inspection includes:



- Certified scale inspection & calibration
- Inspect filling lances
- Replace gaskets and o-rings
- Adjust inlet lines
- Clean filters, regulators and lubricators
- Check hydraulic pump cylinder and hose
- Inspect conveyor rollers and belts
- Inspect bearings, sprockets and chains
- Inspect garmotors
- Lubricate chains, belts, bearings, sprockets & chains
- ...and more!

## Maintenance Schedule Plan Options



**Plan A:** Semi Annual

**Plan B:** Quarterly

**Plan C:** Monthly

Contact our office for your quote and scheduling options.



# Filler As A Service Today

At Specialty Equipment, our FaaS solution is the new way for companies to acquire high-quality, rugged packaging equipment through a monthly subscription.

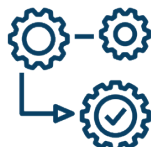


## Benefits of FaaS

When companies transition to an Operating Expense model, not only do they avoid the large capital expense, it allows them to improve financial forecasting and build collaborative relationships with customers.



**Improve Budgeting &  
Budget Forecasting**



**Improve Production  
Times**



**Improve Overall  
Operations**



**Reduce Equipment  
Lead Times**

### The Equipment

Palletized Drum & IBC / Tote Filler is our most versatile and widely accepted filling machine.

### The Service

Our PMAC includes our two 25-point inspections per year to extend the life of your equipment.

### IoT Enabled

Drum Filler in TheCloud is our IoT solution that allows you to monitor your filling operations in real time.

