

## **Semi-automatic Filling Systems**

for Liquid Filling Industries



# **Filling**The Technologies

METTLER TOLEDO offers a complete line of Liquid Filling Systems. With our IND560 controller, teamed with the Allen Bradley 1400 PLC, and the precision of the METTLER TOLEDO floor scales, we can offer our customers one of the most precise fillers in today's market. The mechanical portion of the system is constructed of 304 and 316 Stainless Steel, making this one of the most durable fillers as well.

With over 30 years of experience in the filling business, METTLER TOLEDO has continued to improve our offering. From Pail filling to Totes, we can handle your liquid filling needs.

Solution	Benefit
New design controller with MicroLogix™ 1400 PLC with A/B Panel View Plus and IND560 weigh Terminal	Interactive touch screen for continuous monitoring of filly cycle. Animated display of full cycle.
*100 Product ID Storage with alphanumeric	Prevents operator error in set point entry; saves time.
Automatic Preact Adjustment	Automatically adjust the cutoff point to compensate for filling variations. Ensures consistent final target.
Min./Max. Tare checking is (a) present (b) empty (C) correct size	Increase process safety and prevents overfilling by ensuring that a container before starting fill cycle.
Max. Fill Time Checking	Provides early detection of process malfunctions preventing overflowing and spills.
Process Interlocks	Insures safer, error free filling, minimizing operator error, overfilling and spills.
Consecutive Container Numbering	Tracks production for orders by numbering containers.
Wetted Parts 1.5" NPT, 316 Stainless Steel with Teflon Seals	Durable construction for long life.
Tower System 304 Stainless Steel	Durable long life corrosion resistant design.
Wiper ring cleans excess material from outside of lance. Drip Cup collects material drips from lance tips.	Reduces material buildup on lance exterior, tops stay cleaner.
Subsurface filling. Lance rises during fill cycle.	Minimizes foaming of product, reduces fill time and prevents lance from remaining in material during fill.
Build in Fume evacuator connection at container opening.	Reduces operator exposure to irritating or dangerous fumes.
Various material options on the Material Delivery System.	Durable, corrosive resistant construction for a long life.
Air Limit Switchers	Positions lance smoothly and accurately; determines in/put container safety interlocks.
Precise Electronic Scale	Ensures accurate fill weight typically +/- 2 or 3 graduations.

<sup>\*</sup>The MicroLogix™ formula can be called/loaded using the ID instead of the formula numbers.

## **Filling Systems**

### The Options

#### **Manual Filler**

The C560DF Controller when filling a single container Pails, Drum, or Tote Controls only the fill valve. Lance movement is controller by a separate air cylinder. This requires 3 steps on the fill sequence:

- Press lower the Lance button
- Press the fill button
- Press raise lance

There are versions available for converting Type-S lever scales and scales that used Toledo CapCheck load cells.



#### **Filling System Hardware**

These Systems are designed to increase productivity while improving fill accuracy in any environment...Safe or hazardous. Semi-automatic filling systems include a fixed or swivel lance assembly, controller, scale base. Numerous options are available to configure your system to your specific needs. These systems are capable of filling a single containers on a pallet, as a stand alone system or integrated as part of a conveyor line. Top or Subsurface filling is available for foaming and non-foaming materials. Semi-automatic Filling Systems offer the flexibility to fill several size containers on the same system whether it's pails, drums or totes...this system does it all.



#### **Filling System Controllers**

The METTLER TOLEDO Semi-automatic controller Filling Systems Controller is the most advanced, easy-to-use controller. An IND560 with the Allen Bradley PLC and a Panel View Plus. With intuitive screen shots, and lance location indicator, your operator will have no problem knowing where the fill process completes.

- The MicroLogix™ Data Log Extract Utility reads data log queues and sets up schedules stored in MicroLogix™ units. You can print the extracted data and save it to a Microsoft Excel® spreadsheet.
- Tip: The MicroLogix™ Data Log Extract Utility requires RSLinx® Classic Lite or RSLinx® Classic communication software, version 2.50.00 or later.
- RSLinx® must be installed on the same computer as the MicroLogix™ Data Log Extract Utility.



#### **Specifications**

#### **Power Requirement**

120 VAC, 60HZ, 250 VA regulating transformer recommended

#### **Air Requirement**

80 PSI, 35 CFM min. clean dry air to 3/8: NPT connection (filter, regulator and lubricator provided)

#### **Product Connection Requirements**

Flexible product hose to 1.5" NPT connection standard, pressure not to exceed 125 PSI

#### **Operating Temperature**

32°F to 115°F, 10-95% relative humidity, non-condensing

#### **Operating Speed**

Typically, one 55-gallon drum in 50 sec. with a 110 GPM delivery (based on testing with water)

#### **Standard Features**

- Memory for 50 Product IDs
- Drip cup / Wiper Ring assembly
- Fume Evacuator
- Remote Start/Stop buttons
- 304 SS Controller & Lance Tower
- Printer Output
  - Serial, ASCII code, 20 mA CL RS-422, with selectable baud rate (300 to 9600)
- Host Computer Port
  - Serial, RS-232 Continuous out put of fill data at the end of a fill. Ethernet, using Allen Bradley's RSLinx® and DataLog Extract Utility; can store up to 500 drums before transmitting. Exporting to Excel with a push of a button.

#### www.mt.com

For more information



**Quality certification.** Development, production, and auditing in accordance with ISO9001. Environmental management system in accordance with ISO14001.



**Tailored Services.** Our extensive service network is among the best in the world and ensures maximum availability and service life of your product.

#### Mettler-Toledo, Inc.

1900 Polaris Parkway Columbus, Ohio 43240 Tel. (800) 786-0038 Fax (614) 438-4518 Internet: www.mt.com

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