Custom Batch Control Systems

Batch Control Made Easy!

KEP now offers custom batch control solutions for applications requiring multiple preset batch quantities. An easy to use and custom interface is provided using one of our MMI8000 series touchscreen O/I displays which are connected to a KEP flow batch controller and are all mounted in a single NEMA wall mount enclosure.

The Batch Control System Consists of:

- A choice of flow computer/batch controllers to suite your specific application
- MMI8000 O/I touchscreen display; Choose from different models and screen sizes
- NEMA4x Enclosure; Many sizes and configurations available.
- Custom programmed MMI8000 touchscreen project created specifically for your application
- Many accessories available

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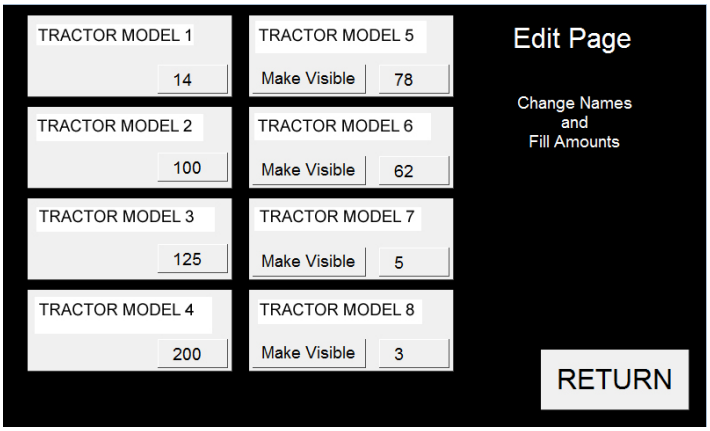
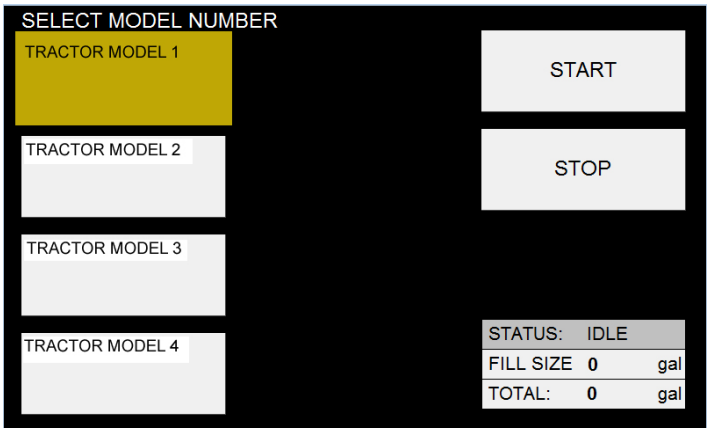
Example 1
Batch by ID and Assigned Batch Quantities

Example 1

A facility manufactures tractors of different sizes. The tractors range from small machines with fuel tanks less than 20 gallons to large machines with fuel tanks of hundreds of gallons. Each tractor is assigned a model number and the customer wants to assign a batch quantity amount to each tractor based on it's related fuel tank size. The system chosen uses a SUPERtrol 1LE (ST1LE) Batch Controller and an MMI8070H O/I touchscreen display. The ST1LE is connected to the flowmeter and control valve on the fuel fill line. The MMI display has been programmed with a custom project that allows the user to assign "Fill Size" amounts to each tractor model. When the Fill Sizes are set to the tractor models, the display allows the customer to simply choose which tractor model to fuel and press start to begin the fueling process. This loads the corresponding Fill Size into the ST1LE Preset Register and the ST1LE sends a signal to the control valve to open the valve and begin the batch. The fill size and total are displayed on the MMI display and when the Fill Size quantity is reached, the ST1LE sends a signal to shut the valve and the batch is complete. The system will remain in standby until the next tractor is ready to be fueled. Records are kept for each fill operation.



In the "edit mode", the user assigns Fill Sizes for each tractor.



In the "run mode", the user selects which tractor to fuel and hits START to start the fueling process.

Kessler-Ellis Products

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Example 2
Batch Tracking with Ticket Printing

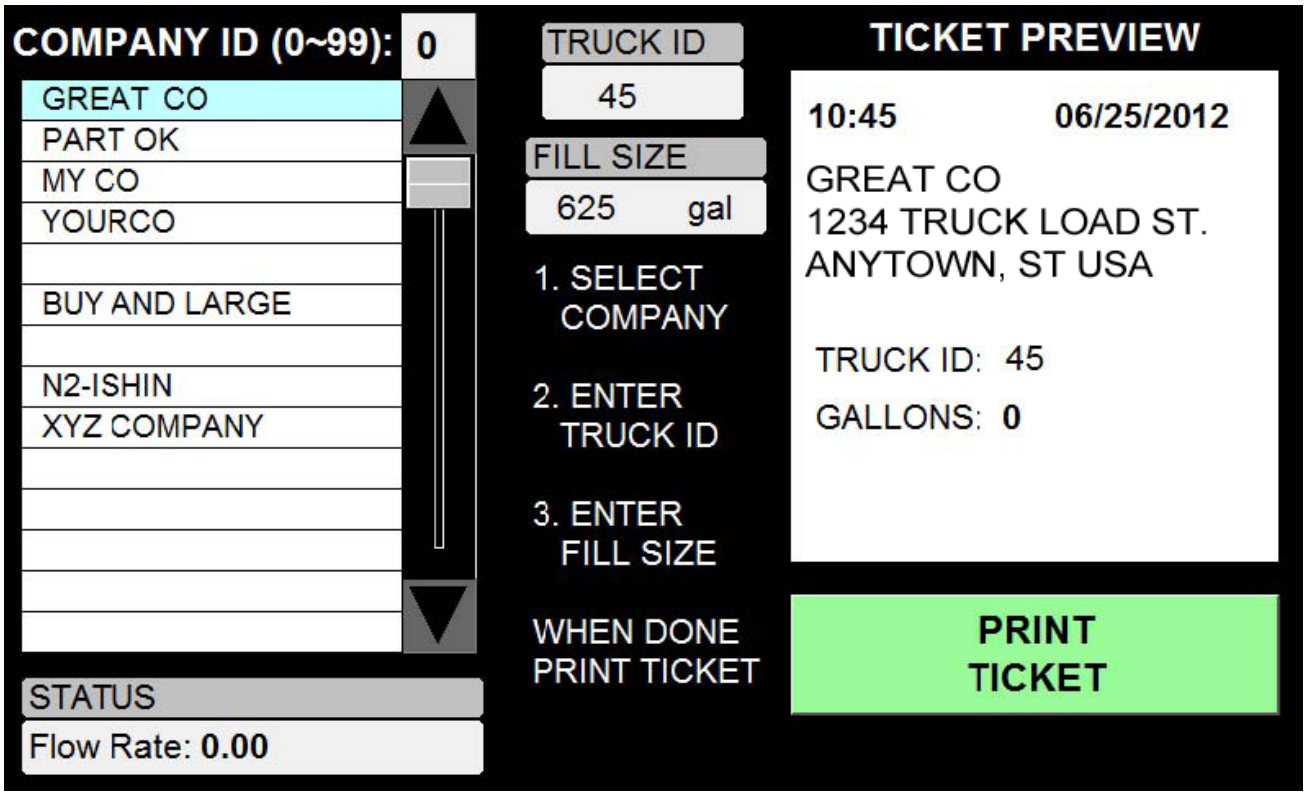
Example 2

The ES765SYS is a complete truck loading batching system consisting of one flow batching computer(ST1LE) and MMI8070H graphic display panel. Other flow computer and MMI models are available upon request. The system is enclosed in a fiberglass NEMA4X enclosure and can be prewired by the factory prior to shipping (PW option recommended)

This System Includes:

- Complete Flow Batcher with Graphic Operator Interface Display Panel System
- Add up to 100 Customers with Unique Truck ID Numbers
- View Graphical Real Time Trending and History Trends
- Record Data to Memory Stick
- Light Weight Enclosure with Hinged Cover
- Ethernet Connectivity Option
- RS485 Modbus Connectivity Option

Main Screen:



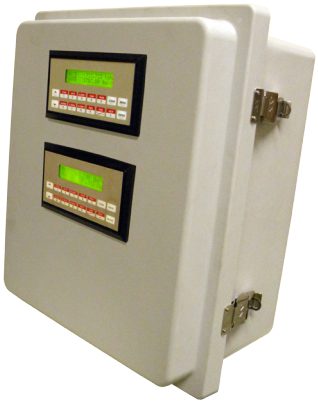
Choose a Batch Controller

Flow Computer/ Batch Controller	Description	Flowmeter Compatibility
SUPERtrol I (ST1) 	Batch Controller with pulse and analog inputs, Temperature compensation	All linear and square law meters supported including: vortex, turbine, magnetic, PD, target, orifice, venturi, v-cone, coriolis and many others
SUPERtril I*LE (ST1LE)* 	Batch Controller with pulse inputs	All pulse producing flowmeters
ES747 	Batch Controller with pulse inputs and 10 Selectable Fluid Tables	All pulse producing flowmeters
MS716 	Batch Controller with pulse and analog inputs, Temperature compensation for Remote Vehicle & Skid Mounting	All linear and square law meters supported including: vortex, turbine, magnetic, PD, target, orifice, venturi, v-cone, coriolis and many others

Choose a Touchscreen HMI Display

HMI Display Model	Description
MMI8070H 	**7" Color Graphic Display Panel and Touch Screen** • 800x480 TFT LCD • Fan-less cooling system • Built-in flash memory and RTC • NEMA4/IP65 compliant front panel • LED Back Light • One USB Host and one USB client port • SD card slot • Power Isolator inside
eMT3070A 	**7" HMI Display Panel and Touch Screen** • Aluminum Housing and Brand-new Color & Design • 800x480 TFT LCD • Fan-less Cooling System • Built- in 256MB Flash Memory and RTC • NEMA4/IP65 compliant front panel • One USB Host and One USB Client Port • SD Card Slot supports SD and SDHC cards • Power Isolator Inside • Com1 or Com3 RS485 2W *Communicates with Batch Controller RS485 Modbus Option*

Choose an Enclosure

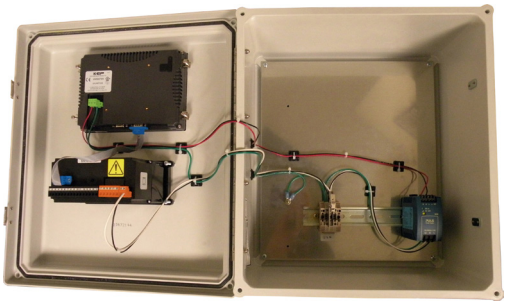
Enclosure	Description
MS799 	**Features** • Large Size: 14”(H) x 12”(W) x 7.75”(D) • Molded fiberglass polyester has outstanding chemical and temperature resistance qualities and exhibits excellent weatherability and physical properties • Accommodates Flow Computer(s) and Accessories (printers, converters, etc.) • Seamless foam-in-place gasket assures watertight and dust tight seal • Stainless steel mounting brackets and attachment screws are provided with each enclosure • Hinge is corrosion-resistant type stainless steel • Padlock provisions included on each quick release latch
MS816 	**Features** • Extra Large Size: 16”(H) x 14”(W) x 8”(D) • Can Accommodate Multiple Products with Accessories Mounted Inside • Meets NEMA 4X/IP65 Specs. • Quick-Release latches (standard) • Hinged Cover (on left) • Light Weight • Options: Sub Panel DIN Rail Pre-wired to DIN Rail Terminal Block

Custom Mounting Configurations

Touchscreen I/O Panel and Single Batch Controller Mounted on Front

Touchscreen I/O Panel and Two Batch Controllers Mounted on Front

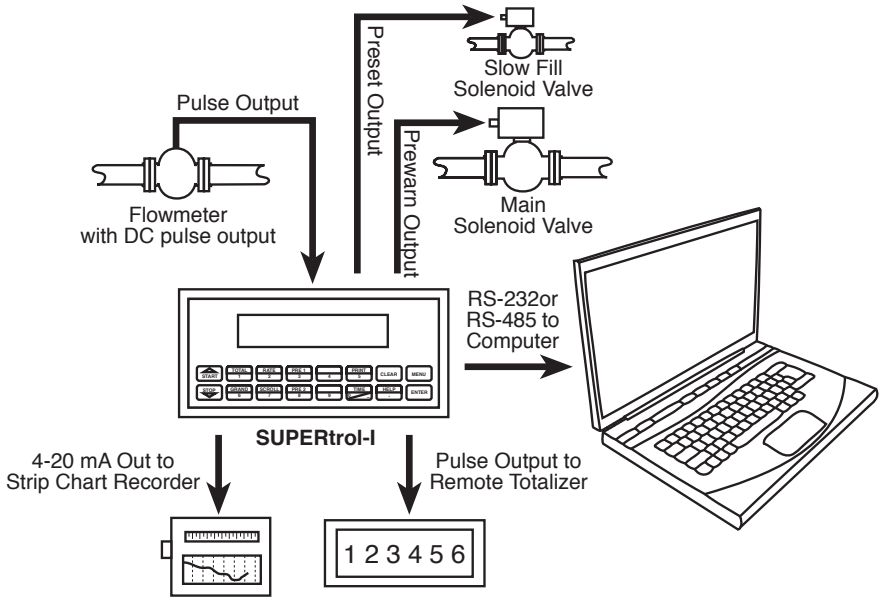
Touchscreen I/O Panel Mounted on Front with Batch Controller Mounted on Internal Sub Panel.



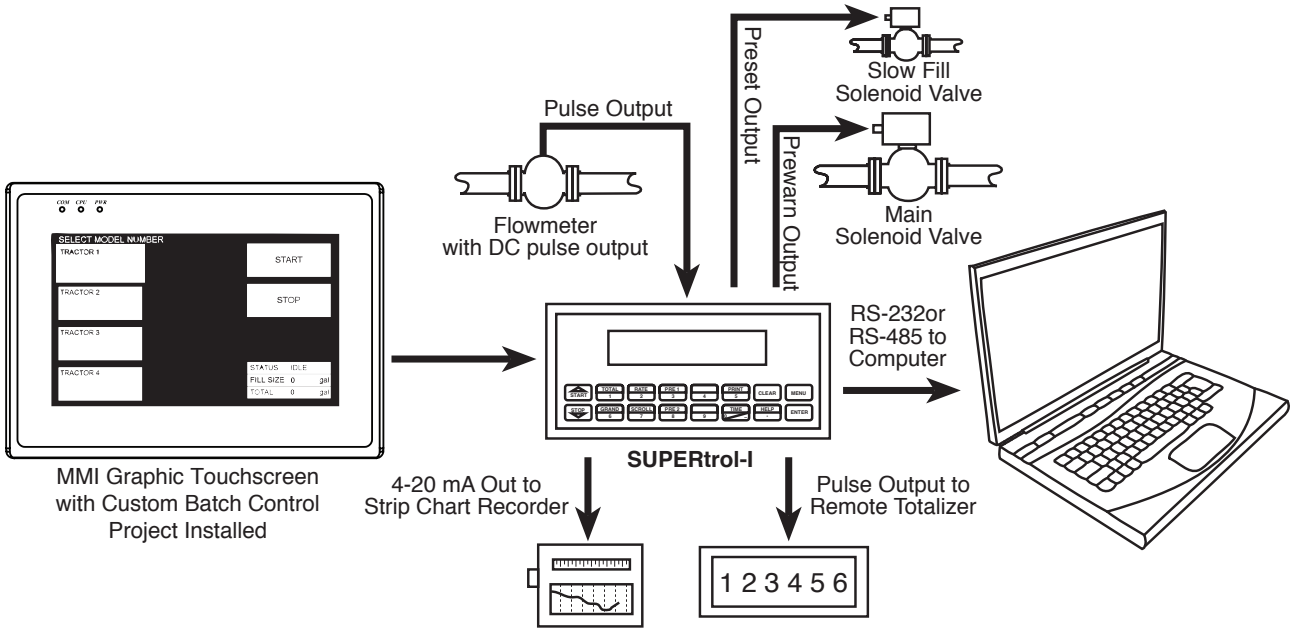
Optional Accessories and Prewiring Options Available

APPLICATIONS

Typical Batch Control Application



Custom Batch Control Application



See Common Batching Solutions and Download Our Batch Control Tutorial Here:
http://www.kep.com/tutorials/batching/Batching_Solutions.html