

Fully-Integrated Batching Controller for a flexible batching solution



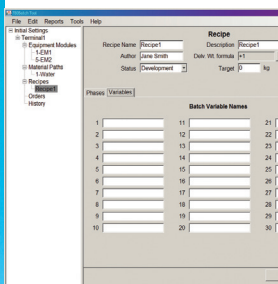
Stand-alone operation

Operating without the need for a PLC or DCS system, the IND780batch is equipped with a large, easy-to-read color graphics HMI display.



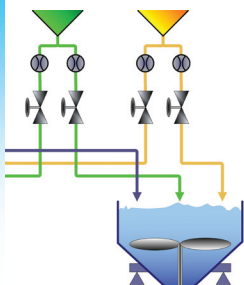
Multiple control options

The system is easily adapted to most batching, filling, and formulation applications, providing functionality for automatic, semi-automatic, and manual modes of operation. Supports automatic material transfer with input from up to four scales and flow meters.



Easy configuration

The PC-based batch configuration tool simplifies the creation of master recipes, which can then be downloaded to the terminal. Up to 1,000 master recipes can be stored, comprised of as many as 999 material paths and 99 phases per recipe, for unmatched flexibility of configuration.



Increased manufacturing efficiency

Enhance your automatic material transfer batch process by adding the Q.iMPACT[®] material transfer control feature. Q.i's patented predictive adaptive control algorithms eliminate the need for multi speed feed, which reduces material feed time while improving material feed accuracy.



IND780batch Controller with Batch-780 application software

The IND780batch controller combines advanced batching control technology with the powerful features of the IND780 terminal. Engineered for the Food, Specialty Chemical, Plastics, Glass and Aggregates batching and formulation market, the IND780batch works as a stand-alone terminal for single or multi-scale or flow meter applications, with high speed cut-off, ethernet connectivity between PC Tool, terminals and configurable I/O. Installation and setup are quick and easy, for a "box to batch" solution. In even more demanding applications, IND780batch can configure advanced predictive adaptive control algorithms and best practice automatic material transfer functionality (Q.i) for superb accuracy and throughput.

Integrated batching solution

from a leader in industrial process weighing control

Features and Benefits

- Self-contained, stand-alone controller for batch applications
- Supports simultaneous operation of up to 4 scales
- IND780batch is ISA S88-compliant, providing a consistent protocol for Batch operations
- Supports up to 40 inputs and 56 outputs for maximum flexibility in control setup
- Manual formulation only or fully-automatic material transfer control batch operation with user-defined messages and data collection for operators
- Ability to add Q.i Predictive Adaptive Control (PAC) to minimize material feed variability and maximize production efficiency
- PC configuration tool to allow recipe and order creation, Track and Trace logging, security setup, and usage report
- Storage for up to 1,000 recipes, containing 99 steps per recipe
- Ability to adjust batch order size by %, target value, or ingredient amount with recipe looping capability
- Automatic material jogging eliminates under-tolerance materials by adding small additional material amounts until within target tolerance
- Gain-in-weight, loss-in-weight, hand add, and discharge cover all material feed types
- Dump-to-empty management to control removal of all material in a vessel in the shortest amount of time
- Print capability for end-of-batch summary and custom print messages
- Advanced color graphics display with SmartTrac optimizes the amount of visible process information while assuring readability
- Equipment view screens show system status for advanced diagnostic capability
- Material ID or Lot ID barcode scanning, to verify that they are correct and ensure that operator adds the right material
- Execute a custom TaskExpert program as part of a recipe phase, to perform processes outside the scope of the standard batching software, before returning to complete the recipe



Technical Specifications

Scales and flow meters	Up to 4, operated and displayed simultaneously
Scale types	Analog scale: 10 VDC excitation, powers up to 8 350Ω load cells, 2 or 3 mV/V, per channel IDNet and POWERCELL® PDX® scales
Master recipe	Up to 1,000 recipes can be stored in the terminal, with each recipe containing up to 99 steps
Batch size adjustment	Allows batch size adjustment per order by %, target value, or ingredient amount
Power loss recovery	After a loss of power during processing, system recovers to Pause mode without loss of data, permitting completion of batch
Q.i PAC algorithm	Up to 4 PAC licenses per terminal
Configuration and setup	BatchTool 780 PC-based configuration tool provides the interface to manage equipment, materials, recipes, orders, and reports
Material management	Up to 999 material paths are supported (maximum 42 automatic feeds and/or 42 automatic discharges per scale)
Enclosure	Panel mount: 220 x 320 x 105 mm (8.7 x 12.6 x 4.1 in.), stainless steel front panel, certified Type 4x/12 Harsh environment/desk/wall/column mount: 200 x 299 x 235 mm (7.8 x 11.8 x 9.3 in), stainless steel, IP69K certified
Interface: Display and keypad	TFT color graphical LCD display with backlight; numeric keypad with decimal and clear keys; tare, zero, print, select scale; screen navigation and enter keys; five softkeys, four application-specific softkeys
Reporting	Includes: Master recipe listing, batch control recipe history, order summary, material usage, audit trail and lot number reports
Security	Login access security levels to prevent unauthorized changes to orders and control recipes
Barcode interface	Supports operator scanning of each material via Serial or USB connection
Standard connectivity	(1) RS-232, (1) RS-232/422/485; Ethernet 10/100 Base-T; USB Master (external keyboard)
Track & Trace	Logs Batch ID, date, time, user ID, changes during the batch, success/fail status of batch; stored data can be exported as .csv
Hazardous area approval	IND780 terminal approved for use in Zone 2/22, Division 2 hazardous areas
Digital I/O options	Discrete I/O: Maximum of 40 inputs, 56 outputs. Local (Relay or Solid State): One or two modules, each with 4 inputs, external sink 5-30 VDC; 4 outputs @ 30 VAC/VDC, 1 A max. Remote: Up to 8 ARM100 I/O modules, 4 in/6 out @ 30 VDC/250 VAC, 1 A max.
Packaged Batch option	Available, pre-packaged, ready-configured batch solution with operator I/O, automatic operation, single-scale input



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For more information