Concrete Batch Controllers

TABLE OF CONTENTS

1280 FlexWeigh Systems Concrete Batcher

Decumulative/Accumulative Batcher

Standard Features

- Powered by 1280 Enterprise™ Series indicator
- Large color touchscreen display
- Remote batching through web server integration
- Front panel control switches and emergency stop
- Automatic or manual batching modes
- Configurable from two to five scales (one to two cement scales, and one to three material bins)
- Up to four admixes (bottled or direct)
- Manual entry of moisture compensation percentage
- Metered water controlled by onboard DIO
- Import/export databases via USB, Revolution® or Interchange software
- Configurable batch transaction ticket
- Storage for 1,000 transactions, 1,000 mix designs and 500 customers
- Available with English or Spanish operation and in imperial or metric measurements

Options

- Desktop stand
- Sun visor

Part Number/Price

Part #	Description	Price
208907	Decumulative batcher	$15,950.00
216733	Accumulative batcher	$16,950.00
212392	Sun visor	$500.00
212234	Desktop kiosk stand	$450.00

Specifications

Power:
100 to 240 VAC; 50/60 Hz

Excitation Voltage:
10 VDC (± 0.5 Volts)
16 × 350 ohm or 32 × 700 ohm load cells per A/D card

Analog Signal Input Range:
-60 mV to 60 mV

Analog Signal Sensitivity:
0.3 µV/graduation minimum at 7.5 to 120 Hz
1.0 µV/graduation recommended

A/D Sample Rate:
7.5 to 960 Hz, software selectable

Resolution:
Internal: 8,000,000 counts
Display: 1,000,000

System Linearity:
± 0.01% full scale

Communication Ports:
Port 1 & 2: Full duplex RS-232 with CTS/RTS, RS-422/485
Baud Rate: 1200 to 115200
Port 3: USB 2.0 Device (Micro)
USB Host: (2) Type A Connectors max 500 mA
Ethernet: Wired 10/100 Auto-MDX
Ethernet: Wireless 802.11 b/g/n 2.4 GHz

Onboard:
Selectable filters: Three stage, adaptive or damping
Embedded Linux® OS
8 GB eMMC (system use)
1 GB DDR3 RAM
460 MB onboard database (SQLite) storage
Up to 32 GB micro SD card

Display:
12-inch, 1280 × 800 pixel, 1,500 NIT

Temperature:
Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: -4 °F to 131 °F (-20 °C to 55 °C)

Rating/Material:
Painted mild steel enclosure
NEMA Type 4; IP66

Dimensions:
20 × 20 × 8 in

Warranty:
Two-year limited

EMC Immunity:
EN 50082 Part 2 IEC
EN 61000-4-2, 3, 4, 5, 6, 8, 11

1280 FlexWeigh Systems Concrete Batcher

Decumulative/Accumulative Batcher

Front Panel Switches	Decumulative Batcher	Accumulative Batcher
Auto/Manual	x	x
E-Stop	x	x
Conveyor Start/Run*	x	x
Bin 1*	x	x
Bin 2*	x	x
Bin 3*	x	x
Cement 1*	x	x
Cement 2*	x	x
Water*	x	x
Admix 1*	x	x
Admix 2*	x	x
Admix 3*	x	x
Admix 4*	x	x
Aggregate Hopper		x
Cement Hopper		x

** Available in Manual Mode*

Outputs	Decumulative Batcher	Accumulative Batcher
Conveyor Start/Run	x	x
Alarm/Horn	x	x
Bin 1 Discharge	x	x
Bin 1 Vibration	x	x
Bin 2 Discharge	x	x
Bin 2 Vibration	x	x
Bin 3 Discharge	x	x
Bin 3 Vibration	x	x
Cement Hopper Gate (Close)		x
Cement Hopper Gate (Open)		x
Cement Silo 1 Feed	x	x
Cement Silo 2 Feed	x	x
Cement Weigh Hopper Air		x
Cement Weigh Hopper Vibration		x
Cement Silo 1 Air	x	x
Cement Silo 2 Air	x	x
Water Fill/Feed	x	x
Weighed Water Discharge Gate		x
Admixture 1 Discharge	x	x
Admixture 1 Fill/Feed	x	x
Admixture 2 Discharge	x	x
Admixture 2 Fill/Feed	x	x
Admixture 3 Discharge	x	x
Admixture 3 Fill/Feed	x	x
Admixture 4 Discharge	x	x
Admixture 4 Fill/Feed	x	x
Aggregate Hopper Gate (Close)		x
Aggregate Hopper Gate (Open)		x
Aggregate Hopper Vibration		x
Aggregate Weigh Hopper Air		x
Dust Collector 1	x	x
Dust Collector 2	x	x

Inputs	Decumulative Batcher	Accumulative Batcher
Admixture 1 Bottle Empty	x	x
Admixture 1 Pulse	x	x
Admixture 2 Bottle Empty	x	x
Admixture 2 Pulse	x	x
Admixture 3 Bottle Empty	x	x
Admixture 3 Pulse	x	x
Admixture 4 Bottle Empty	x	x
Admixture 4 Pulse	x	x
Manual Mode	x	x
Air Pressure OK	x	x
E-Stop	x	x
Water Meter Pulse	x	x
Conveyor Running	x	x
Weighed Water Gate Closed Limit Switch		x
Aggregate Hopper Gate Closed Limit Switch		x
Cement Hopper Gate Closed Limit Switch		x

Concrete Batcher Questionnaire

RICE LAKE WEIGHING SYSTEMS

Customer Number:

Company: Name:

Date: Phone: Fax: Email:

1. Tell Us About Your Current System

Check boxes in either Accumulative or Decumulative to reflect your current system. Type in any bin materials you use.

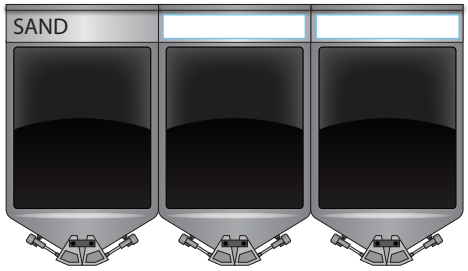
Accumulative System

Plant batch size requirements (cubic units):

Maximum

Minimum

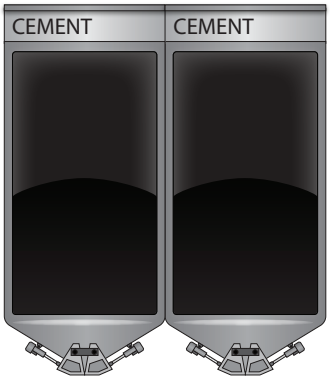
☐ Bin 1 ☐ Bin 2 ☐ Bin 3



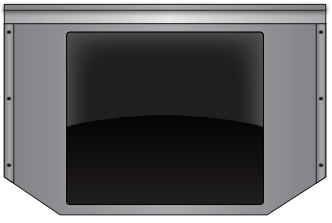
OUTPUTS* ☐ 1 ☐ 2** | OUTPUTS* ☐ 1 ☐ 2** | OUTPUTS* ☐ 1 ☐ 2**

OUTPUTS* ☐ 1 ☐ 2

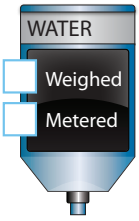
☐ Silo 1 ☐ Silo 2



OUTPUTS* ☐ 1 ☐ 2** | OUTPUTS* ☐ 1 ☐ 2**

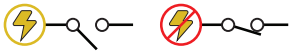


OUTPUTS* ☐ 1 ☐ 2



***ELECTRICAL REQUIREMENTS**

1 output:
Voltage on to open, voltage off to close



2 outputs:
Voltage signal to open, voltage signal to close

****Customization of standard product required**

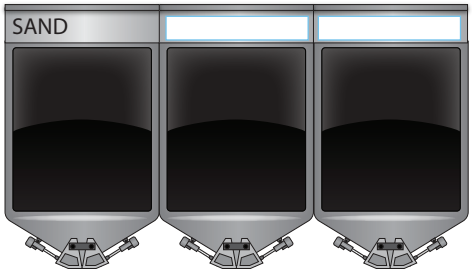
Decumulative System

Plant batch size requirements (cubic units):

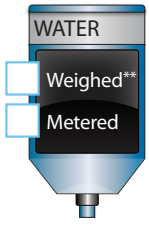
Maximum

Minimum

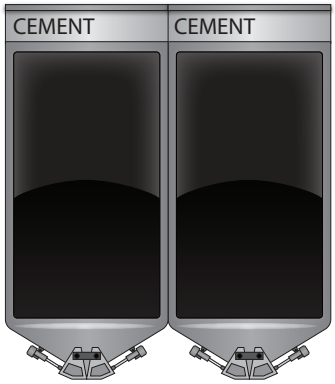
☐ Bin 1 ☐ Bin 2 ☐ Bin 3



OUTPUTS* ☐ 1 ☐ 2** | OUTPUTS* ☐ 1 ☐ 2** | OUTPUTS* ☐ 1 ☐ 2**



☐ Silo 1 ☐ Silo 2



OUTPUTS* ☐ 1 ☐ 2** | OUTPUTS* ☐ 1 ☐ 2**

2. Weigh Ticket Information

Ticket example is shown below. Please include any custom information in the space below and provide an example ticket.

```
Ticket #: 3
Customer: Rice Lake Weighing Systems
Truck #:  1258

Mix ID:   1
Mix Name: Test Mixture
Quantity: 1.0 CY

Ingredient           Target       Actual       %TOL
-------------------------------------------------------
Sand                1200 lb      1195 lb      -0.4%
Stone2              1000 lb      1010 lb       1.0%
Stone1               800 lb       800 lb       0.0%
Cement               400 lb       400 lb       0.0%
FlyAsh               200 lb       205 lb       2.5%
Admix 1               10 oz        11 oz      10.0%
Admix 2                5 oz         5 oz       0.0%
Admix 3                6 oz         6 oz       0.0%
Admix 4                6 oz         6 oz       0.0%
Water                 50 gal       50 gal       0.0%

08:08 AM 12/13/2024
```

3. Input Requirements:

Please indicate all the applicable inputs for this system.

	Decumulative Batcher	Accumulative Batcher
Admixture 1 Bottle Empty	☐	☐
Admixture 1 Pulse Meter	☐	☐
Admixture 2 Bottle Empty	☐	☐
Admixture 2 Pulse Meter	☐	☐
Admixture 3 Bottle Empty	☐	☐
Admixture 3 Pulse Meter	☐	☐
Admixture 4 Bottle Empty	☐	☐
Admixture 4 Pulse Meter	☐	☐
Manual Mode	☐	☐

	Decumulative Batcher	Accumulative Batcher
Air Pressure OK	☐	☐
E-Stop	☐	☐
Water Meter Pulse	☐	☐
Conveyor Running	☐	☐
Weighed Water Gate Closed Limit Switch		☐
Aggregate Hopper Gate Closed Limit Switch		☐
Cement Hopper Gate Closed Limit Switch		☐

Are there any additional 120V or 240V input requirements not mentioned in the previous list such as sensors, switches, limit switches, photo eyes, etc?

If so, please specify in the space provided.

4. Output Requirements:

Please indicate all the applicable outputs for this system.

	Decumulative Batcher	Accumulative Batcher		Decumulative Batcher	Accumulative Batcher
Conveyor Start/Run	☐	☐	Water Fill/Feed	☐	☐
Alarm/Horn	☐	☐	Weighed Water Discharge Gate		☐
Bin 1 Discharge	☐	☐	Admixture 1 Discharge	☐	☐
Bin 1 Vibration	☐	☐	Admixture 1 Fill/Feed	☐	☐
Bin 2 Discharge	☐	☐	Admixture 2 Discharge	☐	☐
Bin 2 Vibration	☐	☐	Admixture 2 Fill/Feed	☐	☐
Bin 3 Discharge	☐	☐	Admixture 3 Discharge	☐	☐
Bin 3 Vibration	☐	☐	Admixture 3 Fill/Feed	☐	☐
Cement Hopper Gate (Close)		☐	Admixture 4 Discharge	☐	☐
Cement Hopper Gate (Open)		☐	Admixture 4 Fill/Feed	☐	☐
Cement Silo 1 Feed	☐	☐	Aggregate Hopper Gate (Close)		☐
Cement Silo 2 Feed	☐	☐	Aggregate Hopper Gate (Open)		☐
Cement Weigh Hopper Air		☐	Aggregate Hopper Vibration		☐
Cement Weigh Hopper Vibration		☐	Aggregate Weigh Hopper Air		☐
Cement Silo 1 Air	☐	☐	Dust Collector 1	☐	☐
Cement Silo 2 Air	☐	☐	Dust Collector 2	☐	☐

Are there any additional 120V or 240V output requirements that were not covered in the previous list, including but not limited to air solenoids, vibrators, aerators, motor starters, horns or lights?

If so, please specify in the space provided.

5. Weighing and Moving Aggregates and Cements:

5a. Apart from a feed gate and gravity, does the aggregate require any equipment to move it from a surge bin into the weigh hopper?

5b. List equipment used to move aggregate into the truck or mixer. For example: "Gate opens releasing product. Product travels via conveyor to truck."

5c. List equipment used to move cement from silo into weigh hopper:

5d. List equipment used to move cement from weigh hopper into the truck/mixer:

6. Admixtures and Water

6a. Does the process use more than the standard front- and tail-water additions?

☐ Yes ☐ No

If yes, describe:

6b. How many admixtures does this system use? NOTE: Four is the default maximum.

How Many

6c. Describe any mix design methods used (bottle or direct).

7. Drawing of Plant

A drawing helps show system integration and design. Please include the location of all moving parts (gates, conveyors, augers), sensors, load cells, bins, silos, water and admixture lines.