

FAIRBANKS[®]

S C A L E S



PREDICTIVE CUTOFF

APPLICATION FOR FB4000 INSTRUMENTS

Flexibility and accuracy for filling and batching applications.

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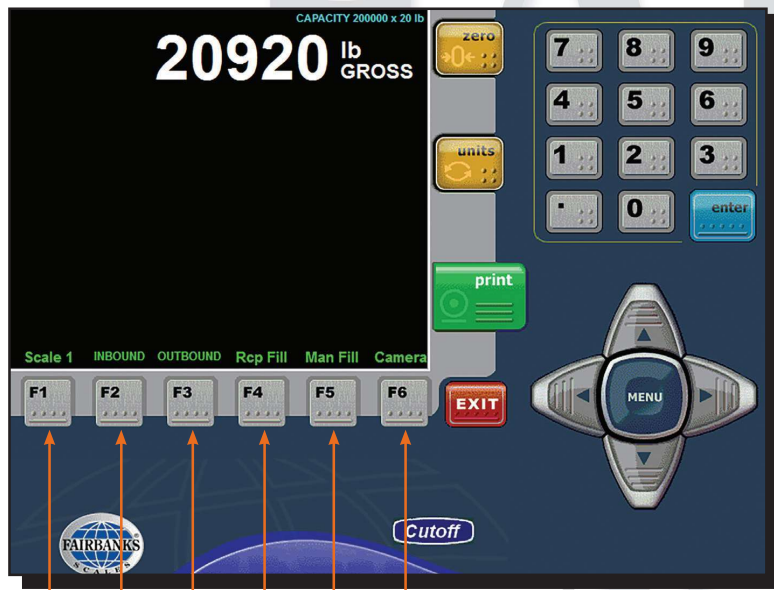
ACHIEVE GREATER ACCURACY WITH PREDICTIVE CUTOFF FLOW MONITORING

The Predictive Cutoff Application for the FB4000 is a flexible and robust filling, batching, and weighing solution. Capable of controlling the flow of up to a dozen different materials and storing recipes with up to four materials each, the Predictive Cutoff Application will allow processes to flow seamlessly between operations.

Typical filling applications turn off the flow of materials when a specified setpoint weight has been reached. With Predictive Cutoff, the FB4000 is constantly monitoring the rate of weight change on the

scale and predicts the value between displayed (on-screen) updates. If the setpoint will be reached between updates, the FB4000 does not wait to stop the flow. This results in more accurate filling weights, saving time and expense, whether filling a single material or batching precise combinations. Built on a Windows® operating system, information from the FB4000 is easy to integrate into other operational reporting systems and the instrument can connect to any Windows® compatible USB or network printer.

Combined In/Out Filling modes for mixed use scales



- Change the active scale
- Process an inbound transaction
- Process an outbound transaction
- Start a recipe fill
- Start a manual fill
- View the camera inputs



CUTOFF RELAY BOX IS LOADED WITH FEATURES

With up to 16 I/O ports, the Fairbanks Relay Box accessory for Predictive Cutoff has the flexibility to run most automated filling apps.

- Use the input modules to add interlocks.
- Add a remote start button.

- Control up to 12 materials at a single rate or six materials with two speeds.
- Connect to the Fairbanks FB4000 Instrument through an existing Ethernet TCP/IP network or directly with patch cables and an Ethernet switch.

SCREEN SAMPLES

Material Entry screen

CUTOFF RECIPES	
Material ID	008 <input type="button" value="View"/>
Description	Portland Cement
Fast Feed Relay	Module 2 Channel 0
Dribble Relay	Module 2 Channel 1
Dribble	1500
Preact	260
* The use of Channels 0 - 3 match the OPT022 relay literature. Channel 0 triggers the Port 1 LED on the relay ... Channel 3 triggers the Port 4 LED.	

Each material can be assigned up to two relays, for a fast and dribble feed.

Recipe Entry screen

CUTOFF RECIPES	
Recipe	CONCRETE <input type="button" value="View"/>
Material Count	4
Material	1 of 4
Material #1	008 <input type="button" value="View"/>
Portland Cement	No. Drafts 1
Target	20000
Dribble	1500
Preact	250
Draft 1	20000
Draft 2	0
Draft 3	0
Draft 4	0
Target	20000

Recipes can contain up to four materials or drafts. Save as many recipes as you need.

Interlock Entry screen

CUTOFF RECIPES	
SNAP I/O Module	Module 0
Interlock #1	Channel 0
Interlock #2	None
Interlock #3	None
Interlock #4	None
Remote Start	Channel 3
Alarm Output	Module 1 Channel 3

Use the input module to add safety interlocks, such as remote start and emergency stop.



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FILLING PROCESSES GRAPHICALLY DISPLAYED FOR OPERATOR

The FB4000 filling screen contains all the information users need to monitor the status of the current filling operation. In addition to live weight, the recipe and material names are displayed along with the weight information for the recipe. A progress bar provides a visual guide to the status of the operation. The status of all Interlocks and the active relays

are displayed so that there are no surprises to the operator and, in case of emergency, a prominent on-screen E-stop button is displayed.



FB4000 Instruments are legal-for-trade!

FILL SCREEN

Active relay Next target weight Live weight Progress bar

Recipe ID: 124
Material description: 000 Portland Cement
Material Drafts: 4
Current Draft: 2
Draft Weight: 13260
Dribble Weight: 8000
Preact Weight: 260
Material Wt. 18740 of 53060 Recipe Wt. 18740 of 53060

Interlocks: Interlock #1 (0,0)

F1 F2 F3 F4 F5 F6 EXIT MENU

Halt or pause sequence button Interlock status End sequence button Emergency stop button

PREDICTIVE CUTOFF TOP FEATURES

- Recipe storage for easy management.
- Ethernet TCP/IP relay box interface.
- Up to 16 configurable I/Os.
- Error notifications.
- Customizable reports.
- Safety interlocks.
- Formattable tickets.



Predictive Cutoff simplifies filling operations.

REPORTING OPTIONS

The Predictive Cutoff Application has the ability to print, export or email configurable reports that show a variety of weighment information.

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Order #	Batch #	Material	Weight	Unit	Scale ID	Scale Name	Scale Type
11	001	Portland Cement	73,500 B	lb	1	SCALE ID 1	SCALE ID 1
12	002	rock	22,200 B	lb	1	SCALE ID 1	SCALE ID 1
13	003	rock	21,900 B	lb	1	SCALE ID 1	SCALE ID 1
14	004	rock	22,200 B	lb	1	SCALE ID 1	SCALE ID 1
15	005	rock	21,900 B	lb	1	SCALE ID 1	SCALE ID 1
16	006	rock	22,200 B	lb	1	SCALE ID 1	SCALE ID 1
17	007	rock	21,900 B	lb	1	SCALE ID 1	SCALE ID 1
18	008	rock	22,200 B	lb	1	SCALE ID 1	SCALE ID 1

06/11/2020

Printed Report Format Sample

Report: Daily Report

Daily Report Created: 06/11/2020 3:41:51 PM

Order #	Batch #	Material	Weight	Unit	Scale ID	Scale Name	Scale Type
11	001	Portland Cement	73,500 B	lb	1	SCALE ID 1	SCALE ID 1
12	002	rock	22,200 B	lb	1	SCALE ID 1	SCALE ID 1
13	003	rock	21,900 B	lb	1	SCALE ID 1	SCALE ID 1
14	004	rock	22,200 B	lb	1	SCALE ID 1	SCALE ID 1
15	005	rock	21,900 B	lb	1	SCALE ID 1	SCALE ID 1
16	006	rock	22,200 B	lb	1	SCALE ID 1	SCALE ID 1
17	007	rock	21,900 B	lb	1	SCALE ID 1	SCALE ID 1
18	008	rock	22,200 B	lb	1	SCALE ID 1	SCALE ID 1

On-screen Report Format Sample

FB4000 SERIES INSTRUMENT ADVANTAGES

- Unsurpassed data collection capabilities
- Unsurpassed data storage capabilities
- Multiple communication options
- Touch screen operation
- Ethernet connectivity
- Email functions
- IP Camera interface
- Built-in error reporting

Predictive Cutoff Application is ideal for controlling a variety of industrial filling operations



Grain loading truck or rail cars



Cement mixing/filling



Asphalt mixing/filling



Food & beverage batching processes



Aggregate loading/hauling



Tank or hopper filling

PREDICTIVE CUTOFF

APPLICATION FOR FB4000 INSTRUMENTS

Weighing Solutions for the World Since 1830

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PREDICTIVE CUTOFF SPECIFICATIONS

Ticket formatting	Customizable
Reports	Six unique reports, fully configurable
Error reporting	Automatic alerts sent to multiple email accounts during an error event
Automated images	During the weighing process
Number of materials	Up to 12
Materials per recipe	Up to 4
Number of drafts	Up to 4 in single material recipes, 1 with multiple materials recipes
Accessories	Relay box

RELAY BOX SPECIFICATIONS

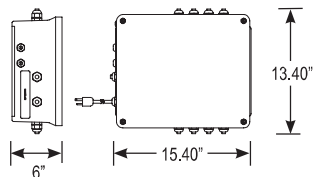
I/O	4 digital inputs standard, up to 12 additional inputs and outputs
Outputs	Dry-contact or digital
Interface	Ethernet TCP/IP
Power requirements	93-130 VAC; 47-63 Hz
Dimensions	15.4" x 13.4" x 6.0"

FB4000 SERIES INSTRUMENT DIMENSIONS

Desktop Enclosure



CUTOFF RELAY BOX DIMENSIONS



INSTRUMENT SPECIFICATIONS

Model	FB4000 Series Instrument with Predictive Cutoff Application
Display	10.4" Color SVGA - 600 x 800
Memory	4 GB RAM
Processor	Dual core, 1.86 GHz
Storage	64 GB & 8 GB
Enclosure	Stainless steel, powder coated, NEMA 12
Device platform	Windows® embedded
Outputs	4 USB 2.0 ports 2 RS232 Serial ports 1 RS232/485 selectable port 1 RJ45 port for network connection 1 DVI-I port 10/100/1000 Mbps Ethernet controller
Print functions	Non-inverted tickets (only)
Power requirements	100 to 130 VAC or 200 to 260 VAC; 50/60 Hz ± -2 Hz
Touch Screen interface	Standard
Load cell interface options	Analog and/or Intaloxig®
Clock	Real time clock, day of the week, 12-hour AM/PM, date month/day/year
Display resolution	10,000 divisions commercial 50,000 divisions for non-commercial
Capacity	Programmable to 999,999
Displayed units	7 primary and 7 secondary
Humidity	0 to 100%
Accuracy	Class III/IIIL
Number of weighing platforms	Up to 8, depending on the scale interface(s) used
Approvals	NTEP CC# 15-064 MC# AM-5997

Your Fairbanks Scales Authorized Representative is:

Call toll-free for the representative nearest you:

(800) 451-4107

Call between 8:00 a.m. – 5:00 p.m. Central Time

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