GRACO®

Reactor® Ratio Assurance System

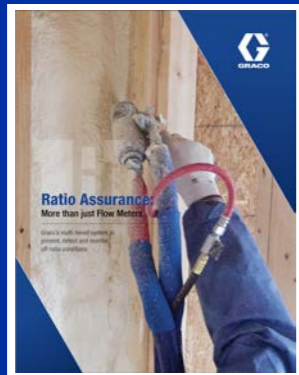Prevent, Detect and Monitor Off-Ratio Conditions

Graco has engineered a multi-tiered system for ratio prevention and detection. As a contractor, having the confidence you are spraying on-ratio is critical. This system is designed to monitor and detect issues that may cause off-ratio spraying.

View the complete White Paper at www.graco.com/RAWP

KNOWLEDGE IS POWER

Graco's Ratio Assurance System provides industry leading solutions:

- Assurance that your material was sprayed correctly

- Peace of mind to homeowners, builders and customers

- Eliminate costly repairs and call-backs

- Quick detection of equipment issues and off-ratio foam

- Confidence for sprayers new to the industry

- Risk mitigation of misapplied foam

SOLUTIONS TO ADVANCE our industry.

The Reactor 2 Ratio Assurance System is designed to provide ratio detection so your job is being applied on-ratio and within tolerance. Since no single detection method is best to detect all possible issues it is important to have a robust multi-tiered detection system. The Graco system uses a combination of mechanically linked positive displacement piston pumps, pressure monitoring and flow meters to create a robust system that will provide unsurpassed results in maintaining on-ratio spraying.

RATIO ASSURANCE SYSTEM

includes pressure and flow meter monitoring.

POSITIVE DISPLACEMENT PISTON PUMPS

INLET PRESSURE MONITORING

OUTLET PRESSURE MONITORING

MECHANICALLY LINKED PROPORTIONER

FLOW METERS
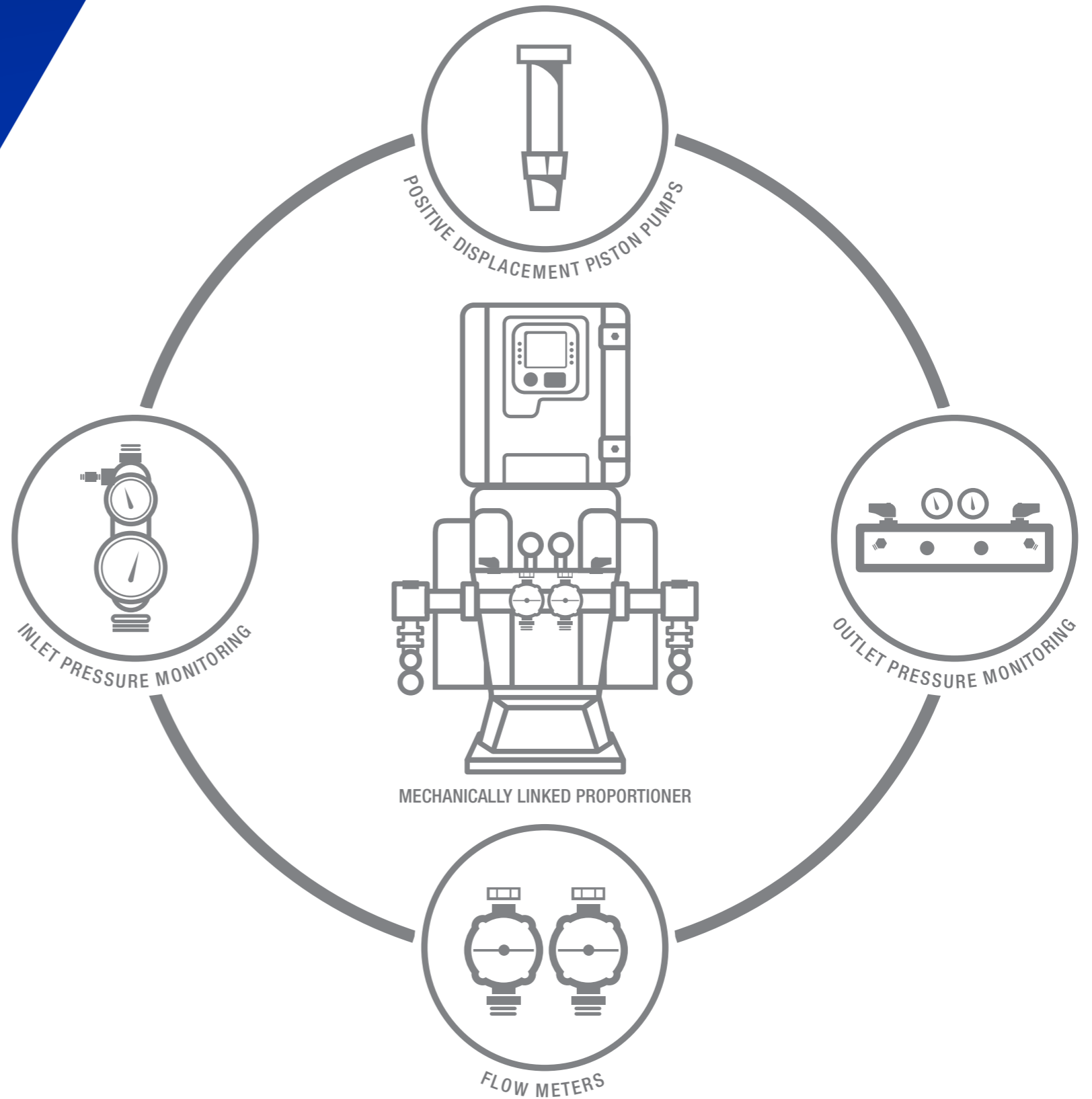
DETECTION METHODS

to eliminate off-ratio conditions.

Graco has identified the best method of detection for issues that may cause off-ratio foam to be sprayed. These issues are called *single-point variables*. Utilizing inlet and outlet pressure monitoring and flow meters, the Reactor 2 can monitor for these issues and shut the proportioner down if required. The operator can then make the necessary updates in order to eliminate the off-ratio condition.

■ BEST ■ BETTER ■ GOOD

Category Type	Single-Point Variables	Reactor Detection Method		
		Inlet Pressure Sensor *	Outlet Pressure Sensor	Flow Meters
Air in fluid stream	Run away feed pump/ Running out of chemical	NA	Better	Better
	Trapped air in the feed line and/or proportioner	NA	Good	Best
Undersized feed pump	Too large of a mix chamber being used	Best	Good	Better
	Too high of proportioner pressure setting	Best	Good	Better
	Too long of a trigger pull	Best	Good	Better
Poor material feed to proportioner	Cold material(s)	Best	Better	Good
	Feed pump pressure set too low	Best	Good	Better
	Damaged feed pump (seals, check ball, air motor)	Best	Good	Better
	No feed pump pressure	Best	Good	Better
	Plugging inlet filter	Best	Good	Better
Proportioner pump issue	Damaged proportioner pump foot valve ball/seat	Best	Good	Better
	Damaged proportioner pump piston ball/seat	NA	Better	Best
	Damaged proportioner pump seal	NA	Better	Best
Fluid leaks	Leak between proportioner pump and flow meter	NA	Better	Best
	Leak in heated hose	NA	Best	NA
Restriction after flow meter	Blockage in heated hose, build-up on ID of hose(s) **	NA	Best	NA
	Plugged gun filter **	NA	Best	NA
	Gun impingement port plugging **	NA	Best	NA

Reactor 2 elite models E-30, E-XP2, H-30, H-40, H-50, H-XP2 and H-XP3 now include factory installed flow meters. All Reactor 2 models include updated software to allow for flow meters to be added and configured, refinements to optimize inlet pressure detection and add Reactor Smart Control to electric models.

RATIO
ASSURANCE SYSTEM
is standard on Reactor 2 elite models.

Updated ADM

- Home screen update to include the real-time ratio value and ratio gauge
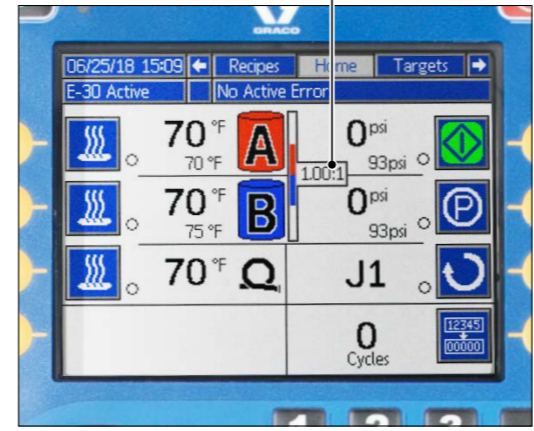
ADM Set-up: System Screen

- Updated ADM set-up screen to allow easy configuration of flow meters and enabling alarms


Oval Gear Flow Meters

- Simple and robust design
- Ideally suited for high flow rate measurements
- Accuracy of +/− 1% once calibrated

DATA ANALYSIS & REPORTING

includes pressure and flow meter monitoring.

Reactor Connect® provides access to summary and detail ratio reports and graphs. Reports can be viewed, emailed, shared and printed using the app.

Reports for Each Reactor
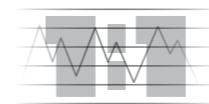
Ratio data showing average ratio, ratio range across a specific timeframe and ratio alarm count

Volume of material usage

Temperature data including A, B and hose set points and averages

Pressure data including A and B set point and average

Simple Ordering Process

Graco's Ratio Assurance System can be added to any Reactor 2 (E-30, E-30i, E-XP2, H-30, H-40, H-50, H-XP2 or H-XP3). Retrofit kits are available. Kits include: flow meters, updated software, cables and hardware.

Ordering Information

Reactor 2 Low-Pressure Flow Meter Hardware Kits

For Reactor E-30 non-elite models (2018 and older)
25N749   Flow Meter kit – includes flow meters, Y-strainers with inlet sensors, Motor Control Module (MCM), all cables and mounting hardware

For Reactor E-30 non-elite models (2019 and newer)
25N786   Flow Meter kit – includes flow meters, inlet sensors, all cables and mounting hardware

For Reactor E-30 elite models
25N913   Flow Meter kit – includes flow meters, Y-strainers with inlet sensors, all cables and mounting hardware

For Reactor E-30i (generation 2)
25N926   Flow Meter kit – includes flow meters, Y-strainers with inlet sensors, all cables and mounting hardware

For Reactor H-30, H-40 and H-50 non-elite models
25N786   Flow Meter kit – includes flow meters, inlet sensors, all cables and mounting hardware

For Reactor H-30, H-40 and H-50 elite models
25N748   Flow Meter kit – includes flow meters, all cables and mounting hardware

Reactor 2 High-Pressure Flow Meter Hardware Kits

For Reactor E-XP2 non-elite models (2018 and older)
25P384   Flow Meter kit – includes flow meters, Y-strainers with inlet sensors, Motor Control Module (MCM),
          all cables and mounting hardware

For Reactor E-XP2 non-elite models (2019 and newer)
25P385   Flow Meter kit – includes flow meters, inlet sensors, all cables and mounting hardware

For Reactor E-XP2 elite models (2018 and older)
25P386   Flow Meter kit – includes flow meters, Y-strainers with inlet sensors, all cables and mounting hardware

For Reactor E-XP2 elite models (2019 and newer)
25P383   Flow Meter kit – includes flow meters, all cables and mounting hardware

For Reactor E-XP2i (generation 2)
25P387   Flow Meter kit – includes flow meters, Y-strainers with inlet sensors, all cables and mounting hardware

For Reactor H-XP2 and H-XP3 non-elite models
25P385   Flow Meter kit – includes flow meters, inlet sensors, all cables and mounting hardware

For Reactor H-XP2 and H-XP3 elite models
25P383   Flow Meter kit – includes flow meters, all cables and mounting hardware

Reactor Connect Hardware Kits

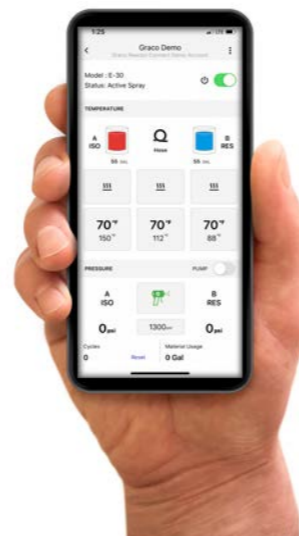**North America Kits (4G Cell Module)**
25E656   Reactor 2 Retrofit kit – for Electric and Hydraulic systems
25E657   Reactor 2 Retrofit kit – for Integrated Systems (E-30i, E-XP2i)

Worldwide Kits (3G Cell Module)
25D612   Reactor 2 Retrofit kit – for Electric and Hydraulic systems
25D614   Reactor 2 Retrofit kit – for Integrated Systems (E-30i, E-XP2i)

Graco Has You Covered

Facilities Worldwide for Global Support

Quality First

At Graco we pride ourselves on providing best-in-class products. Engineered solutions are manufactured in our own facilities, with the highest standards in the industry. We provide you with world-class customer support and expertise to help solve your application challenges.

Global Reach

Graco has facilities across the globe to provide you with the products and service you need, where you live. Plus, Graco has dedicated field experts in all areas of the world to support the products we sell.

Product Capabilities

Graco has a broad range of products that are engineered and tested to perform in the harshest environments so you can be certain your equipment is protected and working at peak performance.

Contact us today!

Call **866-361-5959** to talk with a Graco representative, or visit **www.graco.com** for more information.