GRACO HYGIENIC PUMPS







GRACO SANIFORCE 2.0

Hygienic Pumps by Graco

- Air & Electric Operated Double Diaphragm Pumps
- Electric Air Operated Drum Pumps
- Piston Transfer Pumps
- Pail Drum & Bin Unloaders



Contents

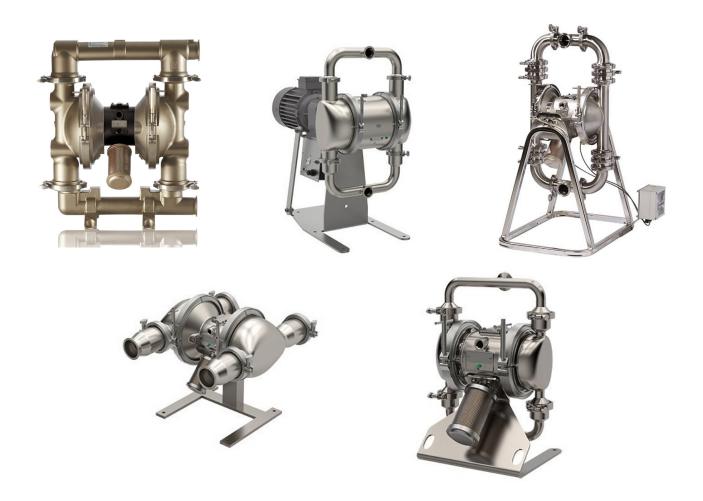
Graco SaniForce Double Diaphragm Pumps Overview SaniForce 515/1040 FDA Pumps SaniForce 1590/2150 FDA Pumps SaniForce 1040e/2150e Electric FDA Pumps SaniForce 1590/2150/3250 3A Pumps SaniForce 1040/1590/2150 High Sanitation Pumps SaniForce 3250/3150/4150 High Sanitation Pumps SaniForce 1590/2150/3250 Pharma Grade Pumps Solutions	3-4 5 6 7 8 9 10 11
Graco SaniForce Bin & Drum Unloaders Overview SaniForce Bin Evacuation Systems SaniForce Drum Unloaders SaniForce Elevators SaniForce Pail Unloaders	13-14 15 16 17 18
Graco SaniForce Electric Driven Drum Pumps Overview Saniforce Electric Driven Drum Pumps	19 20
Graco SaniForce Piston Pumps Overview SaniForce Piston Pumps	21 22
Contact Information - Strouds' Sales Team	23

Graco SaniForce Air & Electric Operated Double Diaphragm Pumps Overview

Graco SaniForce Air & Electric Operated Double Diaphragm Pumps are designed to pump a broad range of foods and chemicals, ideal for applications requiring high flow rates and portability.

Additionally, Graco designed them for rigorous, continuous use with quick knock-down features that make the pumps easy to clean.

Choose from a wide range of FDA, 3A Approved, High Sanitation, Large Particle, or Pharma-Grade options.



Direct your cellphone camera over the QR codes to link directly to the online tool

Graco Sanitary Pump Selector Tool



Sanitary 2.0 DDP Brochure



Graco's Chemical Compatibility Guide



Hygienic Manufacturing

Graco SaniForce Air & Electric Operated Double Diaphragm pumps transfer a broad range of food and personal care products.

These include applications for fruit juices, sauces, food-grade oils, jams, personal care, pharmaceuticals and more.

At **Strouds**, we provide solutions for Food, Beverage, Personal Care & Pharmaceutical Manufacturing that are designed to improve productivity and make every drop count.

With over 40 years in the industry, our experienced team at **Strouds** can help with the difficult task of making these purchasing decisions.

Air Operated: Designed for rigorous, continuous use with quick knock-down design for easy cleanability and sanitisation.

- Overmolded diaphragm plates with PTFE on the fluid side and EPDM on the air side, result in no crevices for harboring bacteria.
- Tri-clamp connections allow accelerated cleaning and minimal downtime.
- All fluid contact materials are FDA-Compliant and meet CFR Title 21.
- Increase productivity with flow rates up to 150 gpm (568 lpm).



Electric Driven: All the benefits of the Air Operated option but with added benefits. The electric pump creates energy savings, reduced pulsation and increased pump control.

Available with a 1" or 2" (25.4 or 50.8 mm) connection.

- Electric drive reduces energy consumption up to 5 times, compared to traditional Air Operated Diaphragm Pumps.
- Low pulsation for applications that need smooth flow.
- Stalls under pressure.
- Less noise disturbance: 70 dBa lower than an Air Operated Diaphragm Pump.
- Mobile cart options available for easy and quick movement.



SANIFORCE - 515 & 1040 DDP's

515 FDA (125 Ra) - SST/SP/SP

Fluid Section Material: [T] Sanitary Stainless Steel

Pump Inlet/Outlet Size: 515 - 1/2 Inch, 16 gpm (12.7mm, 61 lpm)

Center Section: [P01A] Polypropylene Standard Air Valve

Porting: [S1-3] Tri-Clamp, 316 Stainless Steel

Seats: [SS] 316 Stainless Steel

Balls: [SP] Santoprene

Diaphragms: [SP] Santoprene **Manifold O-Rings:** [PT] PTFE

KITS/SPARES

241657 Kit, 515 Air Valve

FK5122 Kit, 515 Fluid Section Rebuild



FD5122

1040 FDA (125 Ra) - SST/PTFE/PTFE

Fluid Section Material: [T] Sanitary Stainless Steel

Pump Inlet/Outlet Size: 1040 - 1 Inch, 40 gpm (25mm, 151 lpm)

Center Section: [S01A] Stainless Steel Standard Air Valve

Porting: [S1-3] Tri-Clamp, 316 Stainless Steel

Seats: [SS] 316 Stainless Steel

Balls: [PT] PTFE

Diaphragms: [PT] PTFE **Manifold O-Rings:** [PT] PTFE

KITS/SPARES

255061 Kit, 1040 Air Valve

FK1111 Kit, 1040 Complete Fluid Repair Kit



FD1111

1040 FDA (125 Ra) - SST/SP/SP

Fluid Section Material: [T] Sanitary Stainless Steel

Pump Inlet/Outlet Size: 1040 - 1 Inch, 40 gpm (25mm, 151 lpm)

Center Section: [S01A] Stainless Steel Standard Air Valve

Porting: [S1-3] Tri-Clamp, 316 Stainless Steel

Seats: [SS] 316 Stainless Steel

Balls: [SP] Santoprene

Diaphragms: [SP] Santoprene **Manifold O-Rings:** [EP] EPDM

KITS/SPARES

255061 Kit, 1040 Air Valve

FK1222 Kit, 1040 Fluid Section Rebuild



FD1222

SANIFORCE 1590 & 2150 DDP's

1590 FDA (125 Ra) - SST/SP/SP

Fluid Section Material: [T] Sanitary Stainless Steel

Pump Inlet/Outlet Size: 1590 - 1.5 Inch, 90 gpm (38mm, 341 lpm)

Center Section: [S01A] Stainless Steel Standard Air Valve

Porting: [S1-3] Tri-Clamp, 316 Stainless Steel

Seats: [SS] 316 Stainless Steel

Balls: [SP] Santoprene

Diaphragms: [SP] Santoprene **Manifold O-Rings:** [EP] EPDM

KITS/SPARES

255061 Kit, 1590 Air Valve

FK2222 Kit, 1590 Fluid Section Rebuild



FD2222

2150 FDA (125 Ra) - SST/PTFE/PTFE

Fluid Section Material: [T] Sanitary Stainless Steel

Pump Inlet/Outlet Size: 2150 - 2 Inch, 150 gpm (51mm, 568 lpm)

Center Section: [S01A] Stainless Steel Standard Air Valve

Porting: [S1-3] Tri-Clamp, 316 Stainless Steel

Seats: [SS] 316 Stainless Steel

Balls: [PT] PTFE

Diaphragms: [PT] PTFE **Manifold O-Rings:** [PT] PTFE

KITS/SPARES

255061 Kit, 2150 Air Valve

FK3111 Kit, 2150 Fluid Section Rebuild



FD3111

2150 FDA (125 Ra) - SST/SP/SP

Fluid Section Material: [T] Sanitary Stainless Steel

Pump Inlet/Outlet Size: 2150 - 2 Inch, 150 gpm (51mm, 568 lpm)

Center Section: [S01A] Stainless Steel Standard Air Valve

Porting: [S1-3] Tri-Clamp, 316 Stainless Steel

Seats: [SS] 316 Stainless Steel

Balls: [SP] Santoprene

Diaphragms: [SP] Santoprene **Manifold O-Rings:** [EP] EPDM

KITS/SPARES

255061 Kit, 2150 Air Valve

FK3222 Kit, 2150 Fluid Section Rebuild



FD3222

SANIFORCE 1040e/2150e DDP's

1040e FDA (125 Ra) - SST/SP/SP

Fluid Section Material: [FG] 316 Stainless Steel, (125Ra)

Pump Inlet/Outlet Size: 1040e - 1 Inch, 35 gpm (25mm, 132 lpm)

Center Section Material: [AL] Aluminum

Pump Speed: [0] High Speed **Compressor:** [4] No Compressor **Motor:** [A] Standard AC Motor

Porting: Sanitary DIN **Seats:** [SS] 316 SST **Balls:** [SP] Santoprene

Diaphragms: [SP] Santoprene **Manifold O-Rings:** [EP] EPDM



24Y583

KITS/SPARES

25A295 Kit, 1040e Fluid Section Rebuild

24Y781 Kit, 1040e Electric Center Replacement Kit

24Y524 Kit, 1040e Main Shaft Repair Kit

1040e FDA (125 Ra) - SST/PTFE/PTFE

Fluid Section Material: [FG] 316 Stainless Steel, (125Ra)

Pump Inlet/Outlet Size: 1040e - 1 Inch, 35 gpm (25mm, 132 lpm)

Center Section Material: [S] Stainless Steel

Pump Speed: [0] High Speed **Compressor:** [4] No Compressor **Motor:** [A] Standard AC Motor

Porting: Sanitary DIN Seats: [SS] 316 SST Balls: [PT] PTFE

Diaphragms: [PO] PTFE Overmolded

Manifold O-Rings: [PT] PTFE



24Y601

KITS/SPARES

25A292 Kit, 1040e Fluid Section Rebuild

24Y899 Kit, 1040e Electric Center Replacement Kit

24Y524 Kit, 1040e Main Shaft Repair Kit

2150e FDA (125 Ra) - SST/SP/SP

Fluid Section Material: [FG] 316 Stainless Steel, (125Ra)

Pump Inlet/Outlet Size: 2150e - 2 Inch, 143 gpm (50mm, 541 lpm)

Center Section Material: [AL] Aluminum

Pump Speed: [0] High Speed **Compressor:** [4] No Compressor **Motor:** [A] Standard AC Motor

Porting: Sanitary DIN **Seats:** [SS] 316 SST **Balls:** [SP] Santoprene

KITS/SPARES

24Y525

Diaphragms: [SP] Santoprene15H826Kit, 2150e Seat, 316 SSTManifold O-Rings: [PT] PTFE112361Kit, 2150e Ball, Santoprene25B436Kit, 2150e Diaphragm, Santoprene

Kit, 2150e Electric Center Replacement Kit

24Y524 Kit, 2150e Main Shaft Repair Kit



658466

SANIFORCE 3A APPROVED DDP's

1590 3A (32 Ra) - SST/PTFE/PTFE

Certification Required: 3A Certified (32 Ra)

Fluid Section Material: [T] Sanitary 316L SST Stainless Steel Pump Inlet/Outlet Size: 1590 - 1.5 Inch, 90 gpm (38mm, 341 lpm)

Center Section: [S02A] Stainless Steel Standard Air Valve, w/ Leak Detector

and Stand

Porting: [SSB] 316L SST Center Ported DIN

Seats: [SS] 316L Stainless Steel

Balls: [PT] PTFE

Diaphragms: [PO] PTFE Overmolded

KITS/SPARES

15H833 Kit, 1590 Ball, PTFE

25P209 Kit, 1590 Diaphragm, PTFE Overmolded

255122 Kit, 1590 Air Valve



SP15.0111

2150 3A (32 Ra) - Electric -SST/PTFE/EP

Fluid Section Material: [3A] 316L Stainless Steel with Leak Sensors , (32Ra)

Pump Inlet/Outlet Size: 2150e - 2 Inch, 143 gpm (50mm, 541 lpm)

Center Section Material: [S] Stainless Steel

Pump Speed: [0] High Speed Compressor: [6] 240V Compressor Motor: [A] Standard AC Motor Porting: Center Ported DIN

Seats: [SS] 316 SST **Balls:** [PT] PTFE

Diaphragms: [EO] EPDM Overmolded, 3A Approved

KITS/SPARES

26C241 Kit, 2150 Ball, PTFE

25P270 Kit, 2150 Diaphragm, EPDM Overmolded



SE2B.1042

3250 3A (32 Ra) - SST/PTFE/EP

Certification Required: 3A Certified (32 Ra)

Fluid Section Material: [T] Sanitary 316L SST Stainless Steel Pump Inlet/Outlet Size: 3250 - 3 Inch, 250 gpm (80mm, 568 lpm)

Center Section: P02A

Porting: [SSB] 316L SST Center Ported DIN

Seats: [SS] 316L Stainless Steel

Balls: [PT] PTFE

Diaphragms: [EO] EPDM Overmolded

KITS/SPARES

112361 Kit, 2150 Ball, Santoprene

25P270 Kit, 3250 Diaphragm, EPDM Overmolded

24K860 Kit, 3250 Air Valve



SP3B.0044

SANIFORCE HIGH SANITATION DDP's

1040 HS (32 Ra) - SST/SP/SP

Certification Required: High Sanitation (32 Ra)

Fluid Section Material: [T] Sanitary 316L SST Stainless Steel **Pump Inlet/Outlet Size:** 1040 - 1 Inch, 40 gpm (25mm, 151 lpm)

Center Section: [S01A] Stainless Steel Standard Air Valve

Porting: [SSB] 316L SST Center Ported DIN

Seats: [SS] 316L Stainless Steel

Balls: [SP] Santoprene

Diaphragms: [SP] Santoprene **Manifold O-Rings:** [EP] EPDM

KITS/SPARES

112092 Kit, 1040 Ball, Santoprene

25P132 Kit, 1040 Diaphragm, Santoprene

255061 Kit, 1040 Air Valve



SP1B.0026

1590 HS (32 Ra) - SST/BN/BN

Certification Required: High Sanitation (32 Ra)

Fluid Section Material: [T] Sanitary 316L SST Stainless Steel Pump Inlet/Outlet Size: 1590 - 1.5 Inch, 90 gpm (38mm, 341 lpm)

Center Section: [S01A] Stainless Steel Standard Air Valve

Porting: [SSB] 316L SST Center Ported DIN

Seats: [SS] 316L Stainless Steel **Balls:** [BN] Buna (Nitrile/Buna-N)

Diaphragms: [BN] Buna (Nitrile/Buna-N) **Manifold O-Rings:** [BN] Buna (Nitrile/Buna-N)

KITS/SPARES

112092 Kit, 1040 Ball, Santoprene

25P132 Kit, 1040 Diaphragm, Santoprene

255061 Kit, 1040 Air Valve



SP15.0155

2150 HS (32 Ra) - SST/PTFE/PTFE

Certification Required: High Sanitation (32 Ra)

Fluid Section Material: [T] Sanitary 316L SST Stainless Steel **Pump Inlet/Outlet Size:** 2150 - 2 Inch, 150 gpm (51mm, 568 lpm)

Center Section: [S01A] Stainless Steel Standard Air Valve

Porting: [SSB] 316L SST Center Ported DIN

Seats: [SS] 316L Stainless Steel

Balls: [PT] PTFE

Diaphragms: [PO] PTFE Overmolded **Manifold O-Rings:** [EP] EPDM

KITS/SPARES

112359 Kit, 2150 Ball, PTFE

25P267 Kit, 2150 Diaphragm, PTFE Overmolded

255061 Kit, 2150 Air Valve



SP2B.0028

SANIFORCE HIGH SANITATION DDP's

3250 HS (32 Ra) - SST/PTFE/EP

Certification Required: High Sanitation (32 Ra)

Fluid Section Material: [T] Sanitary 316L SST Stainless Steel **Pump Inlet/Outlet Size:** 3250 - 3 Inch, 250 gpm (80mm, 947 lpm)

Center Section: [P01A] Polypropylene Standard Air Valve

Porting: [SSB] 316L SST Center Ported DIN

Seats: [SS] 316L Stainless Steel

Balls: [PT] PTFE

Diaphragms: [EO] EPDM Overmolded

Manifold O-Rings: [EP] EPDM

KITS/SPARES

112359 Kit, 2150 Ball, PTFE

25P265 Kit, 3250 Diaphragm, EPDM Overmolded

24K860 Kit, 3250 Air Valve



SP1B.0026

3150 HS (32 Ra) - FL/-/PTFE

Certification Required: High Sanitation (32 Ra)

Fluid Section Material: [T] Sanitary 316L SST Stainless Steel Pump Inlet/Outlet Size: 3150 - 3 Inch, 150 gpm (80mm, 568 lpm)

Center Section: [S01A] Stainless Steel Standard Air Valve

Porting: [SSB] 316L SST Center Ported DIN

Seats: [FL] Flapper Check

Balls: -

Diaphragms: [PO] PTFE Overmolded **Manifold O-Rings:** [EP] EPDM

KITS/SPARES

25E582 Kit, 3150 Ball, -

25P265 Kit, 3250 Diaphragm, EPDM Overmolded

255061 Kit, 3150 Air Valve



SP3F.0016

4150 HS (32 Ra) - FL/-/PTFE

Certification Required: High Sanitation (32 Ra)

Fluid Section Material: [T] Sanitary 316L SST Stainless Steel Pump Inlet/Outlet Size: 4150 - 4 Inch, 150 gpm (102mm, 946 lpm)

Center Section: [S01A] Stainless Steel Standard Air Valve **Porting:** [SSF] 316L SST Horizontal Wye Manifold-DIN

Seats: [FL] Flapper Check

Balls: -

Diaphragms: [PO] PTFE Overmolded **Manifold O-Rings:** [EP] EPDM

KITS/SPARES

25P086 Kit, 4150 Ball, -

25P265 Kit, 3250 Diaphragm, EPDM Overmolded

255061 Kit, 4150 Air Valve



SP4F.0040

SANIFORCE PHARMA GRADE DDP's

1040 (20 Ra) - SST/SP/SP

Fluid Section Material: [T] Sanitary 316L SST Stainless Steel
Pump Inlet/Outlet Size: 1040 - 1 Inch, 40 gpm (25mm, 151 lpm)
Center Section: [S03A] Stainless Steel Electropolished Center Housing

Standard Air Valve

Porting: [SSB] 316L SST Center Ported DIN

Seats: [SS] 316L Stainless Steel

Balls: [SP] Santoprene

Diaphragms: [SP] Santoprene

KITS/SPARES

112092 Kit, 1040 Ball, Santoprene 25P132 Kit, 1040 Diaphragm, Santoprene

255061 Kit, 1040 Air Valve



SP1B.0054

2150 (20 Ra) - SST/PTFE/PTFE

Certification Required: Pharma (20 Ra)

Fluid Section Material: [T] Sanitary 316L SST Stainless Steel
Pump Inlet/Outlet Size: 2150 - 2 Inch, 150 gpm (51mm, 568 lpm)
Center Section: [S03A] Stainless Steel Electropolished Center Housing

Standard Air Valve

Porting: [SSB] 316L SST Center Ported DIN

Seats: [SS] 316L Stainless Steel

Balls: [PT] PTFE

Diaphragms: [PO] PTFE Overmolded

KITS/SPARES

112359 Kit. 2150 Ball. PTFE

25P267 Kit, 2150 Diaphragm, PTFE Overmolded

255061 Kit, 2150 Air Valve



SP2B.0136

3250 (20 Ra) - SST/SP/SP

Certification Required: Pharma (20 Ra)

Fluid Section Material: [T] Sanitary 316L SST Stainless Steel **Pump Inlet/Outlet Size:** 3250 - 3 Inch, 250 gpm (80mm, 568 lpm)

Center Section: P03A

Porting: [SSB] 316L SST Center Ported DIN

Seats: [SS] 316L Stainless Steel

Balls: [SP] Santoprene

Diaphragms: [SP] Santoprene

KITS/SPARES

25P568 Kit, 3250 Ball, Santoprene

25P268 Kit, 3250 Diaphragm, Santoprene

24K860 Kit, 3250 Air Valve



SP3B.0076

SOLUTIONS

EQUIPMENT SELECTION

SELECTING THE RIGHT FOOD & BEVERAGE PUMP

There are four characteristics to consider when selecting the right pump technology for food and beverage applications.

- Flow Rate
 - Determining flow rate is critical in selecting the perfect pump.
- Material Characteristics

 Material viscosity Abrasiveness Shear Factor Heat Agitation Solids / Particles are all key characteristics that must be considered when sizing pump technologies.
- Chemical Compatibility
 Ensuring pump materials are compatible with the ingredient being transferred will maximise pump life.
- 4 Approval Requirements
 Strouds can help to ensure all relevant specifications are met and or exceeded with pump selection.

For the full article, visit:

www.graco.com/us/en/in-plant-manufacturing/solutions/food-bev-personal-care/ingredient-transfer.html

SUCCESS STORY

ICE CREAM MAKER OVERCOMES GROWING PAINS

Many small companies with popular products face problems with scaling operations to sales demand. Large capital machines are too expensive to purchase and run. Manual processes do not have enough volume.

This producer was manually pouring five gallon ice cream mix bags into four individual batch freezers. This led to inconsistent product mix, wasted material, and was hazardous for the employees.

SOLUTION

The producer increased material-throughput by installing a **Graco SaniForce 2.0 1040e food grade electric diaphragm pump**. As a result, they could purchase the ice cream base mix in larger 300 gallon totes, with workers forklifting the totes to the pump and the pump transfering the material to fixed batch freezers. Improving the process reduced waste, as well as increased the product quality and overall employee safety.

For the full case study, visit:

www.graco.com/us/en/in-plant-manufacturing/solutions/articles/ice-cream-maker-overcomes-growing-pains.html

SANIFORCE BIN & DRUM UNLOADERS

PROTECT FOOD FROM CONTAMINATION

Graco container evacuation systems are designed with numerous built-in features to protect foods from contamination.

Graco piston pumps are built with hygienic flanges, quick knock-down connections and a FDA-compliant air motor shroud, making cleaning and sanitisation an easy process.

The unloading systems are equipped with a pump ram with follower plate and inflatable seal protecting ingredients from external contamination and bacteria, leading to safer operations over dumping and scooping.

TRANSFER JAM, FROSTING, PEANUT BUTTER, HEAVY CHOCOLATE & MORE.



HIGH EVACUATION RATES

Graco seals inflate to conform to the container type and shape; providing evacuation rates up to 99% by cleanly wiping down the container's sides.

NO MATERIAL DILUTION

There is no need to dilute materials. Graco pumps handle high viscosity materials such as **peanut butter**, **frostings**, **toothpaste**, **corn syrup and heavy chocolate**. (Viscosities up to 1,000,000 cps).

MULTIPLE PUMP CONFIGURATIONS

For system flexibility, you can configure Graco bin unloaders with either double ball or priming piston designs. Each is designed and built to fulfill your technical requirements.

Direct your cellphone camera over the QR codes to link directly to the online tool

Graco's Chemical Compatibility
Guide



Graco's Sanitary Unloader Selector Tool



Saniforce 2.0 Container Evacuation Solutions Brochure



SANIFORCE BIN & DRUM UNLOADERS

SANIFORCE BIN EVACUATION SYSTEMS

Graco SaniForce Bin Evacuation Systems can evacuate medium to high viscosity products from 300 gallon (1136 litre) containers.





SANIFORCE DRUM UNLOADERS

Graco SaniForce 2.0 Drum Unloader evacuates medium to high viscosity material from 55 gallon drums.

SANIFORCE ELEVATORS

Graco SaniForce Elevators can evacuate low to medium viscosity products from their original containers.





SANIFORCE PAIL UNLOADERS

Graco SaniForce Pail Unloaders evacuate medium to high viscosity products from their 5 or 7 gallon (19 or 26.5 litre) containers without diluting or heating the contents.

SANIFORCE BIN EVACUATION SYSTEMS (BES)

The Cleanest way to unload Materials without Introducing Airborne Bacteria

- High-pressure hygienic container unloading for ingredients or products up to 2,000,000 cps.
- Reduce material waste with up to 99% material evacuation.
- Improve worker ergonomics by eliminating hazards associated with scooping and dumping options.
- Improve food safety by creating a sealed system with the container and inflatable seal design eliminating food contamination from airborne or worker contaminates.
- Self-priming and run-dry pump capabilities; ideal for container unloading applications.

• Electronic controls for system automation of container evacuation and precise batch control with use of scale or flow meter.

• Configurable systems to meet requirements of almost any ingredient unloading application.

SaniForce BES System, 2-pump, 5:1 DB, Plywood Plate, Electronic Control

- · Stainless Steel frame
- Max flow rate of 98L/min
- Max fluid pressure of 210psi
- Two Piston pump model 5:1 double ball
- Dimensions: (d) 194cm x (w) 178cm x (h) 298cm

SaniForce BES System, 2-pump, 2150 AODD, Plywood Plate, Electronic Control

- Stainless Steel frame
- Two 2" 2150 Double Diaphragm Pumps
- Dimensions: (d) 194cm x (w) 178cm x (h) 298cm

SaniForce BES System, 4-pump, 12:1 PP, Plywood Plate, Enclosed Pneumatic Control

- · Stainless Steel frame
- Max Flow rate of 129L/min
- Max Fluid Pressure 1450psi
- Four 12:1 Piston pumps
- Dimensions: (d) 194cm x (w) 178cm x (h) 298cm







SANIFORCE DRUM UNLOADERS

- Up to 99% evacuation rate of medium to high viscosity materials without diluting or heating the contents.
- Superior alternative to manual scooping for improved food and employee safety.
- Automated controls remove unnecessary operator interaction and automate the unload process.
- FDA-compliant inflatable ram plate seal securely fits straight-sided and tapered drums with high evacuation rates and faster change-out of containers.
- Hygienic flange clamps allow quick disassembly for easy cleaning and sanitising and minimal downtime.

SaniForce Ram Unit, Carbon steel Frame, 5:1 DB, Static Wiper, Exposed Pneumatic Controls

- Application Food, Personal Care
- Compatible drum height 101.6cm
- Compatible drum inside diametre 54.6-59cm
- Max flow rate 49.2L/min
- 5:1 Double ball Piston pump
- Max operating Temp 32 degrees Celsius
- Max fluid pressure of 410psi

SaniForce Ram Unit, SST Frame, 12:1 PP, Inflatable Seal, Electronic Controls

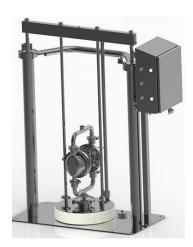
- Application Food, Personal Care
- Compatible drum height 101.6cm
- Compatible drum inside diametre 54.6-59cm
- Max flow rate 32.2L/min
- 12:1 Piston pump
- Max operating Temp 32 degrees Celsius
- · Max fluid pressure of 1200psi

SaniForce Ram Unit, SST Frame, 3150 PTFE OM, Inflatable Seal, Enclosed Pneumatic Controls

- Application Food, Personal Care
- Compatible drum height 101.6cm
- Compatible drum inside diametre 54.6-59cm
- Max flow rate 492L/min
- 3150 PTFE Diaphragm pump
- Max operating Temp 32 degrees Celsius
- Max fluid pressure of 100psi







SANIFORCE ELEVATORS

- Designed to lower pumps into and lift pumps out of drums, bins, and totes.
- Can be used with SaniForce 2:1, 5:1, and 6:2 ball check piston pumps for flow rates up to 14 gpm (53 lpm).
- Mobile and stationary options available.
- Ideal for transfering materials such as fruit juice concentrates, cream candy fillings, condiments and dressings, flowable lotions, cosmetics, and more.

2.5:1 Ratio SaniForce Elevator with Cart & Handle

- · Portable with cart and handle
- · Max working pressure of 250psi
- 2.5:1 pnuematic piston pump
- · Stainless Steel



5:1 Ratio SaniForce Elevator with Cart & Handle

- · Portable with cart and handle
- Max working pressure of 400psi
- 5:1 pnuematic piston pump
- · Stainless Steel



6:1 Ratio SaniForce Elevator with Stationary Base

- Stationary base
- Max working pressure of 600psi
- 6:1 pnuematic piston pump
- Stainless Steel



SANIFORCE PAIL UNLOADERS

SaniForce Pail Unloader systems are built to handle your thickest, toughest food, personal care, and pharmaceutical ingredient transfer.

With up to 99% evacuation rates, the SaniForce systems reduce product waste while providing a solution to transfer products up to 1,000,000 cps utilising hygienic designed high pressure piston pumps. Ram systems increase food safety by creating a sealed system with the container and improve worker ergonomics by preventing injury due to manual scooping and dumping of containers and ingredients. The overall system is able to accommodate 19 and 26 litre pail sizes.

High-pressure hygienic container unloading for ingredients or products up to 1,000,000 cps.

- Up to 99% evacuation rate of medium to high viscosity materials without diluting or heating the contents.
- Designed for quick disassembly for easy cleaning and sanitising.
- Potable, stainless steel construction.
- One size follower plate and seal to accommodate 5 or 7 gallon (19 or 26.5 liter) pails.
- Prevents injuries from lifting and dumping material out of containers.

SaniForce Pail Unit, SST Frame, 6:1 PP, Buna Wiper Seal, Exposed Controls

- Compatible drum height 50.8cm
- Max working pressure of 410psi
- 6:1 piston pump
- Stainless Steel
- Buna wiper seal



SaniForce Pail Unit, SST Frame, 6:1 PP, PTFE Wiper Seal, Exposed Controls

- Compatible drum height 50.8cm
- Max working pressure of 410psi
- 6:1 piston pump
- Stainless Steel
- PTFE wiper seal



SANIFORCE ELECTRIC DRUM PUMPS

Built for Low Volume Transfer of Food, Beverage & Personal Care Products

SaniForce drum pumps make it easy to transfer low, medium and high viscosity fluids from ingredient drums.

Graco Drum Pumps are easy to clean, decreasing production delays during product changeover.

The hygienic pump design is ideal for most food, beverage and personal care applications including edible oil, juices and concentrates, pharmaceuticals, personal care production, and fluid transfer in **breweries, distilleries and wineries.**



SaniForce Electric Drum Pump Flyer





INSTALLATION FLEXIBILITY

Variable speed electric motors give you the flexibility to operate your drum pumps anywhere in your facilities. Use them with drums, totes, or kettles.

EASY CLEANING

With minimal moving parts, our FDA-compliant drum pumps feature a simple knockdown design, which makes cleaning between drums and product changeovers a simple process.

REDUCED MAINTENANCE

An innovative and simple design that doesn't include valves or moving parts reduces costs and minimises equipment downtime.

Direct your cellphone camera over the QR code to link directly to the online tool

SANIFORCE ELECTRIC DRUM PUMPS

230 V Centrifugal Drum Pump System

- Powered by variable speed electric motor.
- Certified to FDA standards.
- Simple design to facilitate easy cleaning and reduce maintenance and downtime.
- Flow rates up to 35 GPM (132 LPM) with a smooth output of material.
- Easily transferable from container to container and adaptable to drums, totes and kettles.

Fluid Outlet Size (cm): 3.81Maximum Working Pressure: 43psi

• Type: Electric Centrifugal Drum Pump

• Voltage (V): 230



230 V Impeller Centrifugal Drum Pump System

Reduce maintenance and sanitisation time at your facility with the SaniForce Drum Pump, designed for easy cleaning with quick tri-clamp connections, no moving parts and easy transferability.

Fluid Outlet Size (cm): 3.81Maximum Working Pressure: 43psi

• Type: Electric Centrifugal Drum Pump

• Voltage (V): 230



230 V Progressive Cavity Drum Pump System

Easy Mobility The light weight design allows all operators to move pumps between drums to increase facility output.

Operational Flexibility Throughout Your Facility With the electric pump operation, you simply plug it in to be ready for transfer in minutes.

Fluid Outlet Size (cm): 3.81Maximum Working Pressure: 87psi

• Type: Electric Progressive Cavity Drum Pump

• Voltage (V): 230



SANIFORCE PISTON PUMPS

Transfer the Most Difficult Ingredients

Graco's powerful line of piston pumps move extremely difficult materials when others cannot.

SaniForce piston pumps have fluid pressures up to 1,200 psi (83 bar), handling even the toughest materials.





FAST & EASY CLEANING SAVES TIME

Quick knockdown lowers are made with corrosion resistant stainless steel and feature easy to clean sections, improving overall efficiency.

THREE PUMP LENGTHS FOR APPLICATION VERSATILITY

We offer Graco Hygienic Food Pumps in three different lengths to fit multiple container sizes:

- 1. Drum
- 2. Bin
- 3. Stubby lengths

EASILY MOVE DIFFICULT MATERIALS

Graco's powerful line of piston pumps move difficult materials when others cannot.

Fluid pressures of up to 1,200 psi (83 bar) are ideal for low to medium viscosity materials such as **beverages**, **juices and sauces**.

SANIFORCE PISTON PUMPS

2:1 Ratio SaniForce Standard Drum Length Double Ball Piston Pump with PTFE & FKM Packings

Easily transfer low to medium viscosity food and personal care materials up to 50,000 cps out of drums and totes. Graco's SaniForce 2:1 piston pump utilises proven Graco air motor technology and smart hygienic design.

Air Inlet Size (cm): 0.9525Fluid Outlet Size (cm): 2.54

• For Use With: Food, Personal Care, & Pharmaceutical

Maximum Air Inlet Pressure (psi): 100Weight (Kg): 10.8



5:1 Ratio SaniForce Double Ball Piston Pump with 4 in Inlet

Graco's SaniForce 5:1 quick knockdown piston pumps are constructed of 300 series stainless steel. The air motor improves serviceability, increases efficiency and offers a lower cost of ownership.

Air Inlet Size (cm): 1.27
Maximum Working Pressure (psi): 410
Pump Ratio: 5:1

• Type: Pneumatic Piston Pump



6:1 Ratio SaniForce Stubby RAM Priming Piston Pump

All SaniForce piston pumps feature an easily removable FDA-compliant shroud to clean and access modular air valve-reducing downtime.

Quick knockdown lowers are made with 300 series stainless steel for long-lasting durability.

• Fluid Outlet Size (cm): 3.81

For Use With: Food, Personal Care, & Pharmaceutical

• Material: Stainless Steel

Maximum Flow Rate (L/min): 15.14
Maximum Working Pressure (psi): 650



FIND A SALES PERSON

100% New Zealand owned & operated, Strouds are Graco's authorised industrial distributor for Hygienic Food-Grade and Process Pumps in New Zealand. Providing local sales support, application expertise and servicing via three service centres nationwide.

Benn Austin - Auckland Central & Upper North Island Sales Benn@strouds.co.nz 027 567 3047

Greg Weyer - Auckland South Sales Greg@strouds.co.nz 021 528 868

Mark Ogle - Hamilton & Central North Island Area Manager MarkO@strouds.co.nz 021 241 6561

Rob Nicol - Wellington & Lower North Island Sales Rob@strouds.co.nz 021 839 943

Paul Harris - South Island Sales PaulH@strouds.co.nz 021 270 3133

Mark Ogle - South Island Area Manager MarkO@strouds.co.nz 021 241 6561

CONTACT US

09 479 8860 info@strouds.co.nz orders@strouds.co.nz





NZ GRACO DISTRIBUTOR





