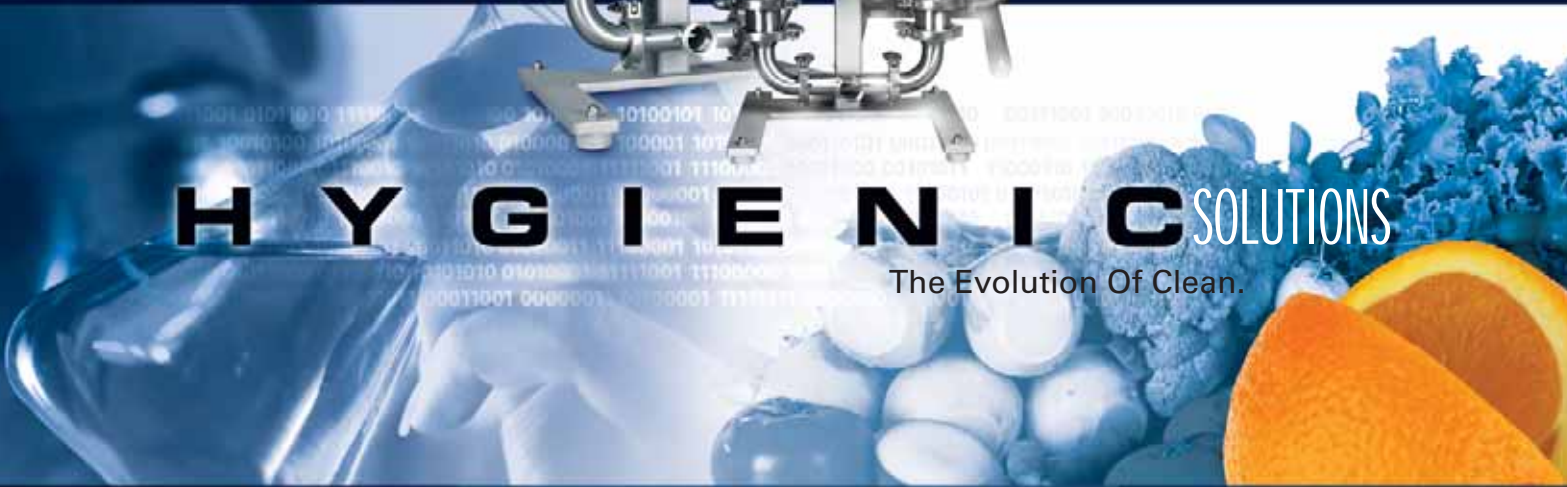


Grayledge Pump & Industrial  
Ph: 603-635-3701  
Fax: 866-373-8490  
Web: [www.AirOperatedDiaphragmPump.com](http://www.AirOperatedDiaphragmPump.com)



# HYGIENIC SOLUTIONS

The Evolution Of Clean.



**WILDEN**<sup>®</sup>  
A **DOVER** COMPANY

# Saniflo™ SOLUTIONS



Prepared Foods



Sauces



Confectionary



Fruits & Vegetables



Beverages



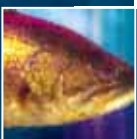
Dairy



Meat



Poultry



Fish

**W**ilden is a global leader in sanitary and bio-pharmaceutical pumps and offers a wide range of solutions for various food, beverage, dairy, personal care and bio-pharmaceutical applications. Wilden's Saniflo™ and BioPharm™ pumps have been engineered to meet the highest standards and requirements in the industry including: EHEDG, 3A, CE, ATEX, USP Class VI, and FDA CFR 21.177.

Wilden's premiere sanitary and bio-pharmaceutical pumps have the versatility you require, safety you need and the capability of efficiently pumping a wide range of viscosities, solids and shear sensitive products. Wilden's Saniflo™ and BioPharm™ pumps are offered with passivated stainless steel components, available in multiple sizes and with various surface finishes. As the global leader in AODD pumps we are committed to your industry. Wilden understands that safety, performance, hygienic requirements and the careful transfer of your products are essential when choosing process equipment.

**WILDEN, the Evolution of Clean**

## SANIFLO™ & BIOPHARM™ SOLUTIONS

<b>UNIQUE CHARACTERISTICS</b>			<b>DIFFICULT APPLICATIONS</b>		

Air operated pumps (non electrical)  
 Superior product containment  
 Bolted & Clamped liquid paths  
 Self priming  
 No damage when run dry  
 Deadhead without damage  
 Variable flow & pressure  
 High viscosity  
 Intrinsically safe by design  
 Lube-free operation  
 Shear sensitive  
 Large solids passage  
 Low water requirements  
 Low product degradation  
 Ease of operation and maintenance

Sauces, Purees & Beverages  
 Poultry, Fish & Meat process  
 Fruits, Vegetables & Condiments  
 Pharmaceutical products  
 Health & Personal care products  
 Chromatography, Separation, Purification  
 High Purity product transfer  
 Filter press feed pumps  
 Acids, Solvents, Caustics & Alcohols  
 Abrasive media & Solids  
 Chemical injections & Metering  
 Waste water transfer  
 CIP, SIP, COP



Bio-Pharmaceutical



Pharmaceutical



Cosmetics



Process Support



Waste

# Saniflo™ HS

## HYGIENIC SERIES

### FEATURES

- Pro-Flo V™ ADS
- Sanitary & hygienic applications
- Delicate / shear sensitive product handling
- Integral piston diaphragm options
- Multiple sanitary elastomers available
- Superior product containment
- Swivel stand available
- CIP (clean in place)
- Multiple certification levels available
- Certifications: EHEDG, 3-A, ATEX, CE, USP Class VI, FDA

USP  
Class VI



FDA



### TECH DATA

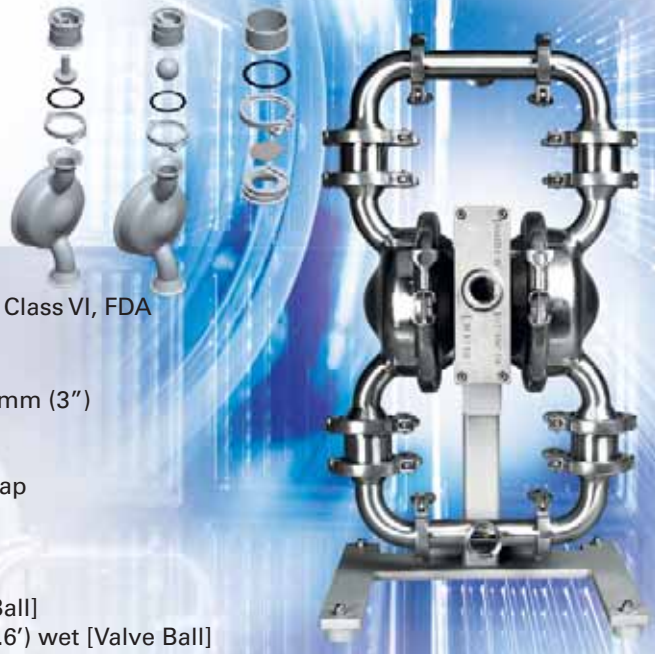
- Sizes available 38 mm (1-1/2") through 76 mm (3")
- 316L stainless steel wetted components
- Contact surfaces with Ra 0.8 µm (32 µ-in)
- Valve options available: ball, mushroom, flap
- Tri-clamp™ style connections

### PERFORMANCE DATA

- Max flow rates 867 lpm (229 gpm) [Valve Ball]
- Max suction lift 5.5 m (19.2') dry, 9.3 m (30.6') wet [Valve Ball]
- Max size solids 51 mm (2") [Flap Valves]



Mushroom Valve Option    Valve Ball Option    Flap Valve Option



# Saniflo™ 3A

## 3 A P U M P

### FEATURES

- Pro-Flo® ADS
- For the sanitary industry (dairy, pharmaceutical)
- CIP (Clean in Place)
- Integral piston diaphragm (PTFE)
- Flow through design
- Multiple sanitary elastomers available
- Wil-Gard™ monitoring system
- Certifications: 3-A, FDA, CE, USP Class VI

### TECH DATA

- 316L SS wetted components Ra 0.8 µm (32 µ-in) contact finish
- Sizes available: 25 mm (1")

### PERFORMANCE DATA

- Max flow rates up to 133 lpm (35 gpm)
- Max suction lift 2.4 m (7.9') dry, 9.2 m (30.1') wet
- Max size solids 6.4 mm (1/4")

USP  
Class VI

FDA



# Unitec™ UB HIGH PURITY PUMPS



## FEATURES

- Uni-Flo™ ADS
- High end sanitary / hygienic applications
- Drain pump contents without disassembly
- CIP (Clean in Place), SIP (Steam in Place) capability
- Designed for superior product containment
- Certifications: EHEDG, 3-A, FDA, CE, ATEX, USP Class VI

USP  
Class VI



FDA

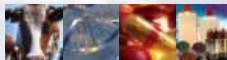


## TECH DATA

- Sizes available 25 mm (1") and 38 mm (1-1/2")
- 316L stainless steel wetted path polished to 0.4 µm (15 µ-in)
- PTFE (FDA and USP Class VI) integral piston diaphragm option
- EPDM (FDA) integral piston diaphragm option
- Tri-clamp™ style connections
- Contact surfaces with Ra 0.4 µm (15 µ-in)

## PERFORMANCE DATA

- Max flow rates: 125 lpm (33 gpm)
- Max suction lift: 2.5 m (8.2') Dry, 9.0 m (29.5') Wet
- Max size solids: 5 mm (1/5")



# Unitec™ UC SANITARY PUMPS

## FEATURES

- Uni-Flo™ ADS
- For sanitary applications
- Soft contours, smooth flow channels, no dead spaces
- Superior containment
- Intrinsically safe
- Draining/backflush system
- Certifications: CE, ATEX, FDA

## TECH DATA

- Sizes available 19 mm (3/4") through 51 mm (2")
- 316 stainless steel wetted components polished to 0.8 µm (32 µ-in)
- PTFE (FDA and USP Class VI) integral piston diaphragms
- EPDM (FDA) integral piston diaphragm option
- Optional contact surfaces with Ra 0.8 µm (32 µ-in)

## PERFORMANCE DATA

- Max flow rates 416 lpm (110 gpm)
- Max suction lift: 4 m (13.1') Dry, 9.0 m (29.5') Wet
- Max size solids: 13 mm (1/2")



FDA



# Saniflo™ LSH

## L A R G E S O L I D S H A N D L I N G P U M P S

### FEATURES

- Pro-Flo V™ ADS
- For sanitary applications
- Designed for delicate product handling
- Multiple sanitary FDA elastomers available
- Delicate/Shear sensitive product handling
- Murzan® retrofit kit available
- Certifications: FDA, CE, ATEX

### TECH DATA

- Sizes available 51 mm (2") and 76 mm (3")
- 316L stainless steel wetted components
- Contact surfaces with Ra 0.8 µm (32 µ-in)
- Valve options available: Ball, Mushroom, Flap
- Tri-clamp™ style connections
- Liquid connection options: horizontal, center, side

### PERFORMANCE DATA

- Max flow rates 931 lpm (246 gpm) [Valve Ball]
- Max suction lift: 6.4 m (21.1') dry, 9.3 m (30.6') wet [Valve Ball]
- Max size solids: 76 mm (3") [Flap Valve]



FDA



Mushroom  
Valve  
Option



Valve  
Ball  
Option



Flap  
Valve  
Option



# Saniflo™ VC

## V A C U U M C O N T R O L L E D P U M P

### FEATURES

- Only 2 moving parts (flap valves)
- Designed for sanitary applications
- Dry run capability
- Variable pressure & flow
- Large solid transfer
- Low water requirement
- Delicate/Shear sensitive product handling
- Easy to inspect & clean
- Certifications: FDA

### TECH DATA

- 304 stainless steel construction
- Sizes available: 102 mm (4"), 152 mm (6"), 203 mm (8")

### PERFORMANCE DATA

- Max flow rates: 10,000 lbs/hr
- Max size solids: 152 mm (6")

FDA



**FEATURES**

- Pro-Flo®, Pro-Flo V™ and Accu-Flo™ ADS available
- For sanitary applications
- Multiple sanitary FDA elastomers available
- Shear sensitive
- Intrinsically safe options
- Complies with FDA elastomer standards
- Certifications: FDA, CE, ATEX

**TECH DATA**

- Sizes available: 13 mm (1/2") through 76 mm (3")
- 316 stainless steel wetted components
- Tri-clamp™ style connections



FDA

**PERFORMANCE DATA**

- Max flow rates: 920 lpm (243 gpm)
- Max suction Lift: 7.6 m (25.0') Dry, 9.5 m (31.2') Wet
- Max size solids: 9.5 mm (3/8")



## Saniflo™ DUS

## D R U M U N L O A D E R

**FEATURES**

- Sanitary drum unloading
- For viscous fluids up to (100,000 cps)
- Compatible with 38 mm (1 1/2") Pro-Flo™ metal pumps
- Pneumatically operated
- Sanitary elastomers
- Sanitary Buna wiper
- Accurate drum alignment
- Variable operating pressure
- Increased recovery rates, yields, profits
- Low operation cost
- Intrinsically safe operation
- FDA CFR 21 compliant
- Certifications: FDA

**TECH DATA**

- 316 stainless steel construction
- Drum size range: (Dia) 533 - 582 mm (21.0"-22.9")

**PERFORMANCE DATA**

- Unloads 200kg (55 gal) 2-4 minutes (based on viscosity)

FDA



# PUMP SELECTION GUIDE FOR SANITARY APPLICATIONS

## SOLIDS HANDLING ABILITY

- 100mm+ (4")+
- 76mm (3")
- 50mm (2")
- 25mm (1")
- 18mm (3/4")
- 12mm (1/2")
- 6mm (1/4")



Vacuum Controlled Pumps



Brahma™ Pumps



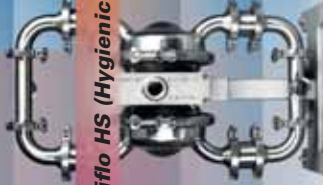
Stallion® Pumps



Advanced™ Plastic Pumps



FDA Pumps



Saniflo HS (Hygienic Series)



Unitec™ UB Biocor



Unitec™ UA

## SANITARY APPLICATION RANGE (cleaning method)

Non sanitary, waste, crude and CIP chemicals

Process Waste, CIP Chemicals, Utilities

High acid, high sugar, high fat food (COP)

Sweeteners, icings, juices, fruit ingredients, some sauces

Low acid, pasteurized and protein based products (COP/CIP)

Milk, meat, egg, vegetable based products, personal care products

Bio-Pharmaceutical sterile processes (COP, CIP/SIP)

Active pharmaceutical ingredients, cosmetic, live cultures

High Purity Pharmaceutical/chemical (includes disposable technology)

R&D products, high potency products, pure, and hazardous chemicals

## PRODUCT EXAMPLES



USP class VI

## POLISH LEVELS

µ-m (µ-inch) Ra

Ra 1.3 µm (125 µ-in)

Ra 0.8 µm (32 µ-in)

Ra 0.5 µm (20 µ-in)

Ra 0.4 µm (15 µ-in)

NOTES: Application requirements can vary depending on viscosity and operational parameters.

## GENERAL TRANSFER PUMPS

Put over 50 years experience to the test  
Waste transfer & sump pumping  
Filter press  
Pre-process transfer

## SPECIFICS

6 mm (1/4") to 102 mm (4") metal and plastic pumps  
Variety of materials available  
Clamped or bolted construction  
Flanged or threaded connections  
Submersible models available  
High purity pumps of PFA & PTFE construction



## CIP AND COP PROCESS PUMPS

Diaphragm or peristaltic technology  
Batching pumps and controllers available  
Electronic or pneumatic interface  
Flocculent dosing for filter presses  
Mixing, delivering, dosing & injecting

## SPECIFICS

6 mm (1/4") to 102 mm (4") metal and plastic pumps  
Variety of materials available  
Clamped or bolted construction  
Variable speed and pressure  
Many voltage options and ratings available



## HIGH PRESSURE PUMPS

Filter press feed pump  
Viscous product pumping  
High head applications  
Facilities that have low air supply pressure

## SPECIFICS

Simplex and duplex technologies available  
Pressures to 17.2 bar (250 psig)  
Flows to 359 lpm (95 gpm)  
Aluminum and 316 SS wetted materials available  
ANSI or DIN flanged connections



**WILDEN**®  
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