



HYGIENIC SOLUTIONS

The Evolution Of Clean.



WILDEN[®]
A **DOVER** COMPANY

Saniflo™ SOLUTIONS



Prepared Foods



Sauces



Confectionary



Fruits & Vegetables



Beverages



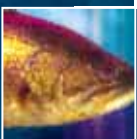
Dairy



Meat



Poultry



Fish

Wilden 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

UNIQUE CHARACTERISTICS			DIFFICULT APPLICATIONS		

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



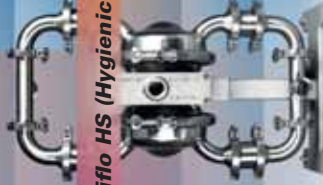
Stallion® Pumps



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



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