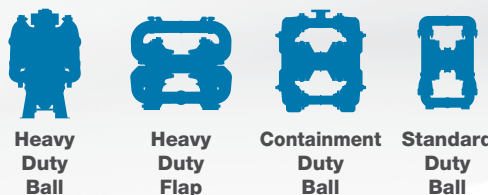




VS COMPETITORS

SANDPIPER PUMPS EXCEL IN EVERY ASPECT OF SAFETY & RELIABILITY WITHIN THE PETROCHEMICAL INDUSTRY



PUMP TYPES



Wear Pads
Weighted Check Balls
Guaranteed Connecting Rod

RELIABILITY AND DURABILITY

Reliable performance in a variety of processes and utility applications

LIMITED



Containment Pumps
• Controls and contains leakage
• Visual, electronic and mechanical leak detection

SPILL CONTAINMENT

LIMITED



1½" - 3" can operate with up to 40um (micron) contaminated air
½" - 1" can operate with up to 20um (micron) contaminated air

AIR VALVE



Can operate with up to 5um (micron) contaminated air



5 MINUTES of on-site main or pilot valve repair with one wrench and removal of only four bolts

AIR VALVE REPAIR

55 MINUTES of off-site main and pilot valve repair with a variety of tools needed to remove pump from line and transport for repair



PORTING OPTIONS

• Flexibility of installation
• Bottom discharge for solids-laden fluids

LIMITED

Limited porting options may require piping changes

PUMP SELECTION

OFFERING THE BROADEST RANGE OF PUMP CONFIGURATIONS



WHAT IS



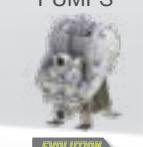
OPTIMIZED PERFORMANCE

OPTIMIZED PERFORMANCE WITHOUT SACRIFICING **PROVEN RELIABILITY**. THESE PUMPS HAVE UNDERGONE AN ENGINEERING **EVOLUTION**, LEVERAGING TRUSTED AND PROVEN PRODUCT DESIGNS TO **IMPROVE THEIR PERFORMANCE** BY APPLICATION OF ADVANCED ENGINEERING METHODS. UNLIKE THE COMPETITION, THESE PUMPS ARE **FULLY INTERCHANGEABLE** WITH PRIOR MODELS.

Suitable for a wide range of applications and designed to perform in the most difficult conditions. Dependable leak detection and implacable solids handling increase productivity and reduce downtime.

HEAVY DUTY

BALL VALVE PUMPS



FLAP VALVE PUMPS



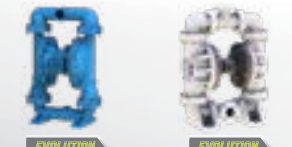
CONTAINMENT DUTY

BALL VALVE PUMPS



STANDARD DUTY

BALL VALVE PUMPS



PUMP MODELS	Metallic	Metallic	Non-Metallic	Metallic	Non-Metallic	Metallic	Non-Metallic
Suction / Discharge Port Sizes	1" through 4" NPT, BSP, ANSI	1" through 4" NPT, BSP, ANSI	2" NPT, BSP, ANSI, DIN	1" through 1-1/2" NPT, BSP	1" through 3" ANSI, DIN	¼" through 3" NPT, BSP, ANSI, DIN	¼" through 3" NPT, BSP, ANSI, DIN
Max Flow Rate	300 GPM (1,136 LPM)	310 GPM (1,173 LPM)	150 GPM (567 LPM)	106 GPM (401 LPM)	280 GPM (1,061 LPM)	285 GPM (1,078 LPM)	280 GPM (1,061 LPM)
Max Inlet / Discharge Heads	125 PSI (8.6 bar) 289' (88m) of Water	125 PSI (8.6 bar) 289' (88m) of Water	100 PSI (7 bar) 231' (70m) of Water	125 PSI (8 bar) 289' (88m) of Water	100 PSI (6.8 bar) 231' (70m) of Water	125 PSI (8.6 bar) 289' (88m) of Water	100 PSI (6.9 bar) 231' (70m) of Water
Max Displacement Per Stroke	2.0 Gal. (7.6 L)	1.60 Gal. (6.06 L)	.5 Gal. (1.9 L)	0.37 Gal. (1.55 L)	1.0 Gal. (3.78 L)	1.0 Gal. (3.78 L)	1.0 Gal. (3.78 L)
Max Solids Handling	.87" (22mm)	3" (75mm)	1.8" (46mm)	.25" (6.6mm)	.75" (19mm)	.38" (10mm)	.75" (19mm)

PUMP MATERIALS	DIAPHRAGM & CHECK VALVE MATERIALS								WETTED PUMP MATERIALS					
	Neoprene	Buna	E.P.D.M.	Hytrel	Fluorocarbon	PTFE	Santoprene	Aluminum	Cast Iron	Stainless Steel	Hastelloy	Polypropylene	PVDF	
Acetic Acid (20%)	B	C	A	A	C	A	B	-	A	A	C	B	B	
Acetic Acid (30%)	B	C	A	A	X	A	B	X	A	A	C	B	B	
Acetic Acid (50%)	C	C	A	-	C	A	B	X	A	A	C	B	B	
Acetic Acid - Glacial	X	C	B	A	X	A	B	B	X	A	A	C	A up to 120°	
Benzene	X	X	X	C up to 70°	B	A	C	B	B	A up to 167°	B	X	B	
Butadiene	C	X	C	-	C	A	C	A	A	A	-	X	A	
Cumene	X	X	X	-	A	A	-	B	B	B	B	-	-	
Cyclohexane	X	B	X	A	A	A	C	B	B	B	B	X	A	
Ethanol	A up to 158°	A up to 140°	-	X	B	A	B	B	B	A	A	A up to 100°	A	
Ethylbenzene	X	X	X	-	A	A	C	B	B	B	A	X	A	
Ethylene (Ethene)	A	B	C	-	A	A	C	A	A	A	-	-	-	
Ethylene Oxide	X	X	X	A	C	A	A	A	B	B	B	C	A	
Formaldehyde	C	B	A	C up to 40%	A	A	B	A	C	A up to 90%	A up to 70%	A	A up to 120°	
Isopropyl Alcohol	A	B	B	A	A	A	-	A up to 90%	A	A	A	A	A up to 150°	
Methanol	A	A	A	A	B	A	A	B	A	A	A	A	A	
Propylene	X	X	X	-	A	A	B	A	A	A	A	-	-	
Propylene Oxide	X	-	C	-	X	A	A	B	B	A	-	X	X	
Toluene	X	C	X	C	B	A	C	A	A	A	A	X	A	
Xylene	X	X	X	C	A	A	C	A	B	B	A	X	A	

A = Excellent Type B = Good C = Fair to Poor X = Not Recommended - = No Data Available
Data limited to % concentration and /or temperature (F) shown. Where not shown is 70° F (21° C) ambient.



Warren Rupp, Inc.
A Unit of IDEX Corporation
800 North Main Street
Mansfield, OH 44902 USA



Phone: 419.524.8388
Fax: 419.522.7867
SANDPIPERPUMP.COM

Contact Your Local Distributor to Place Your Order:

©Copyright 2019 Warren Rupp, Inc. All Rights Reserved.

SP_Petrochem_bro-rev0919



Durable
 Reliable

Application driven pumping solutions for the most difficult conditions



A WARREN RUPP, INC. BRAND | SANDPIPERPUMP.COM

LEARN MORE AT: SANDPIPERPUMP.COM

THE SANDPIPER ADVANTAGE

WITH OVER 50 YEARS OF AODD PUMPING EXPERTISE

For over 50 years, SANDPIPER, a Warren Rupp, Inc. brand, has been a leading global Air Operated Double Diaphragm (AODD) pump manufacturer, featuring the broadest range of products to meet the needs of various petrochemical applications. SANDPIPER AODD pumps feature best in class flap and ball valves to pump in the toughest applications.

Features & Benefits of SANDPIPER AODD Pumps

Excellent Solids Handling Capabilities

- Handles up to pipe size solids
- Feature hinge pads that exert positive pressure on flap checks, allowing pump to operate in virtually any position



Down Discharge Porting Options

- Eliminates damage from settling solids in pump chamber, extending service life



Extended Wear Features

- Wear pads reduce diaphragm stress extending service life
- Chamber and manifold walls typically thicker than industry norms



In-Line Serviceable Manifolds & Check Valves

- Allows repair and cleaning without removing pump from service



Superior Performance & Suction Lift

- Highest flow capacity and maximum pressure
- Dry prime lift capabilities over 20 feet



Guaranteed Reliability

- 5 year limited warranty
- ESADS+Plus Air Valve guaranteed not to stall
- Corrosion resistant stainless steel diaphragm connecting rod guaranteed not to bend



Visual Leak Detection

- Mechanical and electrical leak detection options available
- Prevents spills and costly, time consuming repairs



Certifications & Compliance

- ATEX, CE, ABS and NACE



Key: Standard Duty Ball Valve Heavy Duty Flap Valve Heavy Duty Ball Valve Containment Duty Ball Valve

ESADS+Plus Air Distribution System - A SANDPIPER Exclusive

Independent of the pilot valve position, the cross-drilled pressure ports in the main directional air valve spool provide a pneumatic bias of the spool at either end of travel. This is accomplished by directing (inner) chamber pressure to the end of the spool, boosting and sustaining pilot pressure until point-of-shift of the pilot valve.

Externally Serviceable Air Distribution System includes:

- Complete in-line serviceability
- Lube free, consistent restarts
- On-off-on reliability guaranteed
- PATENTED cross-drilled pressure ports



SCAN TO WATCH THE ESADS+PLUS VIDEO
SANDPIPERPUMP.COM/ESADSVideos



PROCESS APPLICATIONS

MEETING NEEDS OF PETROCHEMICAL APPLICATIONS WITH MORE WAYS THAN ONE



Sump Applications

Quickly removing liquids from unwanted areas

FEATURES:

- Self-priming and dry-run capable
- Flap Valve Pumps for transferring materials containing up to line size solids
- Ball Valve Pumps for transferring viscous fluids
- Containment Duty Pumps for preventing spills
- Lightweight and portable with the durability to withstand continuous use

RECOMMENDED SANDPIPER PUMPS:

- HD20F: 2" Non-Metallic Flap Valve Pump
- S20 / S30: 2" and 3" Non-Metallic Ball Valve Pumps
- 1" to 3" Heavy Duty Metallic Ball and Flap Valve Pumps



Transfer Applications

Pumps for bulk transfer

FEATURES:

- Move viscous materials without the need to adjust or modify the pump
- 2" and 3" pumps for bulk transfer inside or outside of facility (rail cars or trucks)
- 1-1/2" to 3" pumps for day tanks and a variety of other low volume applications
- 1" to 2" pumps for smaller batches to manage flow and volume in tubs and totes
- Various wetted material and elastomer options available on many models
- Lightweight and portable with durability to withstand continuous use
- Self-priming and dry-run capable

RECOMMENDED SANDPIPER PUMPS:

- The full range of SANDPIPER pumps can be used



Process Applications

Moving process critical fluids and hazardous materials

FEATURES:

- Various wetted material and elastomer options available on many models
- Pump sensitive hydrocarbon chains without shearing
- Move viscous materials without the need to adjust or modify the pump
- Containment Duty Pumps control and contain leakage, have visual or electronic leak detection and ability to complete process before required maintenance
- Lightweight and portable with durability to withstand continuous use

RECOMMENDED SANDPIPER PUMPS:

- Plastic, Stainless Steel, Hastelloy pumps
- Containment Duty Pumps



Wastewater & Filter Press Applications

High volume filling with high pressure feed

FEATURES:

- Operating pressures up to 250 psi (17 bar)
- Shortened press cycles, drier cake, less costly disposal
- Various wetted material and elastomer options available on many models
- Ability to move solids-laden material and slurries

RECOMMENDED SANDPIPER PUMPS:

- 1" to 3" Heavy Duty Metallic Ball and Flap Valve Pumps
- S20 / S30: 2" and 3" Standard Duty Non-Metallic Ball Valve Pumps
- EH2: High Pressure Ball Valve Pump
- SH2: High Pressure Flap Valve Pump
- Built to order multi-pump systems



SIMPLIFY YOUR PUMP CHOICE BY USING SANDPIPER FOR ALL OF YOUR SUMP, TRANSFER, PROCESS, WASTEWATER & FILTER PRESS APPLICATIONS