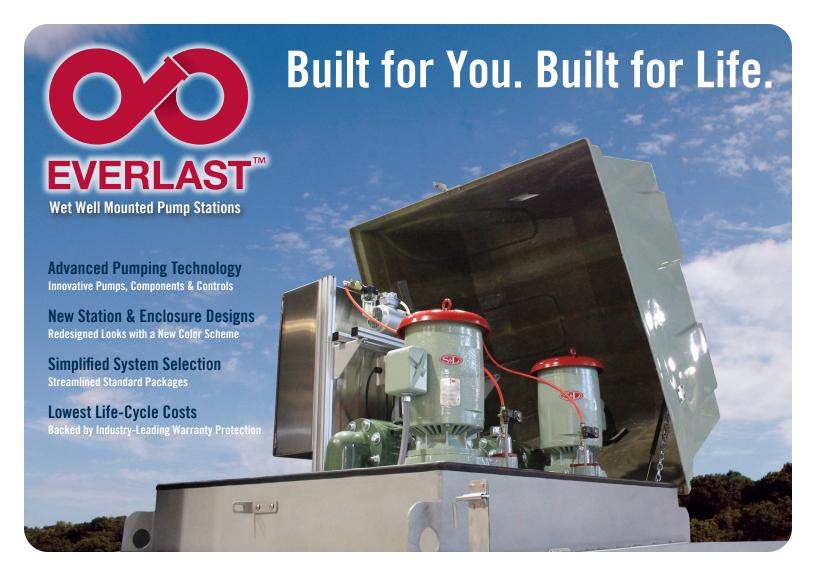




Wet Well Mounted Pump Stations





Smith & Loveless Inc.'s above-ground wastewater pumping stations pave the way for end-users to reap the benefits of robust construction, operator-safe maintenance and single-source solutions. The result is efficient pump station performance, long service life and realized savings—verified by decades of successful installations.

S&L's next generation **EVERLAST**[™] Wet Well Mounted Pump Stations perfectly embody this philosophy. Featuring the top S&L innovations, new looks and enclosures, convenient package options, and leading warranty protection, **EVERLAST**[™] is designed to provide you a long, successful pumping life.

HIGHEST EFFICIENCY.

New STAR ONE™ S&L Non-Clog Pumps Add 3-5%

SAFEST O&M.

No Confined Space Entry; Operator Ease

MOST RELIABLE.

Anti-Clog Solutions; Easy to Maintain

LONGEST LIFE.

Durable Equipment; Decades of Service







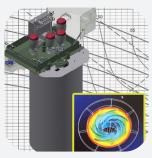
EVERLAST™ Wet Well Mounted Pump Station Specifications

Individual Pumps: Piping: Power (Ind. Pump): Max. Ind. Pump Capacity: Max. Ind. TDH Capacity: Wet Well Diameters: 4"-12" / 100-300 mm 4"-30" / 100-750 mm 1.5-300 Hp / 1.1-225 kW 5,000 gpm / 350 lps 255 ft. / 78 m 4-12 ft. / 1.2-3.6 m

- 2, 3 or 4-Pump Designs Parallel or Series Operation
- Multiple Control Options PLCs to Relay Logic
- Multiple Alarms
- · Concrete or Steel Wet Wells
- Cold Climate Packages
- Multiple Enclosure Types Above-Ground/ Partial-Bury

S&L Total Life-Cycle Support

Engineering and **Design**



S&L provides total support with 3-D Modeling and CAD drawings, computational fluid dynamics (CFD) analysis, finite analysis, specification support, product demonstrations, and other valueadded technical services.

Manufacturing and Testing



S&L pump stations are factorybuilt and assembled, and tested to Hydraulic Institute standards in state-of-the-art facilities that replicate actual field conditions. Our customers are invited to

witness testing at our factory.

Delivery, Installation and Startup



Upon delivery, simply connect suction and discharge piping and electrical connections, and secure the baseplate to the wet well. The process is typically completed within a few hours. S&L startup assistance is available.

After Market Parts and Services



S&L's After Market & Field Service groups completely support you through the life of your system with factory-certified parts and retrofits, service inspections and contracts, technical phone assistance, O&M training, and continuing education.



Industry-Leading Pump Station Warranty Protection

EVERLAST™ Series 1000-5000 pump stations offer the industry's longest service life and warranty protection, including 10-year protection for various pump, baseplate and enclosure equipment. The **DURO-LAST®** stainless steel baseplate option comes with 25-year protection. Rest easy knowing your station is designed to offer service life for a generation or longer.

The Wet Well Mounted Advantage

Above-Ground Access from Simple Vacuum-Priming

Robust, yet simple S&L Vacuum-Priming delivers the benefits of above-ground, operator-safe pumping. When wet well levels rise, the innovative **WaveStart®** Prime Sensing System achieves prime in 60 seconds under standard conditions, maintaining it indefinitely. Employing **Multi-Variable Sensing™** with minimal connections, the system virtually eliminates 0&M tasks associated with older priming systems, utilizes far less energy than self-priming pumps, and operates efficiently in applications with rags, strings, wipes, films, flushables and other debris.

No Confined Space Entry for Routine 0&M

Offering the safest pump station access on the market, S&L **EVERLAST**™ Wet Well Mounted Pump Stations are inspected and maintained without the requirements typically associated with confined space entry, like harnesses, gas monitoring equipment, and multiple personnel.

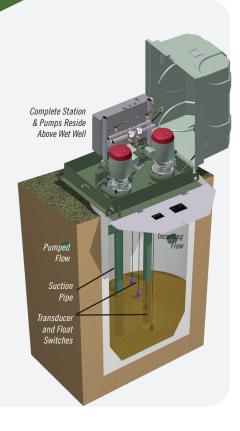
Paves the Way for the Lowest Life-Cycle Costs

One operator is able to inspect S&L stations. Maintenance tasks like pulling an entire pump or changing out a pump seal or impeller can be completed without costly outside contractors or pump maintenance centers. This results in significant savings in parts and labor costs over the life of the system.











S&L Pumps & Impellers



STAR ONE

S&L Non-Clog Pumps

Our vertical, close-coupled **STAR ONE**[™] S&L Non-Clog Pump design meets the highest of standards that promote superior efficiency, durability and ease of maintenance, including the 10 States Standard for 3" (76 mm) solids. Its rugged design, featuring exclusive oversized, stainless steel pump shafts and bearings, will typically deliver service for more than 20 years with basic care. The **STAR ONE**[™] construction streamlines access to the volute, impeller and seal merely by removing four to eight cap screws from the connecting motor adapter on the station base in just a few minutes without any spillage.





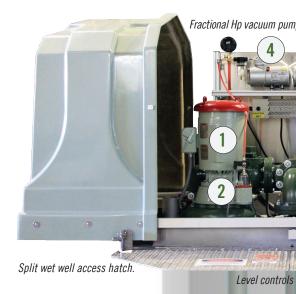


Specifically designed for applications with high volumes of consumer flushables, the **X-PELLER**® Impeller has been proven to effectively expel high volumes of consumer stringy materials, including flushable wipes, rags and other unusual trashy items, because of its mono-port design. Designed to pass 3" (76 mm) solids, the **X-PELLER**® eliminates clogging and the need to pull pumps to unbind the impeller. Fully trimmable to the user's specific pumping conditions, it even works well in low flow conditions. Optional. For more see Bulletin 612.

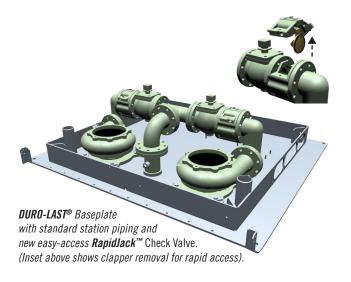


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Station





RapidJack™ Quick-Clean Check Valve

Revolutionizing wafer check valve maintenance, the optional **RapidJack** $^{\text{TM}}$ Quick-Clean Check Valve is easily removed and replaced using 4 bolts in less than 15 minutes. Its unique design allows the clapper system to be removed while the valve body remains in the piping. Simply remove the obstruction, reinsert the **RapidJack** clapper system and the four bolts! *See Bulletin 635*.

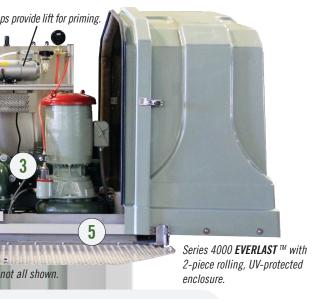
Controls & Accessories





Delivering simplified operation yet powerful pump station control, **QUICKSMART**™ PLC Station Controls provide unparalleled ability to monitor and adjust all of your pump station functions. The user-friendly, graphical touchscreen makes control modifications, screen navigation and viewing of pump station status easier and smarter than ever. Features include a push-notification maintenance log and I/O Status (digital and analog) screen. *Available in all models except Series 1000 & 2000. See Bulletin 660.*









Remotely monitor critical alarms and control a variety of pump station functions via simple cell phone text messaging commands with **STATIONCOMM** $^{\text{TM}}$. Send simultaneous service messages to as many as ten different users. *See Bulletin 685*.

Force Main Sync

By combining **QUICKSMART**[™] PLC controls with Variable Frequency Drives (VFDs) and smart sensors, the **Force Main Sync** system option ensures that multiple pump stations in a single force main achieve optimal energy efficiency and cost-saving pump performance. *Contact S&L for application*.

Assembly





Stainless Steel Baseplate

The rugged **DURO-LAST**® 3/8" or 1/2" (9.5 or 12.7 mm) baseplate option, backed by full 25-year warranty, is available in 316 and/or lean duplex series 2100 stainless steel. It features a Pitting Resistance Equivalent Number of 24.0 or greater. **DURO-LAST**® is glass bead blasted to remove surface contamination and passivated to provide a uniform finish. *See Bulletin 641*.

+ Additional Station Features

- Multiple Enclosure Options (incl. pre-fab buildings)
- Station Advanced Warning System (standard \$3000/4000)
- Submersible Transducer & Back-Up Floats (std.)
- NEMA 4X Stainless Steel Panels (optional)
- ShadeAide® HMI Protector (optional)
- Wet Well Mounted Fall Protection (optional)



Featured Duplex Pumping System Models

Series 1000 & 3000



1000: Packaged Station Hinged One-Piece Enclosure 3/8" (9.5 mm) Baseplate Relay Logic controls

3000: Packaged Station Hinged One-Piece Enclosure 1/2" (12.7 mm) Baseplate **QUICKSMART**™ PLC controls

Series 2000 & 4000

2-Piece Sliding Enclosures



2000: Packaged Station Two-Piece Sliding Enclosure 3/8" (9.5 mm) Baseplate Relay Logic controls

4000: Packaged Station Two-Piece Sliding Enclosure 1/2" (12.7 mm) Baseplate **QUICKSMART**™ PLC controls

Rectangular Recessed

Earth-Insulated with **Dual Hatch Entry**

RR: Packaged Station Ground-Level, Dual Hatch Allows for Deeper Wet Well Maintains Low Profile Relay Logic or QUICKSMART™



Up to 1,300 GPM (82 lps) Up to 158' (48 m)1.5 - 50 Hp (1.1 - 37 kW)4" - 6" piping (100 - 150 mm)

ADD

Station Monitoring Package

Advanced pump station status monitoring features including digital flow rate Avail. only with QUICKSMART™

Enhanced Alarm

Enhanced alarm notifications including intrusion, operator assist, low water alarm, and other water level alarms

Package

Building Enclosure Package

EVERLAST™ Series 1000 - 5000 Supplemental Packages

Skid-mounted pumping system configurations inside one of many climate controlled pre-fab or site-built buildings

Cold Weather Package

Insulated versions of standard S&L enclosures combined with additional heating and vacuum release systems

Specialized Pumping System Models



Series 5000

Higher Capacity Duplex

Series Hi-Head Pumps in Series Operation

Triplex

Higher Capacity & Flex

CAPSULAR®

Highest Capacity WWMPS



5000: Packaged Station Two-Piece Hinged Enclosure; **Higher Capacity Duplex Pumping** Accomodates Larger S&L Pumps



SHH: Packaged Station Multiple Enclosure Options; Higher Head Pumping with 4 S&L Pumps in Series Arrangement



TRIPLEX: Packaged Station Two-Piece Hinged Enclosure; Higher Capacity Pumping Provides Design Flex with 3 S&L Pumps



CAP: Packaged Large-Capacity WWMPS; Pre-Fabricated Building 2-6 S&L Pumps (in Parallel or Series)

Flows
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Power
ping

Flows	Up to 3,000 GPM	Up to 1,300 GPM	Up to 2,600 GPM	Up to 12,500 GPM
	(189 lps)	(82 lps)	(164 lps)	(788 lps)
HOT	Up to 255' (78 m)	Up to 316' (96 m)	Up to 158' (48 m)	Up to 350' (107 m)
Power	1.5 - 200 Hp	1.5 - 50 Hp	1.5 - 50 Hp	1.5 - 300 Hp
	(1.1 - 149 kW)	(1.1 - 37 kW)	(1.1 - 37 kW)	(1.1 - 223 kW)
Piping	4" - 10" piping	4" - 6" piping	4" - 6" piping	4" - 30" piping
	(100 - 250 mm)	(100 - 150 mm)	(100 - 150 mm)	(100 - 750 mm)

Premium S&L Feature Options For Any Station Model



Exclusive S&L single-port impeller design proven to prevent pump clogging; effectively expels high volumes of consumer flushables



NEW! S&L check valve design that simplifies valve access and any unclogging in just minutes



Popular station baseplate upgrade made of 316 and/or lean duplex series 2100 stainless steel, Backed by 25-year warranty protection



Remotely receive updates, monitor and control pump station functions via cell phone text messaging direct with your station



Built for the Lowest Total Cost of Ownership.

Compare vs. Submersibles & Self-Primers

Highest Efficiency

The S&L Non-Clog Pump with custom-trimmed impellers and premium efficient motors deliver the highest wire-to-wire efficiencies. Vacuum-priming uses much less energy than self-primers.

Safest 0&M

All mechanical equipment is instantly accessible without confined space entry, eliminating extra gear and personnel for O&M. No oil-filled mechanical seals, adjustable parts, or spillage.

Most Reliable

S&L Non-Clog Pumps are always designed for 3" (76 mm) solids handling per the 10 States Standard.

Lowest Total Costs

EVERLAST[™] pump stations offer the longest service life (25+ years) and proven 50% savings vs. submersibles. Our seals offer longer average service life than typical submersible pumps.













