900 SERIES

Liqua-Blasters® Up To 450hp

Pressures from 6,500 - 25,000 PSI
Flows to 93 GPM

Versatile High-Pressure Industrial Water Jetting





The Liqua-Blaster 900 Series is ideal for automated systems or for running multiple stations. Above, a Liqua-Blaster 900 powers our fully-automated (top) and semi-automated (bottom) Shellside Cleaning Machine.



Gardner Denver Water Jetting Systems, Inc. offers the most complete line of high-pressure water jetting units in the industry with more choices to solve your cleaning problems. The Partek line of pumps is one of the most popular in the water jetting industry.

Gardner Denver has been designing and manufacturing water-jetting equipment with one goal in mind—to give our customers a cost-effective, rugged, dependable machine. Equipped with our TX-450 pump, the Liqua-Blaster 900 Series is ideal for power plants or other locations that utilize semi- or fully-automated systems. When equipped with our sectionalized fluid end, it is possible to use water from cooling lakes or other "dirty" water sources. For pressures above 15,000 psi, the Liqua-Blaster 900 Series utilizes the TX-450HB pump, which has Partek's patented stud extenders and torque plate for quick, easy maintenance.

All units, single or variable speed, include diesel engine or electric motor, appropriate drive system, fuel tank, pump filtration, pump instrumentation, and safety relief systems.

Model 900 Pressures & Flows – 450hp

UNIT	PRESSURE		FLOW		POWER		PLUNGER		PUMP
Model	PSI	Bar	GPM	LPM	HP	kW	In.	mm	Model
907	7,500	448	92	348	450	336	2.000	51	**TX-450S**
908	8,500	517	81	305	450	336	1.875	48	**TX-450S**
910	10,000	689	70	231	450	336	1.750	41	**TX-450S**
915	15,000	1034	43	148	450	336	1.375	35	**TX-450HB**
920	20,000	1380	35	121	450	336	1.250	32	**TX-450HB**
925	25,000	1724	28	87	450	336	1.250	32	**TX-450HB**

Model 900VS (Variable Speed) Pressures & Flows – 450hp

UNIT	PRESSURE		FLOW		POWER		PLUNGER		PUMP
MODEL	PSI	Bar	GPM	LPM	HP	kW	In.	mm	MODEL
909VS	6,500-9,500	448-655	93-65	352-246	450	338	2.000	51	**TX-450S**
910VS	7,500-10,000	517-690	82-61	310-231	450	338	1.875	48	**TX-450S**
920VS	14,000-20,000	965-1379	44-30	167-114	450	338	1.375	35	**TX-450HB**

Flow rates based on 100% volumetric efficiency; rates may vary according to pump speed.

900 SERIES THE MOST VERSATILE AN

A Liqua-Blaster 910VS skid-mounted unit with transmission delivers pressures from 7,500 to 10,000 psi and maximum flows from 82 to 35 gpm.



Each component of the Liqua-Blaster 900 Series is designed with a specific customer benefit. Below is detailed information on Gardner Denver's pump, engine and other unit components.

TX-450 S/HB PUMP

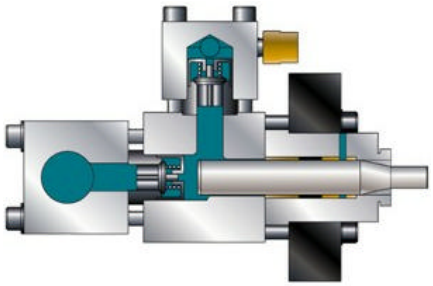
The TX-450 pump consists of the power end and a fluid end. The power end, consisting of crankshaft, connecting rods and crossheads transmits power from the pump driver (either diesel or electric) to the fluid end. Two standard fluid ends are offered for the TX-450; the Sectionalized "L" (TX-450S) for pressures to 10,000 PSI and the Inline (TX-450HB) for pressures to 25,000 PSI.

Fluid End

Partek's fluid ends share many features to significantly improve the pump's life, performance and maintainability.

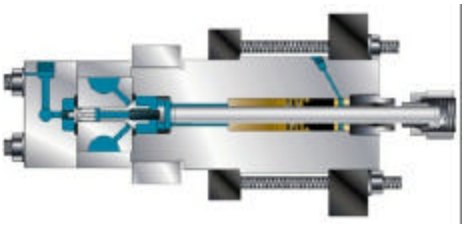
- All high pressure wetted components are constructed of special high strength stainless steel to eliminate corrosion and maximize strength.
- Suction manifolds are manufactured from aircraft aluminum to facilitate field service. They also incorporate stainless-steel valve disc inserts to reduce wear. Complete stainless steel manifolds are available for salt water service.
- Sectionalized "L" style fluid cylinders and inline style stuffing boxes and valve seats are autofrettaged to provide maximum strength and reliability. (Autofrettaging is a unique process that utilizes ultrahigh pressure to significantly increase component life.)
- Partek fluid end designs feature minimal internal clearances to insure highest possible volumetric efficiency. High volumetric efficiency allows the pump to operate at slower, life extending speeds.
- Plungers are non threaded, collet style for positive alignment and rapid removal.
- Plungers and packing are lubricated and cooled by water. Unlike messy oil or grease systems, water lubrication is environmentally safe, inexpensive and requires minimal maintenance.
- Partek's APC (advanced polymer composite) packing systems utilize space age materials and spring loading to deliver long even wear.
- Partek fluid ends are configured to permit rapid removal of packing and plungers from the rear of the stuffing box through the pump cradle.

Sectionalized "L" Operation to 10,000 PSI



The Sectionalized "L" fluid end is clearly the water jetting industry's standard of excellence. Sectionalized design reduces replacement costs and facilitates maintenance. This simple design allows you to easily remove valves, plungers and packing one section at a time for fast, efficient field maintenance. Plungers are colmonoy coated stainless steel which, unlike fragile ceramic styles, are not affected by thermal shock.

The Sectionalized "L" has unique suction and discharge valves designed to handle "dirty" water with little wear to the seats. Inexpensive replaceable inserts extend valve life. Both suction and discharge ports are flanged to facilitate use of different threads.



Inline Operation from 10,000 to 25,000 PSI

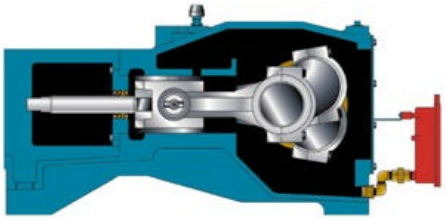
The HB version of our reliable Inline fluid end design has a larger internal bore to allow higher flows. Since its introduction in 1982, the Partek Inline fluid end design has performed flawlessly in applications all over the world. Horizontal, "in line" suction and discharge valves and seats eliminate intersecting bores which can lead to premature fluid end failures at pressures above 15,000 PSI. Gardner Denver offers a unique reconditioning service for valves and seats which adds hundreds of hours of life while reducing operating costs. Plungers are solid polished tungsten carbide resulting in exceedingly long plunger and packing life.



Patented fluid end stud extenders provide rails for supporting fluid end components during maintenance. By eliminating the need for hoisting mechanisms, like forklifts or cranes, packing, plungers and valves can be serviced faster.

Patented torque plate utilizes fluid end pressure to evenly and safely lock-in fluid end components, eliminating the need for large torque wrenches or torque multipliers.

RELIABLE WATER-JETTING UNITS AVAILABLE.



Power End

- Extra-heavy steel crankshaft, tapered roller bearings and large cylindrical crossheads assure accurate alignment and long life.
- All components run in a heavy, precision machined cast iron frame.
- High-capacity, forced-oil system through rifle-drilled crank shaft for even lubrication even at low RPMs.
- Triple-lip baffle seals and splash deflectors avert power end oil contamination.
- Equipped with sight gauge and safety system to shut down the unit if power end oil falls below or exceeds optimum operating level.
- Maximum frame load is 30,000 lbs.

PLUMBING

The plumbing on the Liqua-Blaster 900 Series is designed for safe, reliable operation.

Discharge Plumbing

- All high-pressure connections are rated for at least 2.5 times the working pressure.
- Gardner Denver offers a wide variety of adapters to accommodate most applications.
- Pressure gauge is stainless-steel glycerine-filled with built-in snubber to extend gauge life.
- The Inline fluid end includes dual rupture discs for redundant over pressure protection.
- Standard "L" fluid ends are equipped with stainless steel relief valves and rupture discs.

Suction Plumbing

- Bladder style pulsation dampener minimizes potential for cavitation.
- Suction piping is corrosion-resistant bronze on the Inline and galvanized on the Sectionalized "L".
- Over-sized stainless steel filter delivers clean water to the pump to reduce plunger, valve and packing failure. The filter on a 10,000 PSI model filters to 50 microns. The 20,000 PSI model is filtered to 10 microns.

POWER UNIT

Diesel Power

The Liqua-Blaster 900 is equipped with a powerful water-cooled diesel engine (475hp). Parts and service are available worldwide with engine emissions that meet or exceed most worldwide regulations.

- Fuel filters, dip stick, oil drain and other service points are conveniently located.
- Convenient, large engine-mounted instrument panel includes key ignition, vernier or automatic hydraulic throttle control, low oil pressure and high water temperature shut down for maximum engine protection.
- 150-gallon fuel tank combined with the low fuel consumption of the engine provides more hours of run time.
- Engine is equipped with front and rear cowling and hood for added protection.
- The Liqua-Blaster 900 Series has a three-plate 14" clutched PTO installed between the engine and pump drive. This permits independent operation of the engine. Sealed pilot bearing eliminates frequent lubrication.

Electric Power

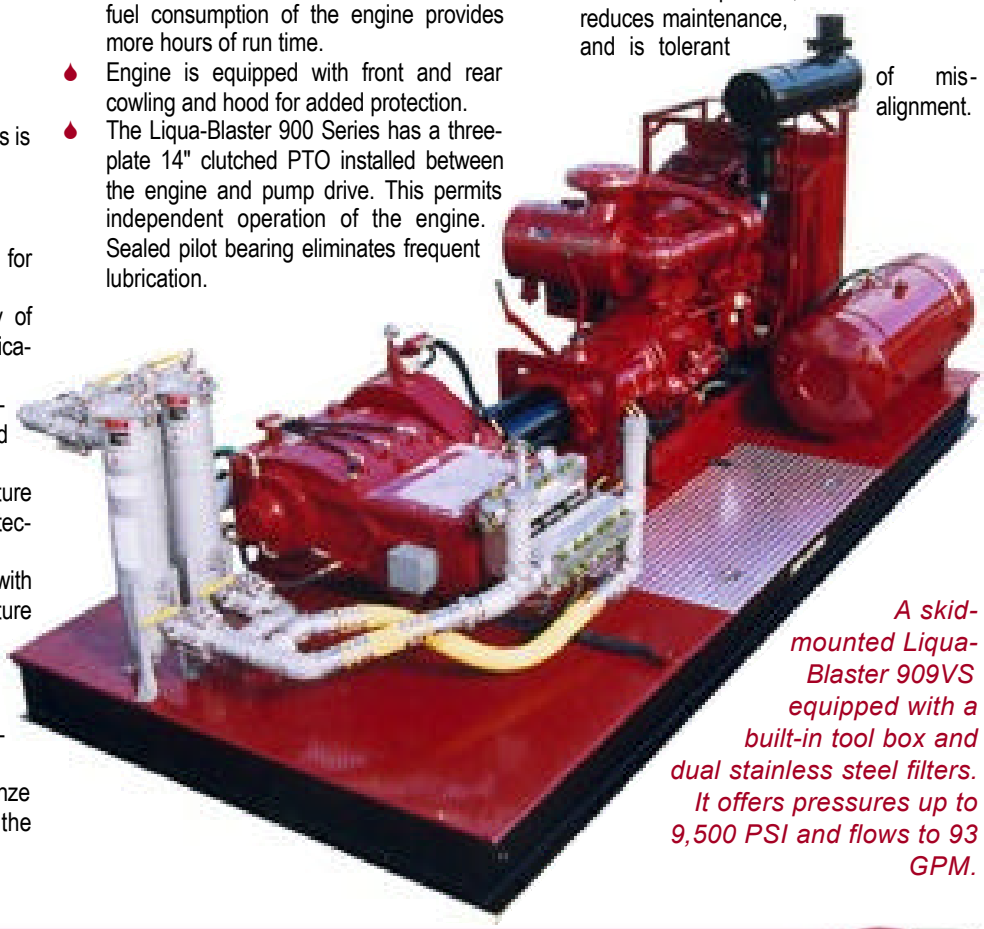
The Liqua-Blaster 900 Series can also be equipped with an electric motor (450 HP). Motors are offered in TEFC, explosion proof or open drip enclosures with a variety of voltages. Starters are also available.

DRIVE SYSTEM

The Liqua-Blaster 900 uses an oversized, heavy-duty shaft-mounted gear box for longer life.

The Liqua-Blaster 900VS is equipped with a five-speed heavy duty transmission. This provides five distinct pump speeds without changing plungers or fluid ends (see page one for ranges).

- Clutch is engaged or disengaged via foot pedal for maximum operator convenience.
- Power is transmitted to the pump through a short-coupled drive shaft, which provides low vibration operation, reduces maintenance, and is tolerant of misalignment.



A skid-mounted Liqua-Blaster 909VS equipped with a built-in tool box and dual stainless steel filters. It offers pressures up to 9,500 PSI and flows to 93 GPM.

GARDNER DENVER WATER JETTING SYSTEMS, INC.

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900 SERIES

BASE

The Liqua-Blaster 900 Series base is constructed of heavy 10-inch steel channel with four lifting points.

- The entire footprint of the engine and pump are welded directly to structural members providing an extremely strong, low vibration design.
- The sturdy design of the Liqua-Blaster skid allows you to lift the unit without twisting the base and skewing the alignment.
- The skid surface is quarter-inch thick steel plate decking to create a safer, non-slip work surface and to enhance the structural integrity of the skid.



Two Liqua-Blaster 920s mounted on the same skid. These units were placed on a float trailer and used simultaneously for concrete demolition.

900 Approximate Weights & Dimensions

UNIT	HEIGHT		WIDTH		LENGTH		WEIGHT	
Model	In.	mm	In.	mm	In.	mm	Lbs.	Kg
Diesel Skid	74	1880	96	2438	170	4318	13,000	5897
Diesel Trailer	96	2438	96	2438	220	5588	14,000	6350
Electric Skid	65	1651	96	2438	160	4064	12,000	5443
Electric Trailer	85	2159	96	2438	210	5334	13,000	5897

900VS Approximate Weights & Dimensions

UNIT	HEIGHT		WIDTH		LENGTH		WEIGHT	
Model	In.	mm	In.	mm	In.	mm	Lbs.	Kg
Diesel Skid	82	2083	96	2438	216	5486	13,500	6124
Diesel Trailer	80	2032	96	2438	238	6045	14,500	6577

Custom systems and options are available. Please contact your Gardner Denver sales representative or authorized dealer for details. Gardner Denver Water Jetting Systems, Inc. offers a complete line of accessories for surface preparation, tube cleaning, jet cutting and other applications. Please call or write for a free catalog today.

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STANDARD OPTIONS

The following options are available for all Liqua-Blaster 900 Series models.

Engine Throttle Control. Governs engine speed. When blast gun(s) are in dump mode, the engine is idle. Once the trigger is depressed, the RPMs increase to a preset level.

Trailer Mounting. Trailers have four wheels per 10,000-pound tandem axle with heavy-duty tongue, fenders, and adjustable height hitch. Trailer units have correct center of gravity for safe highway towing. Trailers have an oversized jack to facilitate vehicle connection. Brakes are mounted on all four wheels and can be either electric or pneumatic.

Hose Rack. Hose rack is made of tubular steel with 150' capacity.

Hoses & Fittings. Hoses are available in 50' (15.2m) sections with a minimum burst of 2.5 times the working pressure. Stainless steel quick connect couplers are available for 10, 15 or 20 Kpsi working pressure.

Quality Parts, Reasonable Costs

Gardner Denver Water Jetting Systems, Inc. parts are designed and manufactured to fit perfectly and to last. Because every part we design is manufactured by Gardner Denver, each part is inspected to meet our demanding quality standards before it goes into a product or inventory. And with thousands of units in service, parts are manufactured in high volumes to keep your costs low.

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Your local distributor/representative is: