1200 SERIES

Liqua-Blasters® Up To 750 HP

Pressures from 4,300 PSI - 20,000 PSI
Flows to 274 GPM

The Most Durable 750 HP Water Blaster in the Industry.



Gardner Denver Water Jetting Systems, Inc. has over 40 years of experience in designing and manufacturing water-jetting equipment with one goal in mind—to give our customers a rugged, dependable machine. By combining the exceptional efficiency of Partek's TGX-600 pump with a correctly-sized power unit and drive train, Gardner Denver has created a perfectly-engineered system that will provide more useable energy than any other water-jetting product on the market.

Whether you choose the single or variable speed model, each Liqua-Blaster 1200 Series unit includes Gardner Denver's Partek TGX-600 pump with two fluid end options, diesel engine, fuel tank, pump filtration, pump instrumentation, and safety relief systems.

Gardner Denver's 1200 Series Liqua Blasters are perfectly suited for automated systems whether the unit is for plant installation or trailer mounted for easy transport. Its higher horse power allows you to get high flows even at higher pressures. The 1200 model is being used above with our Concrete Renovation Robot (CRR). The 1200 Series also offers a reliable pump design that facilitates easy maintenance in the field. Fluid ends are configured to permit rapid removal of packing and plungers form the rear of the stuffing box cradle.



Model 1200VS (Variable Speed) Pressures & Flows – 700hp

UNIT	PRESSURES		FLOW		POWER		PLUNGER		FLUID END
MODEL	PSI	Bar	GPM	LPM	HP	kW	In.	mm	MODEL
1210VS	4,300-10,000	345-690	274-116	825-95	750	565	3.500	79	TGX-600S
1220VS	8,400-20,000	1103-1379	139-58	276-30	750	565	2.500	46	TGX-600HB

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

1200 SERIES THE MOST VERSATILE AN

Each component of the Liqua-Blaster 1200 Series is designed with a specific customer benefit. Below is detailed information on the pump, engine and other unit components.

TGX-600S/HB PUMP

The TGX-600S/HB 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 which may be diesel or electric motor to the fluid end. Utilizing plungers and valves, the fluid end converts inlet water to a high pressure stream. Two standard fluid ends are offered for the TGX-600S/HB; the Sectionalized "L" (TGX-600S) for pressures to 10,000 PSI and the Inline (TGX-600HB) for 20,000 PSI.

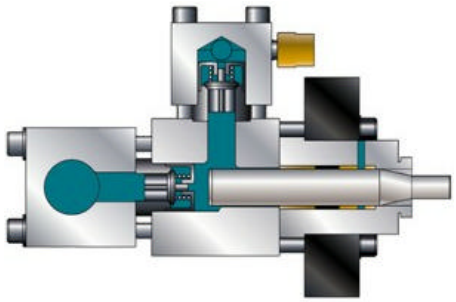
Fluid End

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

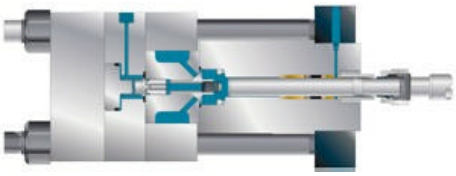
- All high pressure wetted components are constructed of special high strength stainless steel to eliminate corrosion and maximize strength.
- Suction manifolds are manufactured from aircraft aluminum to facilitate field service. They also incorporate stainless-steel valve disc inserts to reduce wear. 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 are characterized by 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.
- Gardner Denver's APC (advanced polymer composite) packing systems utilize space age materials and spring loading to deliver long even wear.
- Gardner Denver 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.



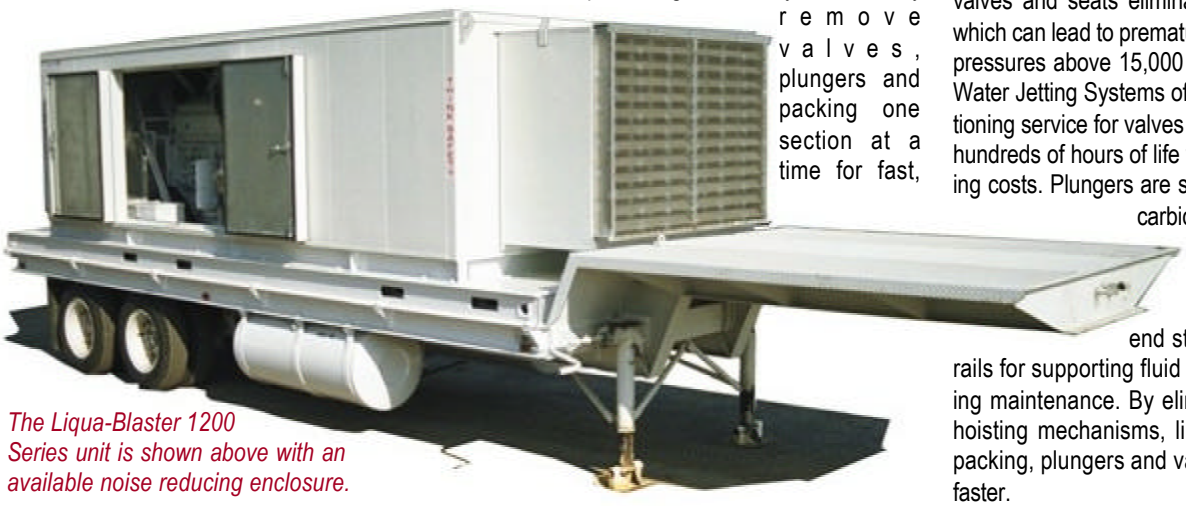
The Sectionalized "L" has unique suction and discharge valves designed to handle "dirty" water with little wear to the seats. Inexpensive replaceable inserts extend valve life. Both suction and discharge ports are flanged to facilitate use of different threads.



Inline Operation from 10,000 to 20,000 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 Water Jetting Systems 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.



The Liqua-Blaster 1200 Series unit is shown above with an available noise reducing enclosure.

GARDNER DENVER WATER JETTING SYSTEMS, INC.
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RELIABLE WATER-JETTING UNITS AVAILABLE.

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.

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 welded steel frame.
- High-capacity, forced-oil system for even lubrication even at low RPMs.
- Triple-lip baffle seals and splash deflectors avert power end oil contamination.
- Equipped with sight gauges and safety system to shut down the unit if power end oil falls below or exceeds optimum operating level.
- Maximum frame load is 200,000 lbs.

PLUMBING

The plumbing on the Liqua-Blaster 1200 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

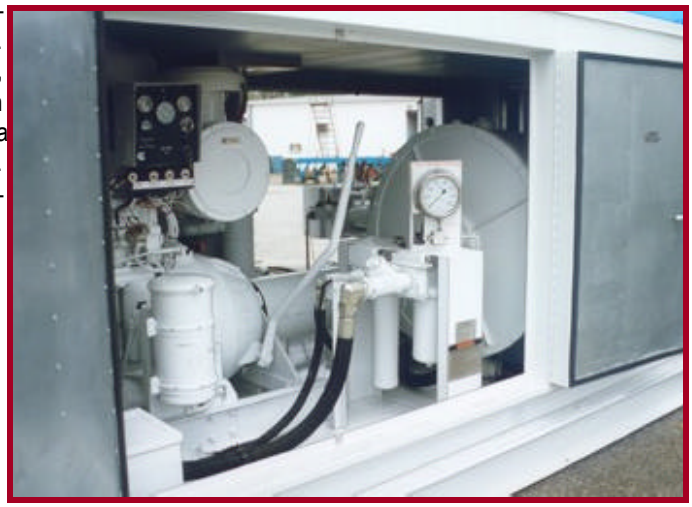
Diesel Power

The Liqua-Blaster 1200 Series is equipped with a powerful water-cooled diesel engine (750 HP). Parts and services 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.
- 300-gallon (1140 liter) 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 1200 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 1200 Series can also be equipped with an electric motor (500 HP). Motors come in TEFC, explosion proof or open drip enclosures with a variety of voltages. Starters are also available.



The Liqua-Blaster 1200 Series whisperizing cabinet allows access for ease of service from any angle.

DRIVE SYSTEM

The Liqua-Blaster 1200 Series uses an oversized, heavy-duty shaft-mounted gear box for longer life. The Liqua-Blaster 1200VS is equipped with a twelve-speed heavy duty transmission transfers engine power to pump via "U" joint coupler. The "U" joint is fully enclosed by a steel guard. This provides twelve distinct pump speeds without changing plungers or fluid ends (see page one for ranges).

- Pump attached gear boxassembly connects to "U" joint and provides the final reduction in pump speed.
- The reduction gear and transmission are equipped with a heat exchanger and filter kit.
- 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.

1200 SERIES

BASE

The Liqua-Blaster 1200 Series base is constructed of heavy, full seam welded 10-inch (254 mm) steel channel with 1/4" tread plate deck. Fork lift slots and four point lifting eyes are standard for skid mounted units.

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



STANDARD OPTIONS

The following options are available for all Liqua-Blaster 1200 Series models.

Engine Throttle Control. Governs engine speed. Engine is at idle rpm with gun(s) in dump mode. Rpm climbs to preset level when gun trigger is depressed.

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

Hoses & Fittings. Hoses are available in 50' (15.2 m) 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.

1200XVS Approximate Weights & Dimensions

UNIT	HEIGHT		WIDTH		LENGTH		WEIGHT	
Model	In.	mm	In.	mm	In.	mm	Lbs.	Kg
Diesel Skid	81	2057	96	2438	290	7366	20,000	9072

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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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: