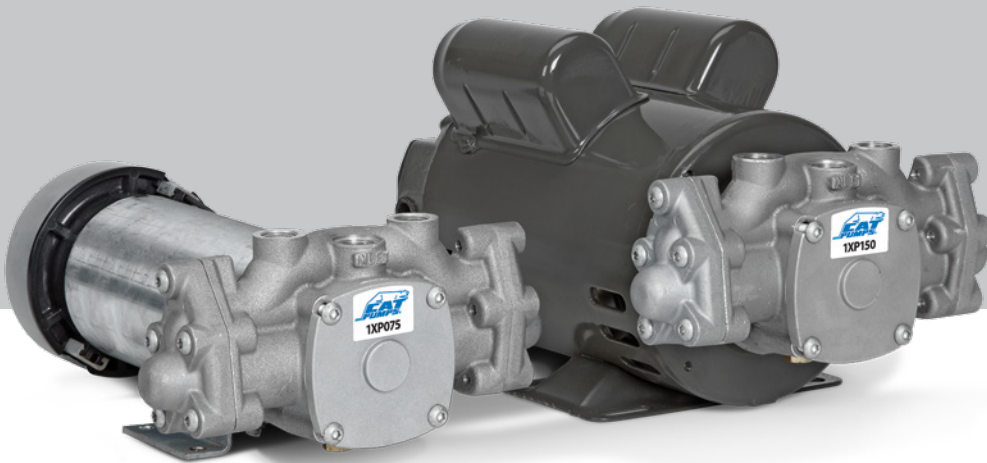


1XP Competitive Comparison

1XP Series Extractor Pumps



Product Quality, Reliability and Support You Expect

www.catpumps.com

Cat Pumps® 1XP Series Pumps

DESIGNED AND PROVEN FOR EXTRACTOR APPLICATIONS

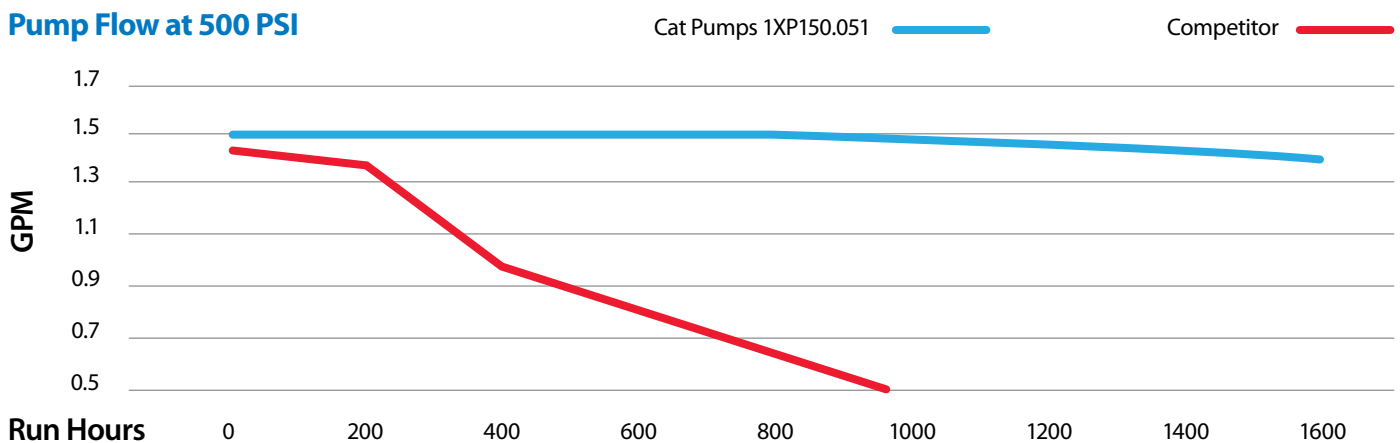
The durability of the 1XP Series pumps make it a great fit for the portable extractors that you depend on. Head-to-head testing against competition shows once again that when it comes to long life and durability, nothing beats Cat Pumps.

Performance	1XP Pump	Competitor
Flow range of .5 to 2.0 gpm	✓	✓
Pressure Range of 100 - 1000 psi	✓	✓
Induction (AC) Motors available	✓	✓
Permanent Magnet Motors (DC) available	✓	✓

Features	1XP Pump	Competitor
Compact direct drive for a small footprint	✓	✓
FPM Seals for compatibility with cleaning soaps and chemicals	✓	✓
Supported plunger rods remove side load on high pressure seals	✓	✓
Crankcase supported crankshaft for consistent cam and plunger rod alignment	✓	
Solid ceramic plungers do not score or scratch like metallic plungers	✓	
Greaseless/oil less drive for less mess and less maintenance	✓	
The backside of the high pressure seals lubricated by the liquid flowing through the pump, extending plunger and seal life	✓	
High pressure seal leakage is contained within the pump	✓	

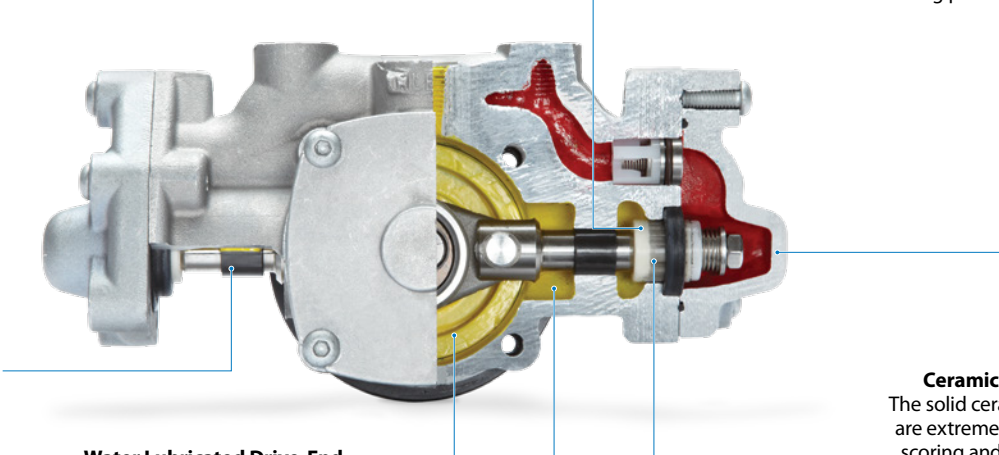
Comparative Testing

1.5 GPM AT 500 PSI



Designed for Long Life and Trouble Free Service

1XP Pump



High Pressure Seal 100% Lubricated
Water flowing through the pump lubricates the backside of the high pressure seal so the plunger and seal surface does not run dry.

One piece Manifold
Design allows the discharge manifold to be completely sealed with one O-ring reducing potential leak points.

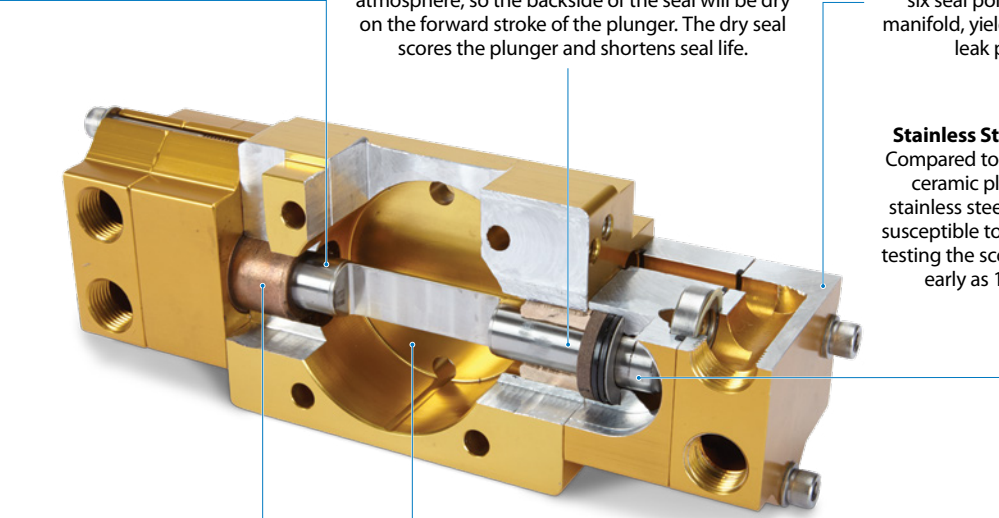
Guided Plunger Rod
A water lubricated bearing provides 360° guided plunger rod support, maximizing seal life by maintaining true center for seal and plunger alignment.

Water Lubricated Drive-End
The liquid flowing through the pump is used to lubricate the connecting rods and support areas. Using the pumped liquid ensures there is always proper lubrication. The bearings are durable enough to run dry intermittently without any damage.

Fluid 100% Contained
If water seeps past the high pressure seal, the water is simply returned to the inlet and re-circulated. Fully contained for no leaks.

Ceramic Plungers
The solid ceramic plungers are extremely resistant to scoring and wear. Result is thousands of hours of dependable operation.

Competitor



Leakage
Water that gets by the high pressures seal ends up in the crankcase, which mixes with the grease required on the cam. Greasy water solution leaks into the bottom of the extractor and possibly on the surface being cleaned.

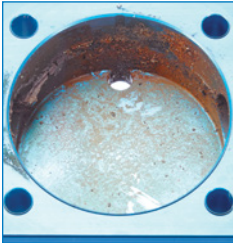
Partially Lubricated High Pressure Seal
The back side of the high pressure seal is open to atmosphere, so the backside of the seal will be dry on the forward stroke of the plunger. The dry seal scores the plunger and shortens seal life.

Two Piece Manifold
Requires six O-rings with six seal points on each manifold, yields 12 potential leak points.

Stainless Steel Plungers
Compared to higher quality ceramic plungers, the stainless steel plungers are susceptible to scoring. In lab testing the scoring occurs as early as 100 hours.

Supported Plunger Rod
Bronze inserts are used to stabilize the plunger, but without lubrication.

Greased Metal on Metal
The cam and plunger connection point requires grease for lubrication. As the pump runs the grease gets thrown off of the cam and plunger eventually leaving metal on metal. The connection point sees excessive wear which decrease pump flow and increases pump noise.



Designed to Outlast the Competition

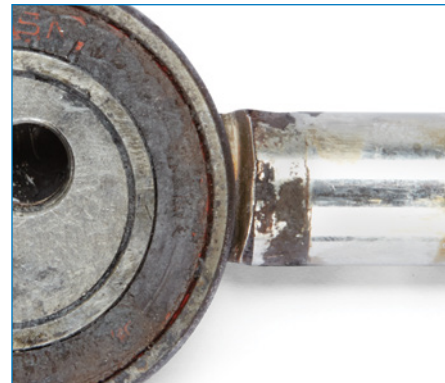
Cat Pumps

Competitor

Cam Wear

Cat Pumps cam and plunger rods show virtually no wear after 1500 hours.

Competitor cam and plunger show significant wear after 225 hours, resulting in a 22% decrease in plunger stroke. This reduces flow rates, causing pressure to drop which impacts cleaning effectiveness.



Plunger Scoring

Cat Pumps solid ceramic plunger exhibits no scoring after 3000 hours and could still be used with a new seal.

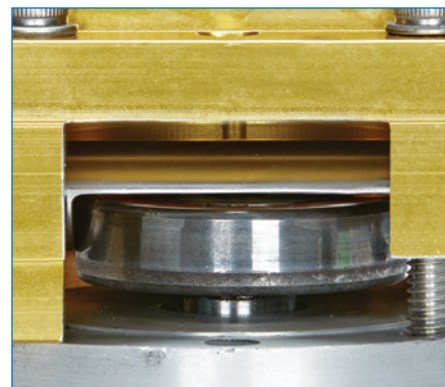
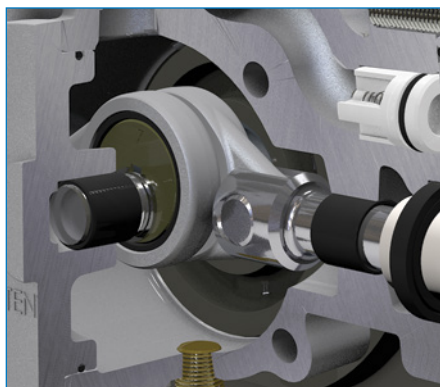
Competitor stainless steel plunger severely scored after 225 hours and would require replacement.



Supported Crankshaft

Cat Pumps crankcase supports the motor shaft with a water lubricated bearing.

Competitor pump has no support for the motor shaft, which allows the motor shaft to flex with side load. This results in premature seal wear and negatively effects pumps life.



CAT PUMPS

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