



LAMOR



GTA PUMP SERIES

www.lamor.com



RELIABILITY AND LONGEVITY FOR PUMPING HIGH-VISCOUS LIQUIDS

RELIABLE BY DESIGN

The screw pump, although an ancient Egyptian invention from more than 2,000 years ago, continues to prove its worth in modern industries with its reliability, versatility, and efficiency. It pumps fluids of high viscosity and handles large pressure changes with little impact on performance.

Lamor's GTA Pump series are multi-purpose, high-performance, hydraulically driven submersible positive displacement Archimedes screw pumps. The capacities of the GTA pumps are certified by Bureau Veritas in varying oil viscosities.



GTA 20-30

GTA 50-70

GTA 115-140

SUITABLE FOR MANY INDUSTRIES

Even though they were originally developed for oil spill response and for primary oil transfer pumping duties, the versatility of GTA pumps allows them to be used for many other applications. The GTA pumps handle any liquids ranging from water to the heaviest, debris-laden, very viscous oils such as bitumen.

Pumping heavy oil
<https://www.youtube.com/watch?v=5IBxJgsZLIM>

OUTSTANDING TECHNICAL PERFORMANCE

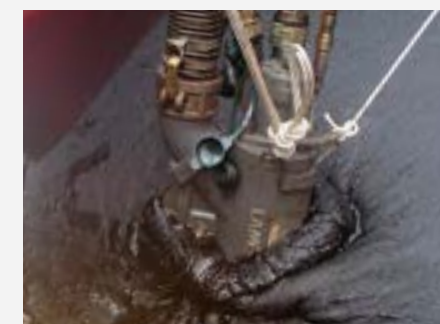
GTA pumps are easy to deploy and versatile to use. For example, an oil skimmer fitted with a GTA pump can easily have its pump removed and used for other pumping duties.

The special internal geometry of the GTA pump design ensures a gentle pumping action that will not emulsify the liquid and ensures the efficient movement of the fluid through the unit. The smooth operation and easy flow control also reduce cavitation for a constant flow. Because the pumps never lose their prime, they are operational from the moment they hit the liquid.

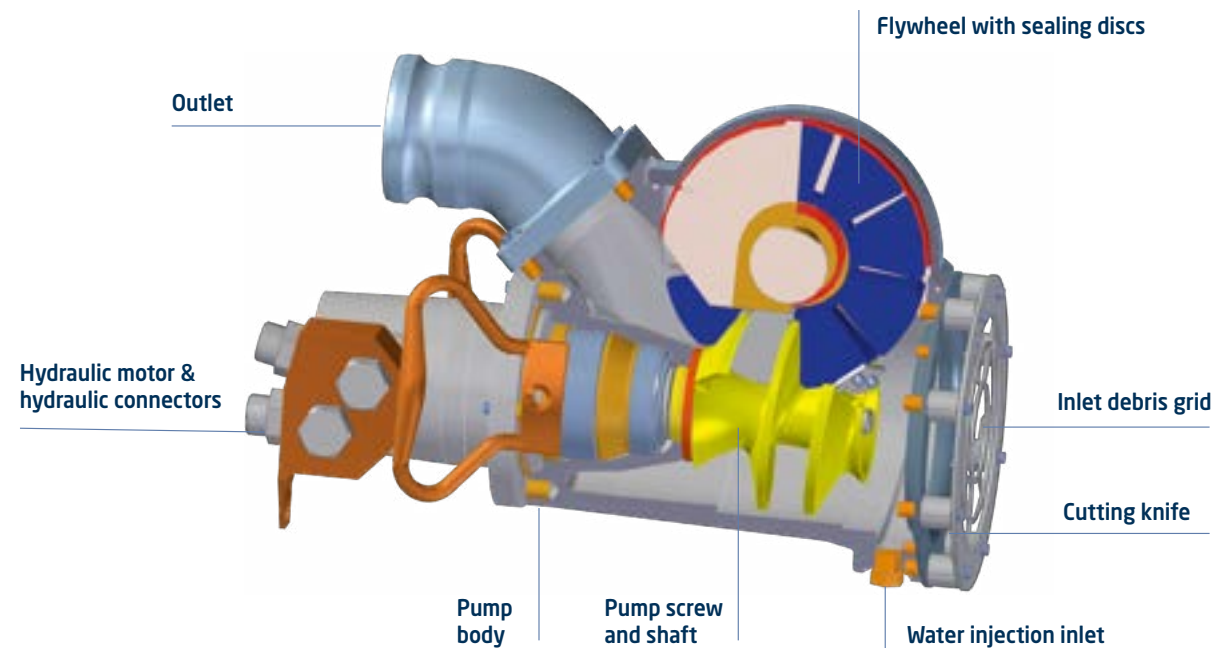
LOTS OF MUSCLE IN A COMPACT PACKAGE

The high-torque hydraulic motors make the pumps extremely efficient. Pump models and capacities vary from 20 m³/h to 140 m³/h (88–616 gpm) and operate in temperatures ranging from –20 to +60°C (–4 to 140°F), reaching up to 14 bar outlet pressure.

The pump casing is compact and, depending on model and intended application, made of robust, yet lightweight aluminum or stainless steel. For reliable operation and longevity, all internal components are made of acid-proof steel with specialized seals.



GTA PUMP STRUCTURE



FEATURES	GTA	GTA SS	GTA ATEX
Compact design	●	●	●
Lightweight	●		
Aluminum nickel-plated casing	●		
Robust stainless-steel casing		●	●
Stainless, acid-proof steel internals	●	●	●
Surface treated with a mix of highly protective dirt-repellent and hydrophobic coatings		●	●
Atmosphere Explosion-proof construction (ATEX Ex II 3 G Ex h IIB T4 Gc)			●
Designed for long exposure to chemicals, acid content liquids, and saltwater		●	●
Comply with the general machinery directive	●	●	●
Capacity certified by Bureau Veritas	●	●	●
Robust and seawater resistant	●	●	●
Pumps multiple fluid viscosities from water to bitumen	●	●	●
Annular water injection (AWI) in the inlet, optionally at the outlet	●	●	●
Debris grid and cutting knife on the inlet	●	●	●
Various discharge port options	●	●	●



ADDITIONAL PERFORMANCE BOOST BUILT-IN

The efficiency of the GTA pumps can be increased by utilizing the unique built-in annular water injection (AWI) flange at the pump inlet. Cold or hot water, even steam, can be used with these injection inlets and injection flanges.

AWI allows the GTA pumps to work efficiently, especially with higher viscosity fluids like crude oil and bitumen and reduces the friction in the discharge hoses for pumping longer distances and higher elevations.

An optional second injection flange on the discharge side of the pumps further enhances the reduction of friction in the discharge hoses. This makes pumping high viscous oils over long distances more effective and decreases the pressure in the oil transfer hoses thus making operations safer.

The pumps can be equipped with several different discharge port options, types, and sizes.

See GTA pump in action
<https://www.youtube.com/watch?v=e6sPtc3TFEM>

PUMP ANY LIQUID, EVEN LADEN WITH DEBRIS

The GTA pumps are equipped with a debris grid and a strong cutting knife fitted on the inlet. This allows pumping liquids with impurities without getting clogged. Solids up to Ø 30mm (1.5in) pass through the pump. Any blockage can be expelled without human intervention by simply reversing the pump.

THE BEST FIT FOR ANY PUMPING ENVIRONMENT

Lamor's GTA pumps come in three variants, each with a wide range of pumping capacities and optimized for a wide range of operational conditions.

GTA pumps feature a lightweight aluminum casing for easy handling, especially on floating structures,

providing an ideal balance between performance and weight.

GTA SS (Stainless Steel) versions provide extra longevity in highly corrosive environments.

GTA ATEX versions are for pumping liquids with unknown characteristics, even in challenging operational conditions and environments where ATEX certification is required. Currently available for Zone 2 (ATEX Ex ii 3 G Ex h IIB T4 Gc) applications. ATEX Zone 1 version available by Q3 2021.



SPECIFICATIONS (METRIC)	GTA 20	GTA 30	GTA 50	GTA 70	GTA 115	GTA 140
Model availability: Std / SS ^{*1)} / ATEX ^{*2)}	x/x/x	x/x/- ^{*3)}	x/x/x	x/x/x	x/x/x	x/x/x
Length [mm]	300	300	400	400	500	500
Width [mm]	195	195	250	250	300	300
Height [mm]	435	435	500	500	598	598
Weight [kg]	25/39 ^{*1,2)}	26	49/73 ^{*1,2)}	47/72 ^{*1,2)}	71/109 ^{*1,2)}	71/109 ^{*1,2)}
Manhole diam. min. [mm]	300	300	400	400	520	520
Capacity [m³/h]	20	30	50	70	115/110 ^{*1,2)}	140/110 ^{*1,2)}
Discharge pressure [bar]	14	14	14	10	12	10
Solid handling [mm]	25	25	30	30	30	30
Hydraulic flow (max) [l/min]	80	75	125	92	160/150 ^{*1,2)}	160/125 ^{*1,2)}
Hydraulic pressure (max) [bar]	210	210	210	210	210	210

*1) SS-casing version
*2) ATEX Ex II 3 G EX h IIB T4 Gc version
*3) GTA 30 ATEX Ex II 3 G EX h IIB T4 Gc version release target Q2 2021

SPECIFICATIONS (IMPERIAL)	GTA 20	GTA 30	GTA 50	GTA 70	GTA 115	GTA 140
Model availability: Std / SS ^{*1)} / ATEX ^{*2)}	x/x/x	x/x/- ^{*3)}	x/x/x	x/x/x	x/x/x	x/x/x
Length [in]	12	12	16	16	20	20
Width [in]	8	8	10	10	11	11
Height [in]	17	17	20	20	24	24
Weight [lbs]	55/86 ^{*1,2)}	57	108/161 ^{*1,2)}	104/159 ^{*1,2)}	157/240 ^{*1,2)}	157/240 ^{*1,2)}
Manhole diam. min. [in]	11,8	11,8	16	16	21	21
Capacity [gpm]	88	132	220	308	506/404 ^{*2)}	616/404 ^{*2)}
Discharge pressure [psi]	203	203	203	145	174	145
Solid handling [in]	1	1	1,18	1,18	1,18	1,18
Hydraulic flow (max) [gpm]	21	20	33	24	42/40 ^{*2)}	42/33 ^{*2)}
Hydraulic pressure (max) [psi]	3045	3045	3045	3045	3045	3045

*1) SS-casing version
*2) ATEX Ex II 3 G EX h IIB T4 Gc version
*3) GTA 30 ATEX Ex II 3 G EX h IIB T4 Gc version release target Q2 2021



QUALITY AND RELIABILITY FOR MAXIMUM LIFETIME YIELD

Lamor’s GTA pump series is in-house developed and manufactured in our ISO 9000, 14000, and 45000 certified facility in Finland, a country renowned for its engineering prowess for harsh operational and climatic environments. In addition to the independent BV certifications for each pump, Lamor does a full performance test on every single pump before delivery, with an approval rate

of 99+ percent. No wonder these pumps are working to their operators’ full satisfaction from the Arctic to the Amazon.

The pumps can easily be serviced on-site with replaceable components. Easy maintenance, even in worst-case scenarios, guarantees the shortest possible service interruption during continuous field operations.



ALWAYS FULFILL YOUR SPECIFIC NEEDS

Lamor focuses on always providing the best fit for your specific challenge. This consultative approach, combined with a broad range of pump options, their uncompromising performance, and long service life, ensures you will get the optimal total cost of ownership and return on your investment.

Lamor also offers expert after-sales service support, an extensive catalog of spare parts and equipment available for next-day shipment.

LAMOR – A GLOBAL PARTNER

Lamor is one of the world's leading pump suppliers with its wide range of pumps. Besides oil spill response, Lamor also serves other industries, such as shipbuilding, oil and gas, mining, manufacturing, petrochemicals, transportation (such as ports, harbors, and railways), salvage, military, oil storage, and many more.

With over 350 experienced team members worldwide and with strategically established offices, hubs and local partners in over 104 countries so far, Lamor is always available to work closely with you to create the best solutions.



- Lamor offices
- Lamor hubs



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