THOMAS 24/7 XCHANGE

TGTO

HIGH PRESSURE PUMPS

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THOMAS PUMP
THOMASPUMP.COM

HIGH PRESSURE PUMPS

T-GTO / T-GTO XD / T-GEAR

T-GTO / T-GTO XD / T-GEAR are high pressure pumps designed for critical applications, making them the most reliable high-pressure pumps in the marketplace.

FIELDS OF APPLICATION

T-GTO / T-GTO XD / T-GEAR

- Sanitation Cleaning
- Paper Mill Showering
- Truck Cleaning Facilities
- Brine Injection
- Environmental Waste Disposal
- Boiler Feed
- Mill De-scaling
- Oil and Gas

DESIGN

T-GTO series is a heavy duty oil lubricated Pitot tube pump designed for critical applications making it the most reliable high-pressure pump in the marketplace.

With a full range of capacities from 30-400 GPM (6-100 m3hr) and pressures reaching 1600-psi (110 bar) the T-GTO offers a variety of pump choices. A robust power frame, features that include only two basic working parts:

1) a rotating case and 2) a stationary pick-up tube, and a mechanical seal that only seals against suction pressure, ensure pump reliability in the most demanding applications.

Unlike conventional centrifugals and piston pumps that have a narrow window of operating performance, the T-GTO can operate at any point on the performance curve pulsation free and hydraulically stable resulting in years of trouble free service.

T-GTO XD series has been developed for low flow, high pressure applications. The Pitot tube design produces a stable, pulsation free flow. The ability to operate with low minimum flow makes the pump suitable for a wide variety of applications, within its performance envelope.

T-GEAR series is a single-stage, parallel shaft speed increaser. Heat dissipation is from a dynamically balanced fan blowing across the finned gearbox casing. The design is for horizontal installation only. The design, material, and workmanship incorporated in the construction of the T-GEAR make it capable of giving long, trouble-free service. The T-GEAR is typically used with the Thomas Pump & Machinery T-GTO, T-GTO XL, and GT-11 Pumps.

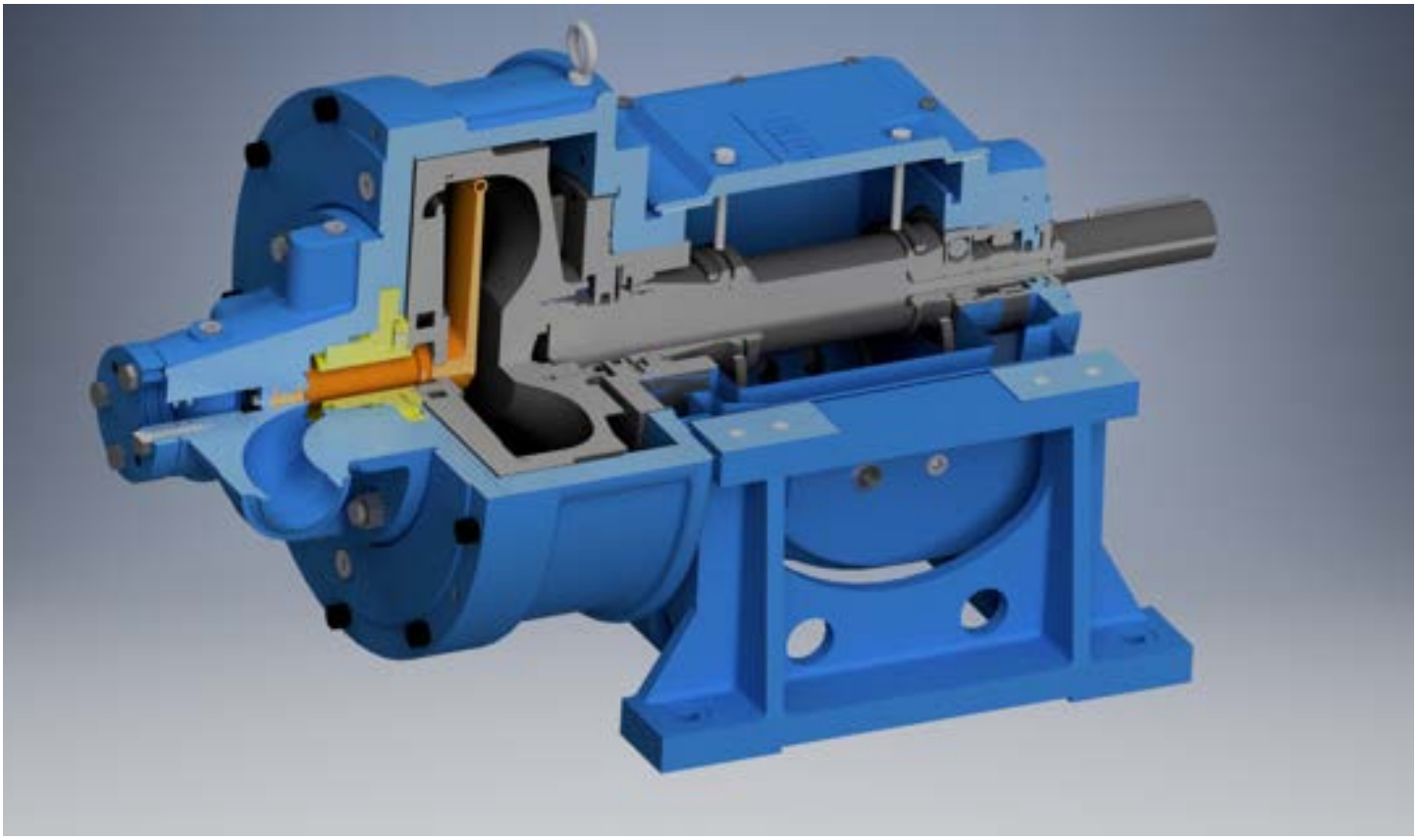
HOW IT WORKS

I. The Liquid enters the pump via the suction line where it is accelerated to a speed identical to the rotor speed creating a liquid ring, giving the fluid a velocity head.

2. As the liquid enters the Pitot tube much of its kinetic energy is converted into pressure energy by the internal shape of the Pitot tube creating relatively high pressures.

NEXT the liquid enters the Pitot tube openings at the periphery of the rotating rotor.

THIS GENERATES a pulsation free flow and has a stable NPSHr curve output.



HIGH PRESSURE PUMP

FEATURES

T-GTO FEATURES

Large Sight Glass. Bull's-eye sight glass 1-1/4" simplifies oil level and oil condition monitoring that is critical to bearing life.

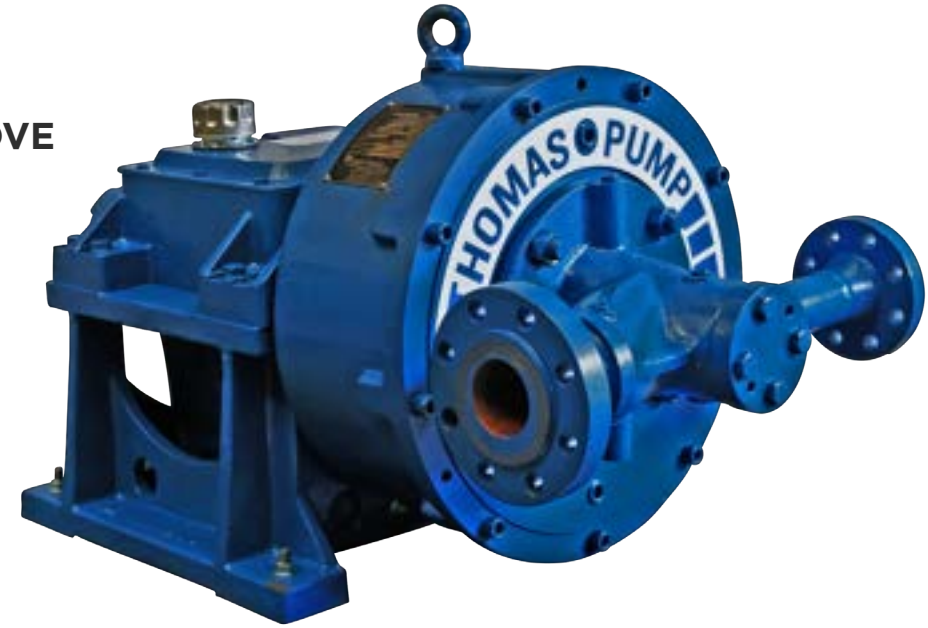
Magnetic Drain Plug. A safety feature designed to magnetically collect damaging metallic contaminants away from the bearings.

Heavy-Duty Shaft Bearings. X-Life Precision Bearings have extremely high reliability and extend bearing life with added benefits of smooth running, noise reduction, and reduced energy consumption.

Monitoring Locations. Power frame has bearing monitor feature to allow RTD insertion for bearing temperature monitoring and optional areas can be added for vibration monitoring.

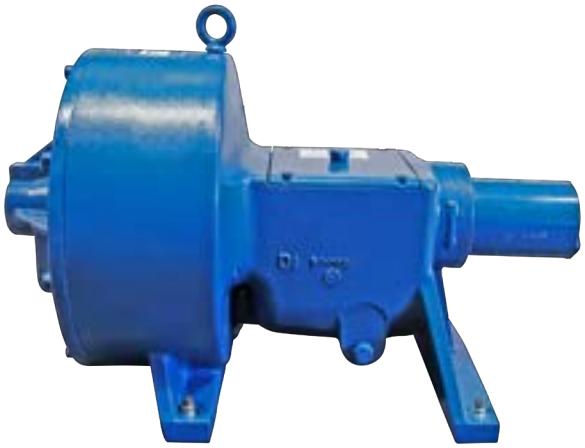
THE T-GTO XD HAS THE ABOVE FEATURE PLUS:

- Meets API 610 Standards*
- Heavy Duty Power Frame
- Higher Operating Speeds / Pressures
- Two Year Power Frame Warranty
- Mechanical Seal Options & Flush Plans
- CE Compliant



HIGH PRESSURE PUMP

T-GTO SERIES



T-GTO

T-GTO XD

Description	Materials of Construction Code		
	Code 1 DI	Code 2 SS	Code 3 CD
*Rotor *Rotor Cover	Ductile Iron 65-45-12	Stainless Steel A351-CF8M	CD4 MCU ASTM A890 GRADE 1A/1B
*Pitot Tube	Alloy Stainless Steel 17-4 PH 17Cr4Ni		
2" X 2" NPT Manifold 2" X 2" NPT and flanged Manifold	Ductile Iron 65-45-12 Carbon Steel A216 WCB GS	Stainless Steel A351-CF8M	Stainless Steel A351- CF8N
Seal Hub Seal Plate	Stainless Steel AISI 316 (not applicable on 2" x 2" screwed manifold)		CD4MCU
Pedestal Rotor Casing	Ductile Iron 65-45-12		
*End Bell	Steel A-105 St		
Shaft	High Tensile, Low Alloy Carbon Steel A576- 4140 HT 42 CrMo4V		
*O Rings	Viton is standard O-ring material but Teflon and Kalrez are available as options		

SPEED INCREASING GEARBOX

T-GEAR

RATIO CHART

SPEED INC RATIO	OUTPUT SPEED	MAX. INPUT HP	OUTPUT SPEED	MAX. INPUT HP
1.1509	4086	400	3395	335
1.2353	4385	400	3644	335
1.3265	4709	400	3913	335
1.4255	5060	400	4205	335
1.5333	5443	400	4523	335
1.7805	6321	400	5252	335
1.9231	6827	400	5673	335
2.08	7388	400	6139	336
Input	3550 RPM	60 Hz	2950 RPM	50 Hz

Gear teeth ground to AGMA class 10

T-GEAR

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