



ROTARY PISTON PUMPS & SYSTEMS

NT SERIES





Meet the NT Series

Already renowned for its long-term reliability, Nash piston pumps have been helping customers achieve optimum performance and unprecedented production efficiencies. Nash's vacuum pumps are characterized for their robust design and manufactured to meet the highest demands of the ever-changing industrial market.

At Nash, we are constantly expanding our product portfolio and leveraging innovations within vacuum pump technology. This commitment has allowed us to become a full spectrum vacuum solutions provider.

Industries & Applications

The NT series designed with time-tested technology proves its worth by providing unequalled durability for demanding industrial applications. The single-stage piston design of the NT series is capable of operating continuously from 0.01 to 100 Torr. Whatever the requirements of your application, the NT-series offers highly-reliable and rugged performance.

- Heat Treating
- Metallurgy
- Transformer Oil Drying
- Vacuum Coating
- Evacuating Refrigeration Systems
- Liquid Gas Storage



Maximize Performance with the NT Series

NASH's NT series rotary piston pumps range in nominal capacity from 150 to 778 cfm while being capable of achieving vacuum levels down to 0.01 Torr. All of the NT models include a cutting-edge triplex piston design that provides quiet and vibration-free operation.

In addition, a standard internal positive pressure lubrication system ensures highly reliable lubrication at all inlet pressure levels. Supplied by a gear pump, the oil is directed through porting in the shaft to be directed to each of the triplex pistons. As the oil is pressurized, it prevents contact between the pistons and their respective eccentric cams, which significantly reduces operational wear.

Whatever the inlet pressure, our rotary piston pumps can operate efficiently from blank off to atmosphere without overloading the motor. As the desire for environmentally friendly features is increasing, using the NT series minimizes water consumption, as the sealing fluid used is recirculated oil instead of a once-through water sealed design.

Stand Out Features & Benefits

NASH's NT-series rotary piston pumps, manufactured in the USA, are characterized by a wide range of features that make them stand out in a constantly developing market:

- **Unique triplex piston design** - provides for equal, diametric balance to virtually eliminate vibrations.
- **Positive displacement oil pump** - shaft-driven mechanical oil pump provides adequate lubrication at any inlet pressure
- **Minimal vibration level** - the pump does not require bolting or grouting to the floor; it rests on vibration reducing springs. This reduces the installation cost as well as the transmission of any residual vibration through the floor.
- **Ease of Maintenance** - the NT series is designed for easy access externally so it can be easily inspected and maintained. An optional factory-mounted oil filtration system also lowers maintenance costs and decreases downtime.
- **Adjustable gas ballast** - enables handling condensable vapors thus reducing any potential condensation in the sealing oil.

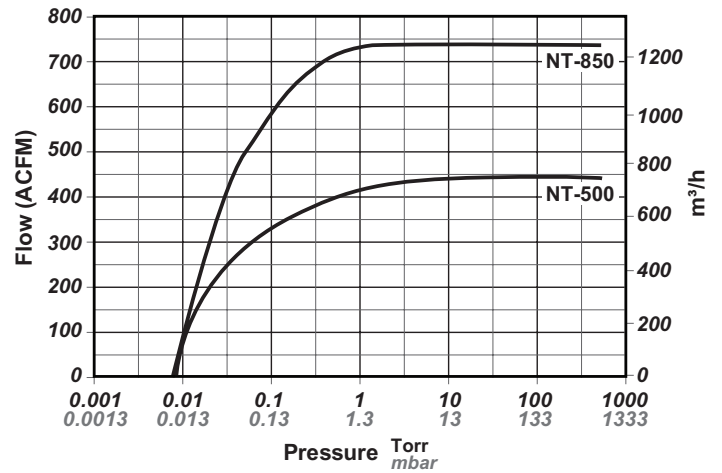
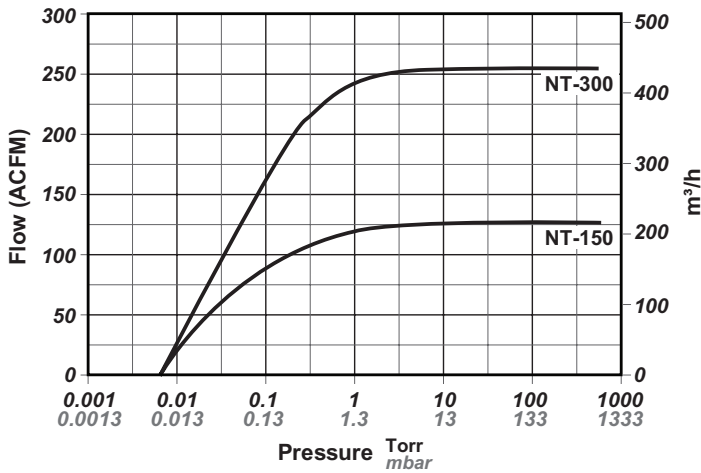


Technical Data

NT 150C - 850D PISTON PUMPS		NT 150C	NT 300D	NT 500D	NT 850D
Nominal Displacement	acfm	150	300	500	778
	m ³ /h	255	510	850	1322
Motor	HP	7.5	15	30	40
	kW	6	11	22	30
Cooling Water @ 60° F(15.5° C) - 45 psig max	GPM	1	1.5	3	4
	L/min	4	8	12	16
Oil Capacity	gal	6	10	15	28
	liters	23	38	57	106
Pump Weight	lbs	800	1525	2625	4175
	kg	364	693	1200	1900
Maximum Gas Ballast (GB) Flow	acfm	11	20	34	62
	m ³ /h	18	34	58	105
Blank off (at 5% Gas Ballast)	Torr	2.0	2.0	2.0	2.0
	mbar	2.6	2.6	2.6	2.6
Ultimate Pressure	Torr	0.010	0.010	0.010	0.010
	mbar	0.013	0.013	0.013	0.013
Noise Level at 0.1 Torr	dB(A)	71	72	73	75

Information subject to change without notice.

Performance Curves



Your Vacuum Solution Partner

Nash is a leading global provider of highly engineered vacuum solutions. With more than 110 years of experience and extensive technological expertise, we are the preferred company in the market for:

- Rotary Piston Pumps
- Liquid Ring Vacuum Pumps and Compressors
- Rotary Vane Vacuum Pumps
- Dry Screw Vacuum Pumps
- Dry Claw Vacuum Pumps
- Steam Ejectors & Hybrids
- Centrifugal Blowers & Exhausters
- Positive Displacement Blowers
- Custom Engineered Vacuum Systems

Built to exceed industry standards, Nash products have long been known to be tireless workhorses designed to stand up to the rigorous demands of even the harshest industrial environments. Whatever the application, our unparalleled design, and manufacturing capabilities allow us to meet your exact process requirements.

Nash is renowned for delivering custom-designed solutions which ensure reliable performance that our customers can trust. We offer a faster turnaround time for plug-and-play operations because our systems are easy to integrate into automated processes and minimize installations and operating costs. Nash engineers carry out in-depth analyses of their customers' application needs and work with them to maximize value and deliver high quality, reliable solutions that their processes require.



Trusted Service, Global Support



Know That Your Pumps & Systems
Are Protected With Nash®

NASH CERTIFIED™ Support & Service

Every NT Piston Pump & System is backed by our global network of service and support.

NASH CERTIFIED™ Field Service Team

Available to supplement your in-house maintenance operations and keep your system running efficiently and reliably. Factory-trained, and located around the globe, NASH Certified Field Service will help you identify needed repairs, prevent costly downtime, and increase mean time between failures.

NASH CERTIFIED™ OEM Parts

Every part is certified and built to our high quality standards using the latest designs and innovations for optimum performance and efficiency. Emergency quick ship parts are available at NASH locations worldwide.

Factory Service

Certified service centers in key industrial regions as well as field service technicians on hand to provide technical guidance and support. We keep your vacuum equipment and processes running smoothly, no matter how challenging the application.

Nash Products & Systems



NASH® Liquid Ring Vacuum Pumps & Systems

The reliable and durable solution for demanding process applications. Through ongoing commitment to innovation Nash continues to introduce liquid ring vacuum pumps that meet the rigors of the most demanding applications while improving efficiency and lowering total cost of ownership.



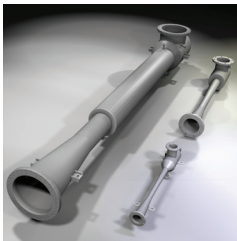
NASH® Mag Drive Liquid Ring Vacuum Pumps & Compressors

Provides leak-free performance for applications requiring the highest levels of security. Through a magnetic drive with static o-ring seals, the 2BM series achieves non-contact torque transmission, allowing for a hermetically sealed pump body. This key feature eliminated leaks while reducing maintenance.



NASH Dry Vacuum Pumps & Systems

Designed to meet your specific process needs, NASH dry systems are ready for simple process integration and operation, help minimize installation & operating costs, and reliably meet the rigors of the most demanding applications.



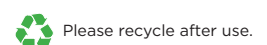
ENER-JET™ Ejectors & Systems

Whether on their own, or as part of a NASH ENER-JET Hybrid Vacuum System, NASH steam jet ejectors are engineered for optimum efficiency, reducing steam consumption while maintaining their ability to handle large volumes at very high vacuum levels.



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