

NETZSCH



Pumping
Solutions for
Your Process
Requirements



NETZSCH

The Heart of
Your Process

Tornado

Rotary Lobe Pumps

NETZSCH



A New Standard in Rotary Lobe Technology

For effectively pumping viscous fluids containing solids and abrasives, NETZSCH manufactures TORNADO® positive displacement rotary lobe pumps. Compact in design, NETZSCH TORNADO® pumps offer high efficiency, metered pumping capabilities by means of a pair of abrasion resistant lobes that rotate in opposing directions within a housing.

Compact Modular Construction

NETZSCH recognizes that your installation space is limited. The compact design of our NETZSCH TORNADO® rotary lobe pump minimizes your space requirements, making them ideal for skid and mobile applications. TORNADO® pumps are available in over 30 sizes and in four configurations, and can be combined into powerful systems that achieve high efficiencies even in the most demanding applications.

Low Maintenance

NETZSCH TORNADO® modular designed pumps can be easily and quickly assembled and disassembled for routine maintenance or field modifications. Full access to the pump through the front wear plate allows for quick and easy cleaning of all internal parts. Through this access, entire wet end rebuilds, including mechanical seals, lobes and front and rear wear plates can be completed in-line. These advantages translate into long operating life, low life cycle and maintenance costs and reduced process downtime.

Applications

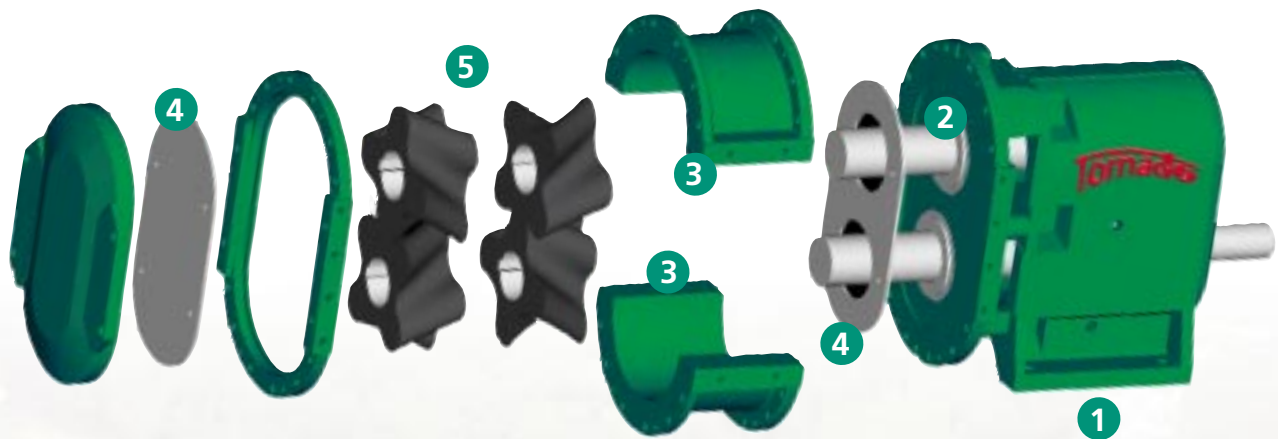
NETZSCH TORNADO® pumps are ideal for chemical, agriculture, municipal/industrial waste water, and food applications, where pumping viscous fluids, sludges and slurries that contain a high solids content or entrained air is necessary.

Additional Benefits

- Low life cycle costs
- Low investment costs
- Vertical installation possible
- Intermittent dry running capabilities
- Quiet running and low vibration
- Two-direction flow
- Self-priming
- Optional accessories available including monitoring instruments, control units, and mounting tools
- Technical Specifications Include:
 - Capacities to 3100 GPM
 - Pressures to 170 PSI
 - Temperatures: 220° F
 - Viscosities: 1 to 1,000,000 cps
 - Solids to 3"
 - Suction Lift Capabilities to 25 ft.



NETZSCH TORNADO® Components



1 Timing Gears
Patented timing gear design with open space between pump seals and gear housing prevents cross contamination of gear case and bearings.

2 Mechanical Shaft Seal
Two easy to service, wear resistant single cartridge mechanical seals provide complete protection of the pump's tool-steel shaft. These seals are independent of the direction of rotation and are easily installed through the front cover plate.

3 Housing
Compact modular design includes adjustable cast iron housing for extended service life. The lobes and seals can be easily serviced or replaced by removing only the wear plate.

4 Protective Wear Plates
Highly abrasion-resistant, reversible hardened wear plates provide twice the service life. By simply removing the front cover plate, entire wet end rebuilds can be completed in-line.

5 Rotary Lobes
TORNADO® lobes are offered in various elastomers to provide long service life and low shear pumping action of many types of fluids. Unlike other designs, no metal-to-metal contact ensures longer life in abrasive applications. Four interchangeable lobe designs are available to meet various application requirements.



Straight or Beveled Two Blade Lobes:
Designed for difficult products containing large solids. Highly efficient through its long sealing line and large volume conveying chamber.



Three and Four Blade Lobes:
Designed for high flow, quiet running applications. These lobes provide pulsation-free pumping action.



Global Presence

www.netzschusa.com

NETZSCH Incorporated is the North American subsidiary of the globally operating group of NETZSCH companies and is one of the world's leading manufacturers of progressing cavity pumps, wet and dry grinding and dispersion equipment, and filtration systems. The NETZSCH Group of companies has manufacturing and sales facilities in more than 60 countries.

With access to comprehensive global resources in engineering and research and development, NETZSCH brings our customers the optimal benefits of our continually advancing technology. NETZSCH subscribes to recognized worldwide standards in quality certification and process control. Our full capabilities in the functional areas of design, development, production, sales and service meet the highest demands established by the ISO 9001 International Quality Guidelines. Our customers rely on this commitment to deliver products of absolute reliability and exceptional quality.

Located in Exton, Pennsylvania, a western suburb of Philadelphia, our seven acre campus contains over 85,000 square feet of manufacturing, engineering, testing laboratories, marketing and corporate offices. Our employees assist and service the far reaching requirements of our customers throughout North America.

NETZSCH
Incorporated

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