



Sleep in Heavenly Peace Using NETZSCH NOTOS® Pumps in Mattress Production

Delivering flow consistency and reliability

In the world of premium sleep solutions, advanced polymer technologies have transformed mattress comfort by delivering exceptional pressure relief and support. A key component in the formulation of these hyper-elastic polymers is mineral oil, which plays a vital role in achieving consistent material performance. Since 2021, NETZSCH Pumps USA has supported this type of manufacturing process with NOTOS® multi screw pumps operating continuously to ensure precise and reliable transfer of mineral oil in a demanding production environment.

Mineral oil, while relatively low in viscosity, requires careful handling to maintain purity and flow consistency. The NOTOS® pump's ability to deliver smooth, pulsation-free flow with minimal shear makes it well suited for this application. Its robust design and precision engineering ensure that the mineral oil is transferred with exacting control, preserving the quality of the hyper-elastic polymer and, ultimately, the comfort of the finished mattress. Quiet operation and leak-free performance align seamlessly with the high standards required on modern production lines.

The pumps installed at this manufacturing facility have demonstrated exceptional reliability, operating continuously for more than four years. This longevity highlights the durability and efficiency of the NOTOS® design, which minimizes wear even under constant operation. With minimal maintenance requirements and high uptime, the pumps have become an essential contributor to consistent production output, helping manufacturers meet growing market demand with confidence.

Beyond this specialized application, NETZSCH NOTOS® pumps are widely used in traditional foam mattress manufacturing, where they handle critical components such as Polyols and Diisocyanates. These materials vary significantly in viscosity and chemical behavior, requiring pumping solutions capable of managing both lubricating and reactive fluids. NOTOS® pumps meet these challenges with ease, offering options such as magnetic coupling for hazardous or toxic fluids and mechanical seals for standard applications.



NOTOS® Multiple Screw Pump - in a mineral oil transfer application between tanks.



NOTOS® Same pump as above looking from motor side, just after commissioning.



NOTOS® Multiple Screw Pump Application - mineral oil transfer from tank to manufacturing line.

The versatility of NOTOS® pumps—whether transferring mineral oil for advanced polymer systems or Polyols and Diisocyanates for conventional foam—underscores their value in modern mattress manufacturing. Their compact footprint, customizable sealing configurations, and ability to handle a wide range of viscosities make them easy to integrate into diverse production environments. Manufacturers benefit not only from reliable performance but also from the peace of mind that comes with NETZSCH's engineering expertise.

In a market where comfort is paramount and consistency is essential, NETZSCH NOTOS® pumps help ensure that every mattress meets exacting quality standards. From innovative polymer-based designs to established foam production processes, these pumps play a quiet but critical role in advancing the sleep industry. At the core of every restful night is a commitment to quality—and for many manufacturers, that commitment begins with the dependable performance of a NOTOS® pump.

NOTOS® Pump Data (3 identical)

Pump type:	NOTOS® 2NS
Flow Rate:	up to 160 gpm / 36 m ³ /h
Pressure:	up to 90 psi / 6 bar
Medium:	Mineral oil
Temperature:	Ambient

Contact NETZSCH:

NETZSCH customers rely on our rigorous standards in design, engineering and manufacturing to deliver products with absolute functional reliability and exceptional quality. NETZSCH service, like NETZSCH quality, is geared to surpass our customers' expectations.

NETZSCH®

pumps-systems.netzsch.com

NETZSCH Pumps USA · 119 Pickering Way · Exton, PA 19341
Tel.: 610 363-8010 · Fax: 610 363-0971 · npa@netzsch.com

NETZSCH Pumps USA · 1511 FM 1960 Road · Houston, TX 77073
Tel.: 346 445-2400 · npa@netzsch.com

NETZSCH Canada, Incorporated · 500 Welham Road · Barrie, ON L4N 8Z7
Tel.: 705 797-8426 · Fax: 705 797-8427 · ntc@netzsch.com

NETZSCH Canada, Incorporated · 5050 76th Ave SE · Calgary, AB T2C 2X2
Tel.: 705 797-8426 · Fax: 705 797-8427 · ntc@netzsch.com