

## TORNADO® Rotary Lobe Pumps T.Proc™ in Petrochemical and Oil Processing Industries



# NETZSCH TORNADO® –

## High performance, reliability, ease of service

The NETZSCH TORNADO® T2 rotary lobe pump is ideal for pumping many petrochemical products including crude oil, heavy oil, light oil and petroleum. Suitable applications for the NETZSCH TORNADO® T2 rotary lobe pump include:

### Oil/Diesel fuel transfer

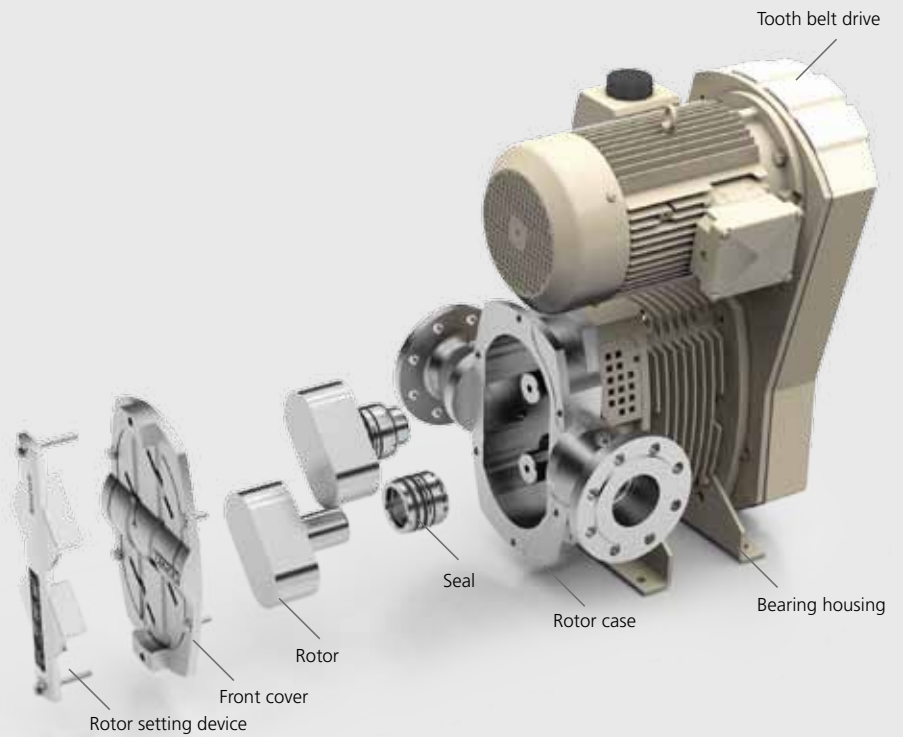
The TORNADO® T2 is perfect for filling/emptying tanks, especially where space is limited. One pump can be used for loading and unloading.

### Waste/Slop oil

Material options are available to resist corrosion and pre-mature wear from contaminated waste oil, e.g. due to hydrocarbons and chlorides.

### Crude oil tank washing

The TORNADO® T2 can be used for emptying and cleaning tanks that contain sediments.



The NETZSCH Rotary Lobe is available to be constructed in general compliance to API standards. Material options and arrangements include:



### Your Benefits

- Low shear
- Minimal to no pulsation (PRS)
- Able to handle solids
- Low NPSH
- Full service in place
- Very compact
- Self priming
- Handles a wide range of fluid viscosities
- Tolerance of dry running
- Reversible operation

### Housing Options

- Cast iron
- Stainless steel
- Hastelloy
- Duplex

### Insert Material Options

- NBR
- EPDM
- FPM
- HNBR

### Lobe Material Options

- Stainless Steel
- Hastelloy
- Duplex

# TORNADO® T.Proc™ – the right choice for your application

## NETZSCH TORNADO® Rotary Lobe Pumps T.Proc™ – Operating Parameters

Range	Model	Flowrate at nominal speed range (theoretical)	Speed (nominal) recommended range	Flowrate at max. speed (theoretical)	Speed max.
		appr. m <sup>3</sup> /h	rpm	m <sup>3</sup> /h	rpm
T1	MB-1	<b>3 to 14</b>	100 to 500	23	800
T1	MB-2	<b>4 to 20</b>	100 to 500	32	800
T2	08/45	<b>8 to 39</b>	100 to 500	46	600
T2	06/70	<b>12 to 58</b>	100 to 500	70	600
T2	08/100	<b>16 to 82</b>	100 to 500	99	600
T2	06/140	<b>24 to 119</b>	100 to 500	142	600
T1	XLB-2	<b>30 to 151</b>	100 to 500	166	550
T1	XLB-3	<b>43 to 214</b>	100 to 500	235	550
T1	XLB-4	<b>60 to 302</b>	100 to 500	332	550
T1	XLB-6/2	<b>121 to 604</b>	100 to 500	604	500
T1	XLB-8/2	<b>181 to 905</b>	100 to 500	905	500

Pumping of oil water with DS content of 5% on an offshore platform with the flowrate of 140m<sup>3</sup>/h against a discharge pressure of 3 bar.



Discharge pressure (max.) continuous/ intermitted	Displacement (theoretical)	Flange connections
bar	l/r	mm/ANSI
6/8	0,47	65/2,5"
6/8	0,67	80/3"
8/10	1,27	80/3"
6/8	1,90	100/4"
8/10	2,74	125/5"
6/8	3,95	125/5"
4/6	5,03	150/6"
4/6	7,12	150/6"
4/6	10,06	200/8"
4/5	20,12	250/10"
3/5	30,18	250/10"

Pumping of drilling fluid to feed a centrifuge with the flowrate of 6 – 28 m<sup>3</sup>/h against a discharge pressure of 1 bar. Due to dusty environment the pumps are installed in a container.

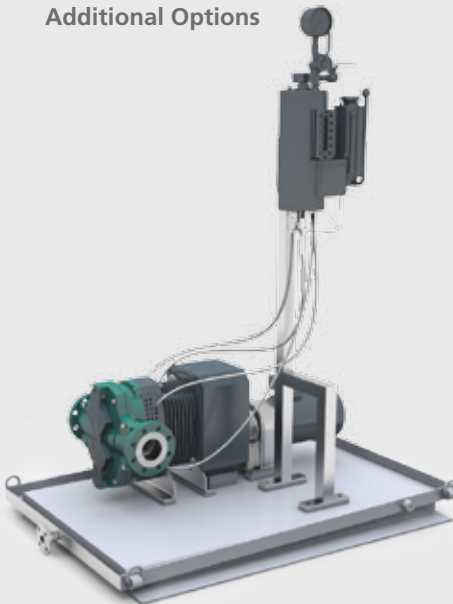




## Sealing Options

Cartridge seals are available in single or double seal configuration with API flush plans to suit application and specification demands. Seals are totally removable from the front of the pump by removing cover plate and lobes only.

## Additional Options



API Baseplate



Integrated Quench



By-Pass Pressure Relief Valve System

## Further information

TORNADO® Rotary Lobe Pump  
Brochure NMP · 081

Partnership in the Oilfield Processing  
Brochure NMP · 309

The NETZSCH Group is an owner-managed, internationally operating technology company headquartered in Germany.

The three Business Units – Analyzing & Testing, Grinding & Dispersing and Pumps & Systems – provide tailored solutions for highest-level needs. Over 2,500 employees at 130 sales and production centers in 23 countries across the globe guarantee that expert service is never far from our customers.

The NETZSCH Business Unit Pumps & Systems offers with NEMO® progressing cavity pumps, TORNADO® rotary lobe pumps, screw pumps, macerators/grinders, dosing systems and equipment custom built and challenging solutions for different applications on a global base.

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