

NETZSCH Multi Screw Pumps

Thirty Five Years of Design, Manufacturing and Application Experience



NOTOS™ Multiple Screw Pumps

2NS Series

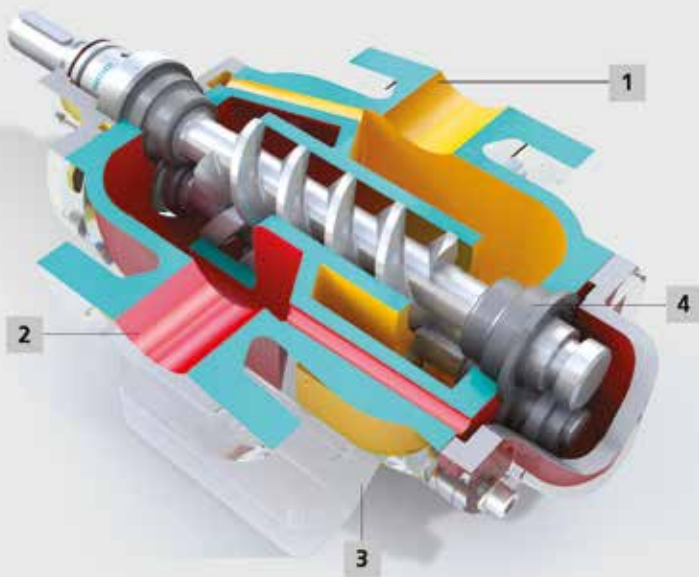
NETZSCH Two Screw Pumps have a drive screw intermeshing with a driven screw, transferring torque from one screw to the other.



- Flow up to 2200 gpm / 500 m³/h
- Pressure up to 236 psi / 16 bar
- Temperature up to 570° F / 300° C
- Viscosity up to 10,000 cSt

Advantages

- Hydraulically balanced
- Quiet operation
- Long lifetime in service
- Low pulsation
- High efficiency
- 3-year manufacturer's warranty



The hydraulic balance is the main reason for the long life cycle of this pump.

1 Flanges
DIN, ANSI and SAE connections are available.

2 Accessories
Optional built-in relief valve, heating, and API 682 mechanical seal.

3 Configurations
Foot mounted, pedestal mounted, semi-submersible or flange mounted.

4 Bearing Bushing
Internal bearing bushing helps to support radial loads.

3NS Series

NETZSCH Three Screw Pumps have one drive screw intermeshing with two driven screws, transferring torque from one screw to the others.

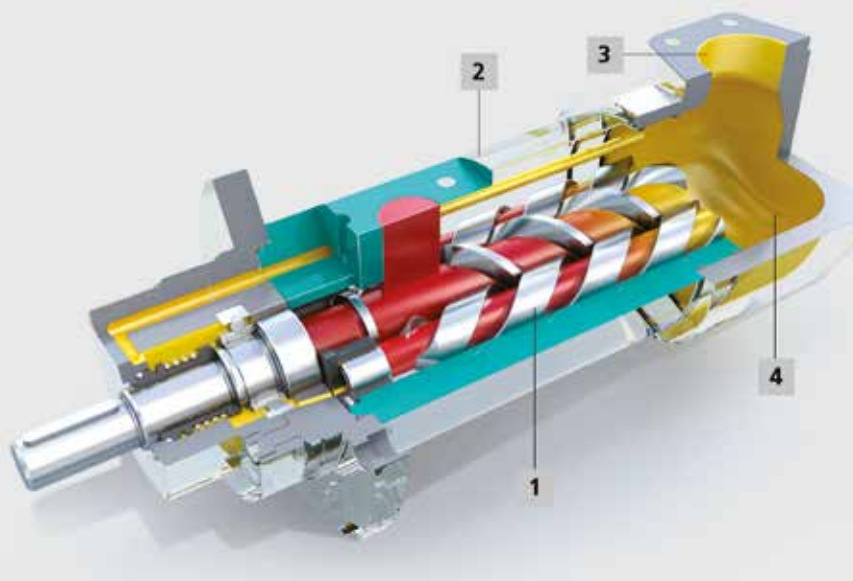
pumping principle



- Flow up to 880 gpm / 200 m³/h
- Pressure up to 1160 psi / 80 bar
- Temperature up to 570° F / 300° C
- Viscosity up to 12,000 cSt

Advantages

- High efficiency
- Easy maintenance
- Lightweight and small footprint
- Low pulsation
- 3-year manufacturer's warranty



The pump is axially balanced due to the bushing and NETZSCH High Efficiency Unique Design (HEUD).

1 High Efficiency
With the NETZSCH High Efficiency Unique Design (HEUD), the volumetric efficiency is extremely high.

2 Configurations
Foot mounted, housing, light, flanged, vertical and semi-submersible.

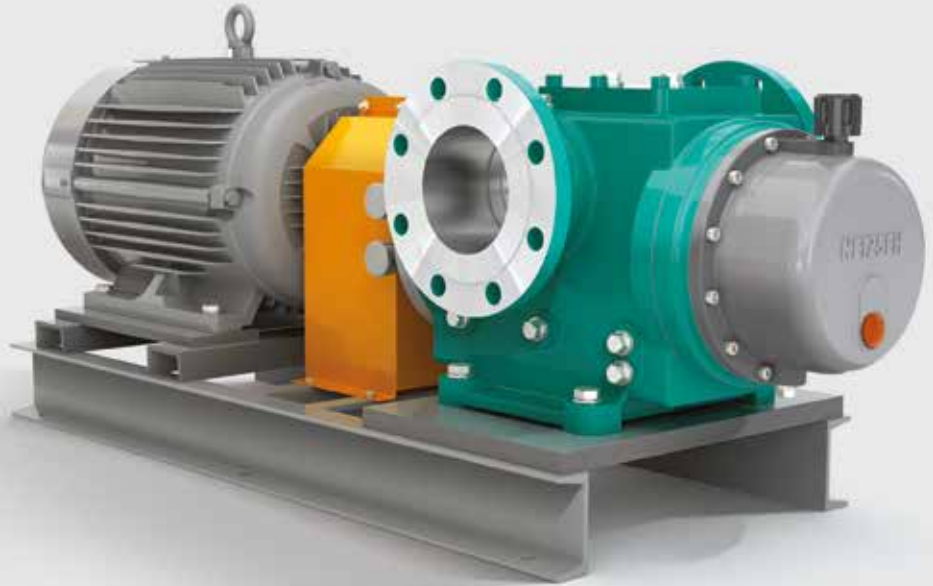
3 Flange Options
DIN, ANSI and SAE ports in-line, other options are available.

4 Self Priming
Able to prime up to 26 ft / 8 m either vertically or horizontally mounted.

NOTOS™ Multiple Screw Pumps

4NS Series

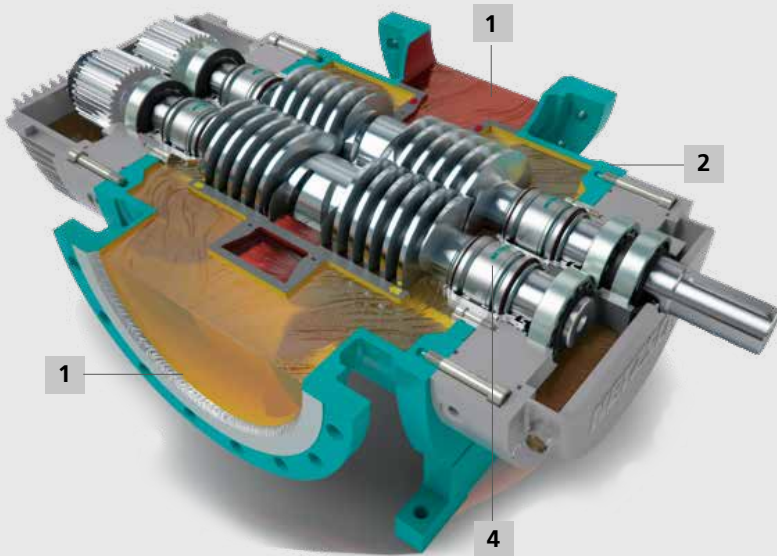
NETZSCH Four Screw Pumps (Geared Twin Screw Pumps) have two shafts with four screws rotating inside a replaceable liner with timing gears. No metal-to-metal contact.



- Flow up to 6600 gpm / 1500 m³/h
- Pressure up to 1176 psi / 80 bar
- Temperature up to 570° F / 300° C
- Viscosity up to 50,000 cSt

Advantages

- No metal-to-metal contact
- Complies with API 676 3rd Ed.
- Small footprint
- Long lifetime in service
- High efficiency
- 3-year manufacturer's warranty



1 Flanges
DIN, ANSI and SAE are available. Vertical flanges upon request.

2 Configurations
Vertical, horizontal, in-line or top discharge available.

3 Timing Gears
Double helical timing gears transfer the torque, reducing vibration and noise.

4 Accessories
Optional built-in relief valve, heating, and API 682 mechanical seal.

APPLICATIONS



- Onshore & Offshore crude oil
- Fuel oil
- Diesel
- Asphalt
- Bitumen
- HFO and LFO
- Water-oil emulsions
- Dark oil
- Paraffin
- BPF
- Petroleum asphalt cement (PAC)
- Bunker
- Produced water
- Gasoil



- Load and unload
- Main engine fuel feed
- Propeller shaft bearings lubrication
- Main engine sealing lubrication
- Gearbox lubrication
- Power generator pump (diesel)
- Lubrication and pre-lubrication
- Fuel oil
- Anchor system
- Cargo pump
- Stripping pump
- Bunkering



- Turbine bearing lubrication
- Wind generator bearing lubrication
- Boiler fuel feeding
- Turbine propeller angle adjustment system
- Bearing lubrication system
- Load and unload pump
- HFO, LFO and FO for Thermal Power Plants



- Polyol
- Grease
- Emulsions
- Molasses
- Palm oil
- Eva emulsion
- Resins
- Polymers
- Hydraulic oil
- Vegetable oil
- API54 mechanical seal plan pump
- Isocyanate
- Fuel feed cement oven

NOTOS™ Multiple Screw Pumps Applications



Lubricant oil,
660 gpm / 150 m³/h
60 psi / 4 bar
Pump installed
inside the vessel



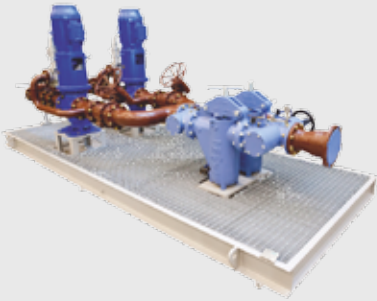
Lubricant oil
260 gpm / 60 m³/h
120 psi / 8 bar



Marine service
Lubricant oil,
220 gpm / 50 m³/h
90 psi / 6 bar



Asphalt Refinery
530 gpm / 120 m³/h
150 psi / 10 bar
Heating system



Pump with suction filter system in a power generation plant.



Horizontal pump, ISO VG68, 2,465 gpm / 560 m³/h max. pressure 230 psi / 16 bar.



Vertical pump used in the marine industry.



Gear Box Lubrication
Lubricant Oil
64.2 gpm / 14.6 m³/h
174 psi / 12 bar



Bearing Lubrication
Lubricant Oil
39 gpm / 8.9 m³/h
145 psi / 10 bar



Cargo Pump
Fuel Oil
528 gpm / 120 m³/h
167 psi / 11.5 bar



Bearing Lubrication
Lubricant Oil
176 gpm / 40 m³/h
102 psi / 7 bar

The NETZSCH Group is a mid-sized, family-owned German company engaging in the manufacture of machinery and instrumentation with worldwide production, sales and service branches.

The three Business Units – Analyzing & Testing, Grinding & Dispersing and Pumps & Systems – provide tailored solutions for highest-level needs. Over 3,500 employees at 210 sales and production centers in 35 countries across the globe guarantee that expert service is never far from our customers.

The NETZSCH Business Unit Pumps & Systems offers NEMO® progressing cavity pumps, TORNADO® rotary lobe pumps, NOTOS™ multiple screw pumps, macerators/grinders, dosing systems and equipment custom built and challenging solutions for different applications globally.

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