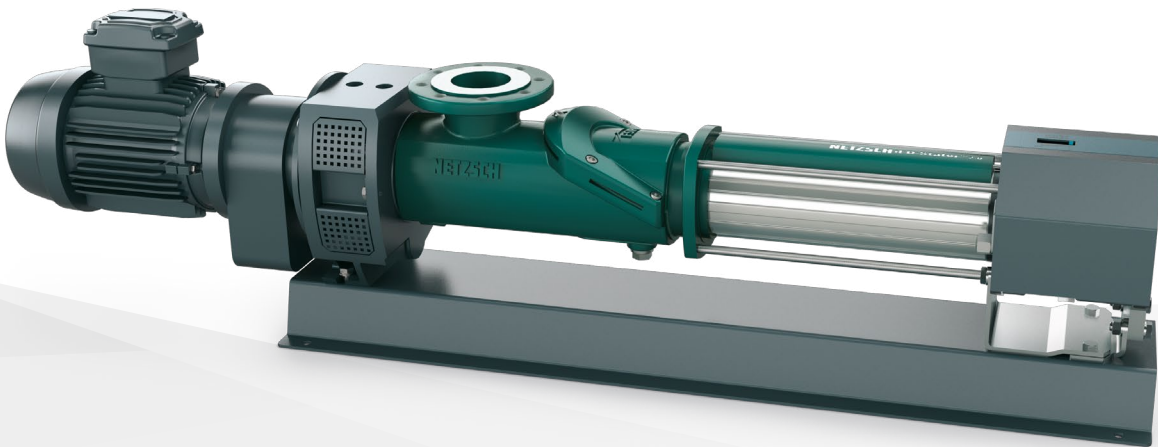




Products & accessories

NEMO Progressing Cavity Pumps

Comprehensive and uncompromising solutions for all industries

Pumps & Systems

Design of the NEMO Pump

1

Rotor

From wear- and corrosion-resistant metal designs to the wear-free ceramic rotor NEMO CERATEC.

2

Stator

We manufacture stators to the latest standards. Minimised tolerance ranges thereby optimise the performance of the pump. Our unique, fully networked production and process data monitoring system, developed in-house, is backed up by consistent quality testing.

2.1

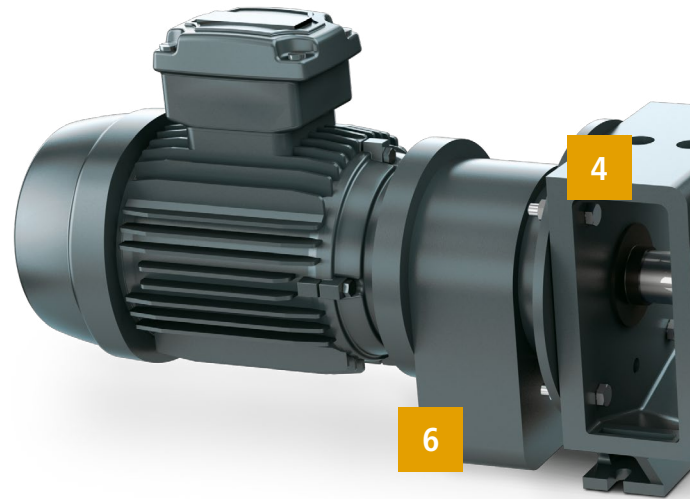
Stator with conventional technology

The stator inlet is vulcanised into the tubes with integrated seals on both ends. The inlets are available in a wide variety of NEMOLAST elastomers, plastics and metals. Stator inlet with cone-shaped opening to improve product feeding into the conveying chamber.

2.2

Stator with iFD technology

The iFD-Stator consists of a two-part reusable housing with a polygonal profile and the NEMOLAST elastomer housed within. The advantages of this technology include a lower breakaway torque, higher efficiency, increased service life, simple and quick replacement, and environmentally friendly disposal.



3

Drive train

The drive and connecting shaft with coupling rod and two gimbal joints provide the power transmission from the drive to the rotor. Alternatively, also available with a flexible coupling rod without joint.

4

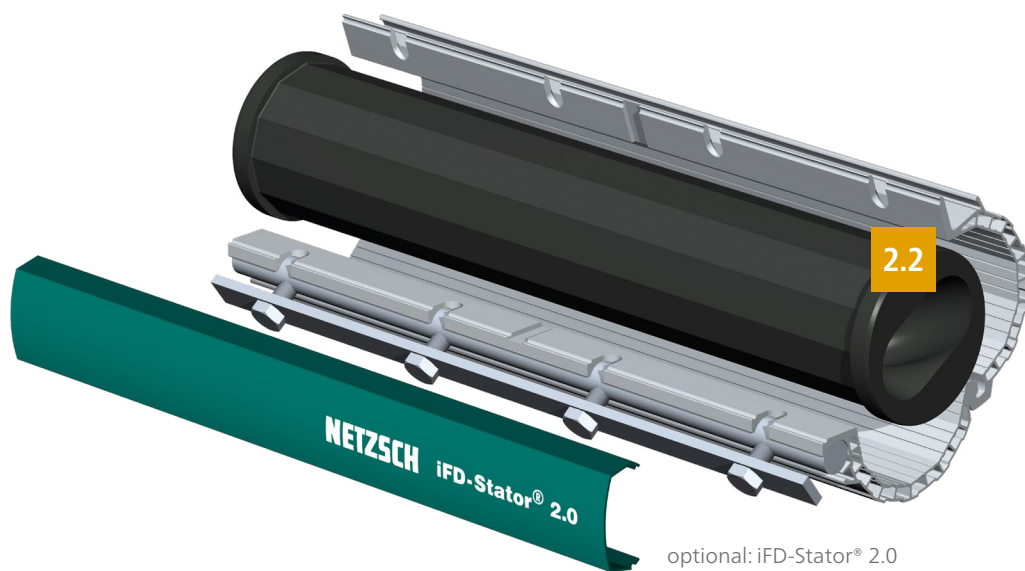
Shaft sealing

Standard design with single-acting, wear-resistant, bi-directional mechanical seals. On request, single-/double-acting mechanical seals from a range of manufacturers, as well as cartridge and special seals and stuffing-box packing.

5

Suction and pressure housing

Hydrodynamic design with flange or thread connections in accordance with DIN and international standards. Grey cast iron, stainless steel, rubber-lined or Halar-coated, and special materials as per requirements.



6

Block design

As the drive is directly flanged onto the pump's lantern, the dimensions are compact, the overall weight is low, the shaft heights are constant irrespective of the design and size of the drive – the pump requires low maintenance and is economical.

„Full Service in Place“

PUMP SERVICE WITHOUT REMOVING THE PUMP FROM THE SYSTEM



1

Housing in FSIP design with inspection cover

The FSIP design of the suction housing mainly differs from the standard design when you look at the large inspection cover, but the housing dimensions remain unchanged. All installed NEMO BY/SY pumps in the sizes mentioned above can be upgraded without any problem. After this upgrade you can fully service the pump while it is installed. All wetted parts are immediately accessible. All wearing parts can be replaced in less than half the time.

2

Inspection cover

The inspection cover is fixed by only a few screws which can be easily removed without special tools.

3

Stator with iFD technology

The stator consists of a reusable housing with a polygonal profile and the elastomer inserted into it. The benefits of the technology are reduced starting torques, higher degree of efficiency, prolonged lifetime, easier and faster change of the wear part and environmentally friendly disposal. In combination with the housing in FSIP design there is the additional benefit that the rotor/stator can be changed simply and quickly outside the pump and without pre-tensioning, once the stator housing has been opened. The rotating unit can simply be lifted out and leaves the pump open from flange to flange. The previously mandatory stator expansion length is no longer required, which significantly reduces the installation space needed.



4

Rotor

In wear- and corrosion-resistant designs, various materials on request.

5

5a

Drive train and sleeve coupling

Removing the inspection cover from the FSIP pump gives you access to a sleeve coupling which joins the rotor to the coupling rod. Here only one screw has to be removed to split both elements from each other.

6

Shaft sealing

Standard for the FSIP concept is a single-acting, non-directional and wear-resistant mechanical seal, which can be easily removed through the large inspection opening. Other options upon request.

7

xLC stator adjustment unit

The xLC unit is attached to the flange of the elastomer part of the stator and can compress or stretch it. In the event of wear, axial compression of the elastomer increases the preload between the rotor and stator, thereby compensating for the wear.