

The PFT Range of Rotors and Stators



After René Moineau, a mathematics professor from Paris, had patented his eccentric screw pump in 1936, it rapidly made its entrance in various industries.

In 1963, KNAUF/PFT successfully used eccentric screw pumps with machine-applied gypsum plasters for the first time in the building trade. Since then, there have been numerous further developments and improvements. Today, PFT offers special eccentric screw pumps, allowing of an undisturbed conveyance of a wide variety of mortar-water mixtures, for its entire range of machines.

The basic principle, however, has remained unchanged up to now: A wear-resistant rotor turns in a rubber-lined housing (stator). The rotor, designed as a single-thread screw, rotates in a double-thread stator. This thread difference creates chambers which open and close from the inlet side to the discharge side in an almost pulsation-free process.

PFT STATORS

The PFT stators are available in various designs, depending on customer requests and material requirements.

Retentionable PFT stators:

"Retentionable" means that the outer casing of the stator is either a slotted steel tube or a hard plastic tube. With a PFT clamp, the delivery and back pressures can be individually adjusted.



Maintenance-free PFT stators:

These stators have unslotted steel tubes as outer casings, which results in a constant delivery pressure and thus considerably facilitates a trouble-free operation.



PFT stators with air pores:

The PFT Stator LP is specially designed for materials that have to be applied with a fixed air content, e.g. restoration plasters. Through an opening in the stator, air is suctioned in during pumping, so that the required quantity of air is added to the material.

Smooth-running stators:

Smooth-running stators facilitate the starting of the conveying pump and thus reduce the starting torque.



A few years ago, the new PFT TWISTER stators were added to our product range. These wave-shaped stators are breaking all records. The PFT TWISTER, easy to recognise by its outward appearance, is characterised by scale-like structure on the inside. Just like fish scales, this structure causes an advantageous fluidic behaviour of the mortar-water mixture, which results in a lower consumption of energy. In this way, the PFT TWISTER helps you to optimise the pumping process in terms of fluid mechanics. Many stator types are available with or without PIN (locking device) on request.

The special rubber mixture of the PFT stators is designed to offer a long service life and to resist considerable wear.

PFT ROTORS

The PFT rotors are available in two designs: with or without a peg. A peg, i.e. an "extension" of the rotor, is needed when the material pumped by the screw pump has to be mixed once more in a mixer, e.g. the PFT ROTOMIX or the PFT ROTOQUIRL.



The exceptionally high wear resistance of the PFT rotors is due to embedded chromium carbides. Although the PFT rotors are extremely robust, a special hardening process is used to make the driving head insensitive to sudden stresses. So you can definitely rely on PFT in the long term.

Convince yourself of the large variety of PFT pumps. Please ask for our brochure "PFT ROTOR/STATOR Program", that gives you an overview over the most common Rotor/Stator pumps.