KÄCHELE
VIBRASTOP

Construction and plaster stators

FLEXIBILITY FOR YOUR SUCCESS

The Revolution

EVEN WALL®

Kächele – we prepare the way

For a long time it has been known that using stators with a constant elastomer wall thickness would have major benefits for the use of progressive cavity pumps . However, in the past, the pro- duction costs involved in stators of this kind were too high. And consequently so was the selling price.

The appearance of this stator fits in with that of the rotor. It is no longer cylindrical but is also helical, as the rotor is.

The advantages at a glance

- Cost savings, since less material used
- Lower weight
- Less transport and storage costs
- Less vibration
- Easier handling
- Longer service life
- Higher pressure

The rotor can also be manufactured in this new and unique way. It also has an even wall thickness and is hollow due to the produc- tion technique, which makes it 50% lighter.

Extensive tests have confirmed that the **EVEN WALL®** rotors can be subjected to as much stress as can solid rotors manufactured in the conventional way.

A new manufacturing technique enables Kächele to produce stators with an even elastomer wall thickness. At surprisingly cost-effective and consequently marketable prices.

Can be delivered with or without antitorsion device.

The Advantages

EVEN WALL®

End cap

EVEN WALL® is making its mark

One advantage of the even elastomer wall thickness is the generally low degree of heat generation and the considerable improvement in heat dissipation. The elastomer is not nearly as heavily stressed in this version as it is in cylindrical stators.

Wear on the stator is reduced considerably, which means that its service life is significantly extended.

Another important advantage lies in the higher pressure build-up and the associated higher delivery height. Higher temperatures, an abrasive delivery medium, different chemical and physical compositions of the plaster mixture – all this can be handled better with the new stators.

Without changing the system design, a higher and more constant pump pressure can be generated if an **EVEN WALL®** stator is employed. This means that the same pumping job can be carried out with a shorter and considerably more compact pump. Alternatively, the same construction length, delivery pressure and delivery volume can be maintained while the drive power is reduced. This certainly makes itself felt in the operating costs.

The output of existing eccentric screw pumps can be raised to previously unknown levels with this Kächele innovation.

EVEN WALL®

The Fields of Application

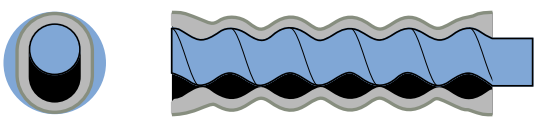
Possible applications

The manufacturers of plaster machines have been waiting for this new geometric design. Thanks to this innovative manufacturing method, they now have the chance to use the new rotors and stators in numerous applications for the first time ever. This is why the use of the **EVEN WALL®** stator in plaster pumps has caught on so quickly.

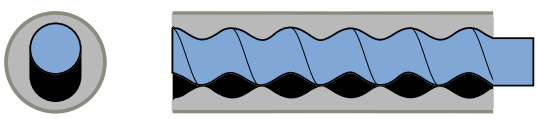
The new stators can be used in almost all machines without any restrictions.

Kächele offers a complete pump set for plastering machines. This consists of optimally co-ordinated precision rotors and stators with an even wall thickness. The stators are maintenance- free and are adapted individually to meet requirements, according to their specific use. Larger delivery heights and even processing of the material as a result of the evenly-shaped delivery flow are decisive advantages, particularly in the construction business.

EVEN WALL® design



Cylindrical design



The Performance

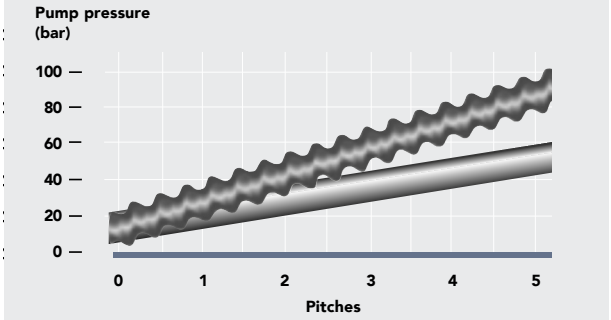
EVEN WALL®

EVEN WALL® – logical progress

A new manufacturing technique permits the economical production of stators with an even metal and elastomer wall thickness.

The stator sheath is made from a steel tube. The end seals are integrated at both ends.

Theoretical pump pressure in a comparison of systems



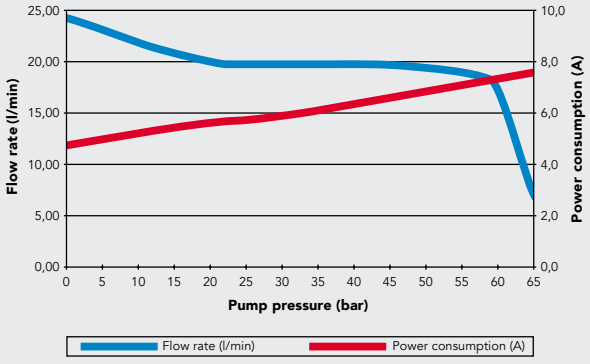
The lubricant for progressive cavity pumps

STAROFIX

Advantages:

- Simplifies installation of the rotor in the stator.
- Lower breakaway torque therefore better start-up.

Test diagram for EW 6-3



Motor drive power:	*4 kW*	*Test medium:*	*Water*
Motor speed:	*400 rpm*	*Maximum pressure:*	*80 bar*
Starting current:	*5,2 A*	*Hold-back pressure:*	*35 bar*

Range of products

Until recently, all stators in progressive cavity pumps consisted of a cylindrical tube into which elastomer was inserted.

This resulted in different elastomer wall thicknesses in the stator. Kächele also supplies these cylindrical stators in all sizes.

The right one for every requirement.

Spray nozzles are also developed by our rubber team at the factory in Weilheim

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Well-known pump manufacturers world-wide have been using stators manufactured by Kächele in Weilheim/Teck for many decades.

An experienced team of engineers develops and tests the optimum geometries and elastomer mixtures for a huge range of applications.

Kächele uses its own injection technique to manufacture Kächele stators up to 6 m in length, in any diameter and made from all well-known elastomer types. They are available in conventional or self-lubricating rubber qualities, with or without a mechanical anti-torsion element, as a tensionable or maintenance-free version and for application temperatures of up to 200 °C.