

PIL-MIX Industrial Propellers

PILVAD A/S produces specially welded, acid proof, stainless steel propellers. The 3-bladed marine propeller has a special form and pitch ratio, which ensure an optimal stream pattern and a high pump capacity. Thereby a strong circulation with high homogenisation level and low energy consumption is achieved.



The 4-bladed flow propeller provides strong circulation at low speed. 4-bladed flow propellers are, therefore, well suited for tasks, where high peripheral speeds may harm the product. Flow

propellers are used, for example, in fermenting tanks for beer brewing and flocculating tanks.

Furthermore, we can mention dispersion discs, cross beam and blade mixers.



PILVAD_{A/S}

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PIL-MIX Agitators

Mixing Technology



PILVAD_{A/S}



PILVAD A/S has know-how for Innovation

Many years of experience, combined with modern technology, are the basic fundamentals supporting the products of PILVAD A/S.



This engineering background ensured that the latest and most suitable technology is used in the construction of equipment. The many years of experience, combined with highly qualified employees, provide us the know-how to develop and supply mixers, that meet customers' demands for modern technology and functionality to a broad range of industries.



Since 1966 Erik Pilvad has supplied industrial mixers to the processing industry.

In 1973 Erik Pilvad founded the company and continues today as managing director.

Following his graduation from university, his son Henrik Pilvad was appointed a partner in the company.



Regardless of the know-how and experience build up over the years by the company, new assignments demand continued research, development and testing in cooperation with our customers.

In order to give the best possible technical advice, we have developed a software programme for design engineering of mixers. The programme provides information concerning stirring organs, mixer shafts and efficiency levels. At the same time circulation volumes, peripheral speed and critical rotary speeds are calculated.

PILVAD A/S enjoys a reputation of providing optimal service and last but not least, "after-sales-service".





More and more companies demand fully automatic plants to optimise production. Therefore PILVAD A/S offers control panels. These are designed to control the complete manufacturing process of mayonnaise and similar products.



In order to meet labour requirements regulating lifting loads, we have in recent years developed various forms of automatic lifting devices. The hydraulic lifting supports are supplied with a control panel. Alternatively, we supply manual lifting devices. The illustration shows a few of the lifting devices, which through the years have been delivered to Akzo Nobel. Lifting devices with mixer, designed for explosion-proof environments.

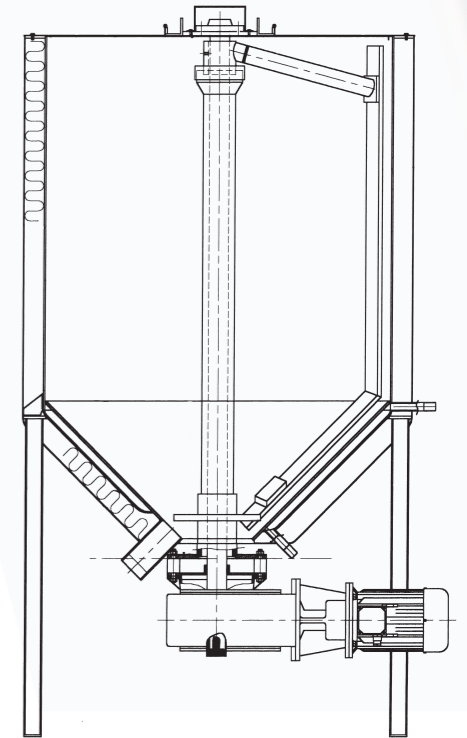


Process-Oriented Design

The conceptual framework behind PILVAD A/S has been from the start, to develop solutions in close cooperation with our customers in the field of homogenizing fluid products. Therefore, PILVAD A/S offers many types and designs of mixers to satisfy a broad field of application.

Our standard programme includes a broad range of accessories in special designs. The programme offers optimal utility value for customers and users. The mixers are designed, drawn and constructed on the basis of specific demands and requirements of our customers.

PILVAD A/S is also a powerful partner when total solutions, project design and supply of complete production lines are required. Furthermore, we are agents for several foreign manufacturers. In cooperation with them, we supply complete production lines using mixers, containers, pumps and control panels, as well as filling and packing equipment. We also supply plants for kneading of very high viscosity products.



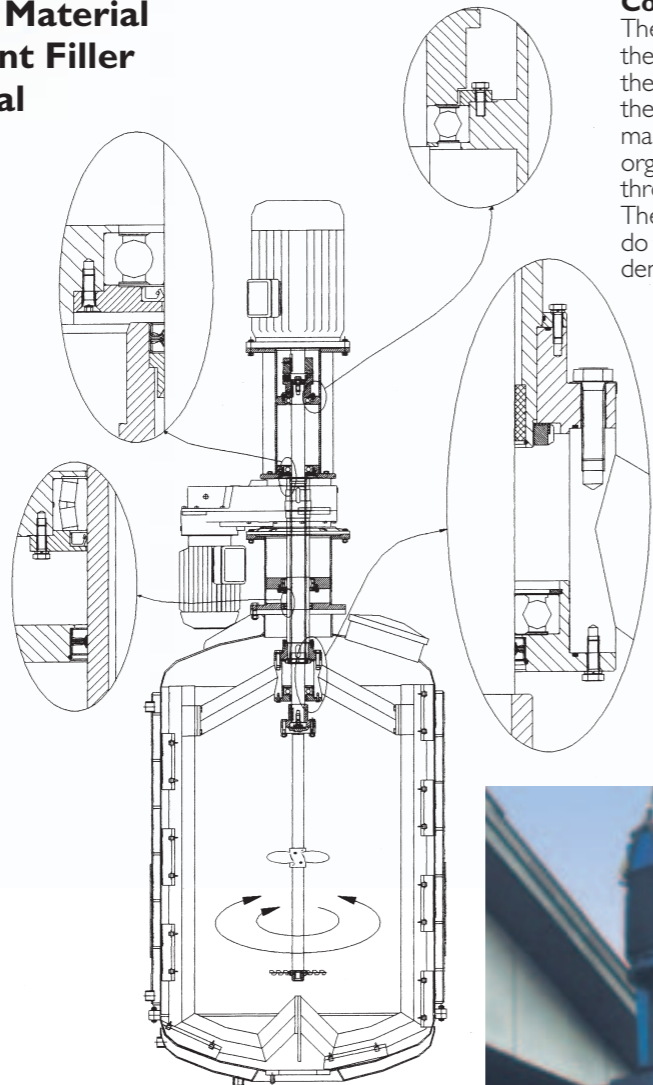
We are suppliers of mixers to Toms Fabrikker, (G&J, Pingvin Lakrids) for the production of liquorice. The mixers are bottom-mounted to provide more space for filling and lower construction height. The mixers are constructed in such a fashion that they operate without the use of sealing.



PIL-MIX Coaxial Mixers

for High Viscosity Products

- Chocolate
- Cheese
- Paint
- Sludge
- Recycling Material
- Polymeric concentrates
- Moulding and Padding material
- Adhesives
- Sealing Material
- Silicone Joint Filler
- Filling Material
- Bitumen
- Asphalt
- Hotmelts
- Coloring and Varnish
- Building Material
- Thickener
- Cosmetic products
- Paste
- Resins

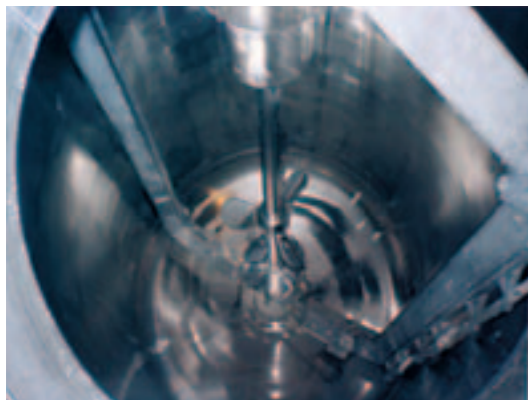


Construction
 The coaxial mixers, with their strong bearings for the mixing shafts, ensure the lowest possible maintenance. All stirring organs can be mounted through a manhole. Therefore, containers do not require demountable covers.

Application

It is well known, that you will save much energy and processing time by using twin mixers, when working with high viscosity products.

For the last 15 years, PILVAD A/S has manufactured coaxial mixers for various industries and has, therefore, acquired a wide experience in the design and production of this special equipment.



The photo illustrates a 6.000 litre process vessel with anchor mixer, dispersing disc and propeller for the manufacture of glue, sealing compounds and fillers. PILVAD A/S supplies coaxial mixers for containers with or without pressure/vacuum for various industries. The same coaxial mixer is delivered in a hygienic version for the production of chocolate, cream cheese and similar products.



Many of our customers have very good experience with our products and have, therefore, reordered our powerful coaxial mixers, particularly for the production of glue and sealing compounds. PILVAD A/S delivers plants complete with control systems and vessels according to customer specification.

Economy

Many high viscosity products must both be cooled and heated. However, an anchor mixer with scrapers and high-speed homogenizing mixer will reduce processing time by 50 –75 % in comparison with the previously used mixers. This can be achieved under vacuum with a minimum of air inlet, while the product can be finished in the one and the same vessel.

Reactor and Fermentor



A 20.000 litre process tank, delivered to Lawter Int. for the production of modified resins. The mixer was supplied with a 55 kW gear motor together with a double mechanical shaft sealing, complete with thermo-siphon system. The equipment is dimensioned to operate under high pressure and very high temperature, and delivered with quick-break switch, frequency converter and condenser. A 4-bladed cross beam mixer together with foam breaker, is mounted on the 4.500 mm long shaft.



PIL-MIX special mixers are based on a broad standard programme, allowing for specific constructions. In other words, a design which meets the demands of the traditional industrial mixers. At the same time, this opens the opportunity for individual solutions. The equipment, constructed on the basis of the DIN requirements, has through the years been delivered to different industries:

- Chemical and pharmaceutical industries
- Plastic industry
- Raw material industry
- Paint and varnish industry
- Food and stimulant industry
- Environment and waste water treatment
- Biotechnology

All standard mixers are delivered with oil sealing rings, preventing oil and grease from gear and bearings, coming in contact with the product. We always deliver sealings for vacuum and pressure from reputable suppliers, e.g. Burgmann. Through the years, PILVAD has delivered mechanical shaft sealers to many different industries. These sealings provide maximum safety with regard to durability and sealing levels, in both sterile and contaminated environments. The range of supply includes everything from simple string sealings to mechanical shaft sealings.



PIL-MIX Mixer Programme

PIL-MIX standard mixers are manufactured in different designs and sizes – all with strong shaft bearings. The serial produced mixers use shaft lengths from 0,4 m to 16 m. Within this wide range PILVAD can at any time offer solutions that meet customers' needs. Since the individual components are also produced in series, standard mixers can be delivered with short notice and at a reasonable price.

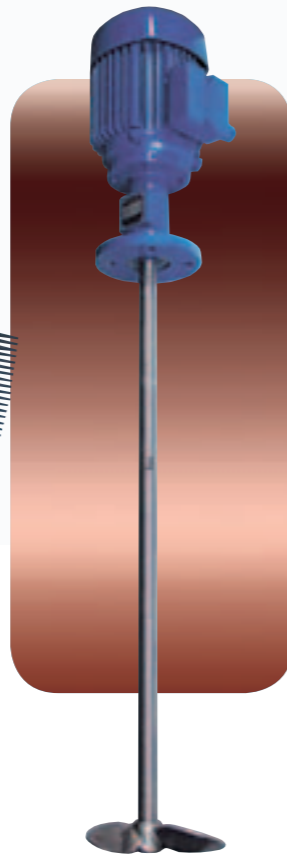
All flange mixers can be delivered with all types of sealings for pressure and vacuum.



Laboratory mixer, type 0, is ideal for limited production and test series. Is available in many varieties, according to requirements, and with different motor types, demountable shaft and many different stirring organs, including dispersing disc and finger stator.



Edge mixers type K0, K1, K2, supplied with stainless steel mounting. Available with quick coupling on shaft.



Norm 0 flange mixer with Ø25 mm shaft and strong bearing housing.



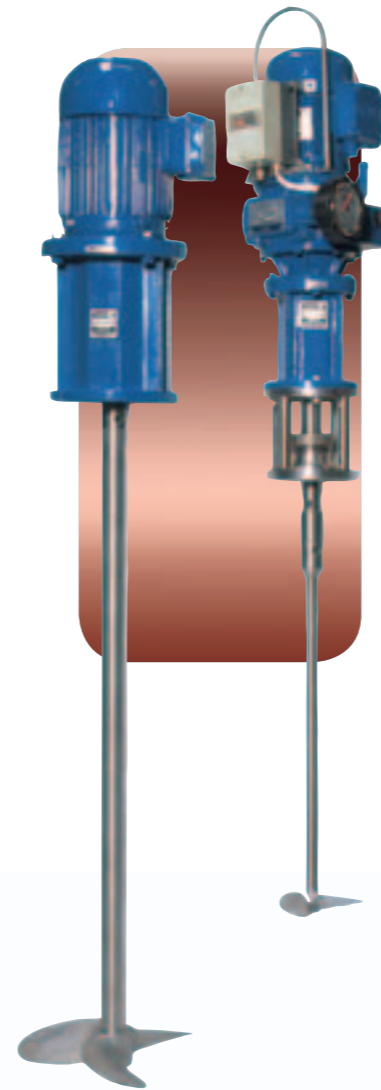
Norm 25 and 45. Available in many varieties.



PILVAD has a wide experience in the design of mixers with adjustable speed, which is required to avoid problems with critical rotary speeds. We are always at your disposal in assisting you to select regulating types: frequency converter or manual variator.



As a general principle, PILVAD offers mixers with German motors and gears. However, all types of mixers can be supplied with components according to customers' wishes.



Norm 1 + 2. Very strong moulded bearing housing. Available with shaft coupling.



Norm 60 bearing housing for long shafts and powerful motor and gear.



Illustration of Norm 70/80 bearing housing. Bearing housings are manufactured with shafts up to Ø 300 mm.

Complete delivery of containers and mixers to BASF. High speed motors, calculated for dispersion and homogenisation.

