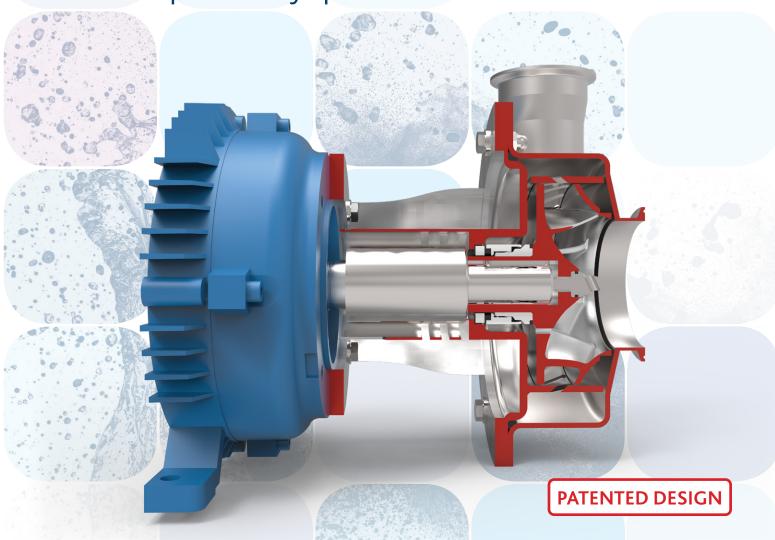


High Shear pump series SFP2 & SFP3

# Packo High Shear Pump

Enhances productivity up to 100%!



- Self pumping
- Hygienic design, so easy to clean
- Easy installation and maintenance
- Use of std. components
- Highest efficiency on the market, 50% less energy consumption
- Very quiet operation

# **High Shear Mixer Pump Series SFP2 & SFP3**

### Working principle

The new, efficient high shear mixing method is based on our perfectly cleanable pump series FP2 with open impeller and series FP3 with closed impeller.

The Packo shear mixer pump is mainly used for in-line mixing, homogenisation and dispersion applications.

The shear is generated between the rotor and an innovative and optimized perforated stator (patented design).

The shear can be optimized and increased by raising the speed of rotation. Shear rates up to 100.000 s-1 can be achieved at a maximum speed of 3600 rpm!

The final goal is to achieve a homogeneous solution of two liquids with high difference in viscosity and/or density and to obtain a particle size reduction for emulsions and particles.

The smooth operational performance achieved by this conforms with the unique precision and quality you have come to expect from all Packo components.



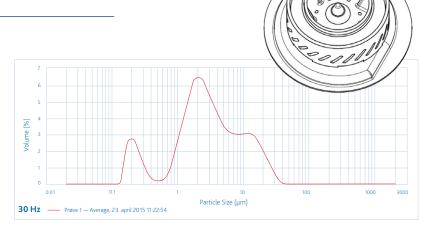
### The stator

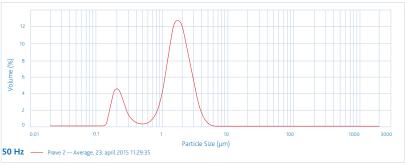
Thanks to the special designed stator (patented design) together with small clearance between rotor and stator an important shear will be generated resulting in a significant particle size reduction (between 1.4 and 2  $\mu$ m)! A smaller particle size will result in a more stable final product!

#### **Particle Size Reduction**

Particle size from a customer trial with a dairy based formulation with 3.5% AMF.

Sample test externally by 3rd party on a Malverne instrument using Laser diffraction.







### **Types**

• SFP2/32-160	35 m³/h	25 m	max. 11 kW	max. 750 cP	shear up to 30.000 s-1
• SFP2/40-160	50 m³/h	25 m	max. 11 kW	max. 750 cP	shear up to 30.000 s-1
• SFP2/50-160	75 m³/h	25 m	max. 11 kW	max. 750 cP	shear up to 30.000 s-1
• SFP2/40-250	50 m³/h	40 m	max. 22 kW	max. 750 cP	shear up to 100.000 s-1
• SFP3/80-160	130 m³/h	20 m	max. 22 kW	max. 1000 cP	shear up to 30.000 s-1
• SFP3/100-200	200 m³/h	50 m	max. 45 kW	max. 1000 cP	shear up to 40.000 s-1

## **Typical applications**

#### Mixing of 2 liquids

- with a large different specific gravity (f.i. honey in water)
- having a large different viscosity (f.i. oil in butter)
- that are difficult to mix (f.i. oil in water)

# Dispersing of solids in liquids (f.i. toothpaste in water)

# Dispersion of gas in liquids (foamed desserts)

#### Dairy

- · Recombined milk
- Drink yoghurt

#### Beverage

- · Soda syrups & concentrate
- Sucrose solution
- Green tea

#### Food

- Hummus
- Salsa & hot sauce
- Fruit puree

#### **Personal Care**

- Shampoo & conditioner
- · Sanitizer gel

#### **Bio-pharm**

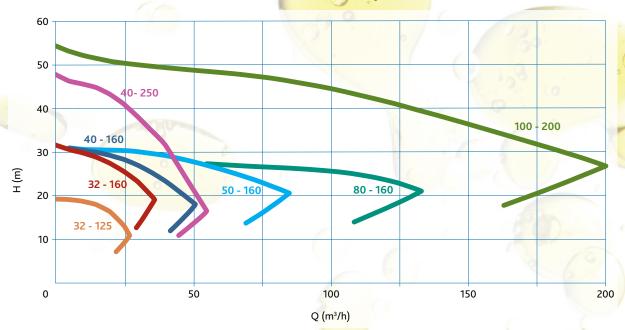
- Media prep
- Buffer solution
- Glucose

#### **Industrial**

- Paintballs
- · Edible oil refining
- · Pigment dispersion

### The right solution for every requirement!

### Performance curves SFP2 & SFP3 at 2900 rpm



### The benefits

### Packo High Shear Pump Series SFP2 & SFP3

- · High efficient so less energy cost!
- Use of std. components, easy maintenance
- Several seal configurations available
- ATEX available
- Monobloc execution, easy installation
- Easy to clean (CIP and SIP)
- · 'Self' pumping
- High mechanical & hydraulic shear
- Rapid solid dissolving

Particle size reduction leading to a stable product!





For complete mixing & homogenizing units, please contact Packo.



BQA\_QMS019\_C\_1994041



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Production in Belgium in an ISO 9001 and ISO 14001 certified company.



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