

# Model PSL centrifugal slurp pumps – for fluids containing large amounts of trapped air

1-6019-EN

They've stood the test for years in

- machine tools,
- filtering systems,
- washing and degreasing installations.

## What's so special about the slurp pump?

During modern metal-cutting operations air can get trapped in the coolant. This trapped air can impede or even stop delivery of the fluid.

The "System Spandau" slurp pump makes sure that air is separated and dissipated from the fluid while it's being pumped. As a result of this bleeding, the flow remains constant, thus ensuring the desired cooling or lubrication.

Another advantage: the reservoir can take up less space since it's completely emptied. The pump keeps delivering as long as the intake is wetted with fluid.

**Please note:** our model PMS centrifugal slurp pumps are designed to deliver smaller amounts of fluids containing trapped air. They work within a range of  $Q_{\max} = 400$  l/min and  $H_{\max} = 15$  m.



## Technical data

Delivery rate  $Q_{\max} = 1250$  l/min

Delivery head  $H_{\max} = 105$  m

Immersion depths down to 670 mm

## Design features

- ① Suction impeller
- ② bore connecting to shaft through the impeller
- ③ two axial grooves along the shaft to serve as guide courses
- ④ radial bores leading inside the shaft at the end of the grooves
- ⑤ bottom end of shaft with axial bore and banjo bolt

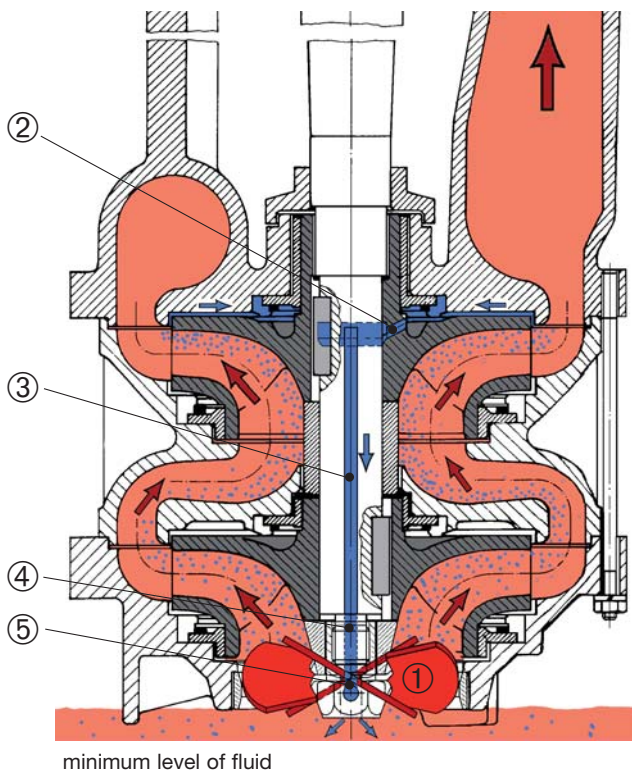
## Functional principle

The impeller ①, a pre-pressurizing propeller, ensures stable delivery, even when only little fluid is still left in the reservoir and air is drawn in as well ("slurping").

The air is separated from the fluid by centrifugal force. In the topmost pump chamber it is then fed through the impeller ② to the shaft via the connecting bore.

Due to the difference in pressure, the air flows along the grooves ③ to the bottom of the shaft. From there it makes its way through holes ④ to the hollow end of the shaft ⑤.

There the air can escape into the fluid, where it is picked up by the suction impeller and swirled into tiny particles that are easy to deliver.



The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of use of the information contained herein.

SKF Lubrication Systems Germany GmbH  
Product department Spandau Pumps  
Motzener Strasse 35/37 · 12277 Berlin · Germany  
PF 970444 · 12704 Berlin · Germany  
Tel. +49 (0)30 72002-0 · Fax +49 (0)30 72002-261  
[www.spandaupumpen.com](http://www.spandaupumpen.com)

This brochure was presented by: