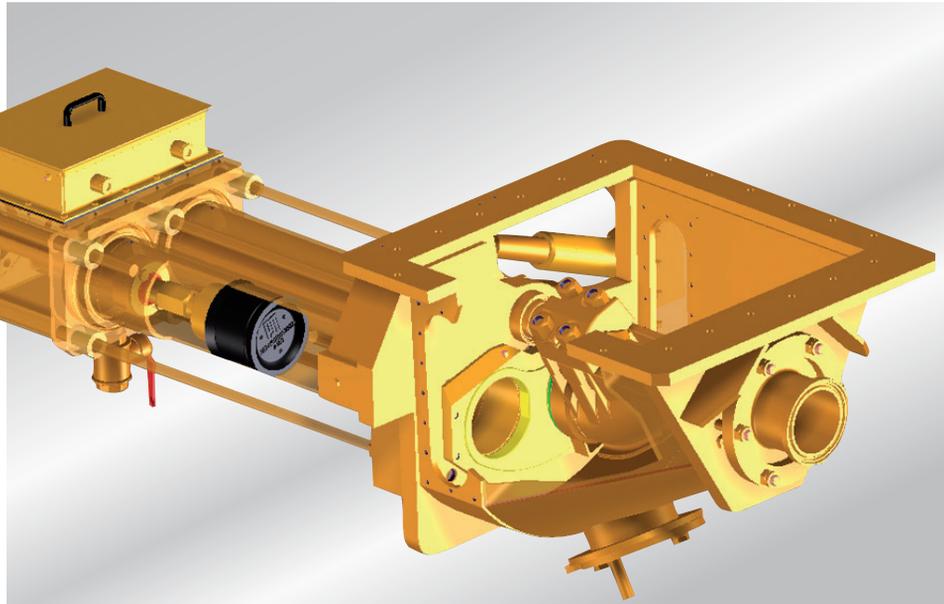


# S-transfer tube technology

Simple – reliable – made for the toughest applications



**KOS pumps are the first choice when it comes to maximum availability, easy maintenance and long service life**

In the KOS series, the pressure outlet (connection of the delivery line) and the delivery cylinders are connected by an S-transfer tube. This enables a **freeflowing conveyance** of the material **without the use of valves**.

**Foreign bodies up to 2/3 of the size of the discharge outlet can be conveyed without any issue.**

The KOS pump is particularly suitable for conveying **highly viscous sludges** and other material with a **high content of foreign bodies**.

## Advantages of the S-transfer tube

- Reliable pump system
- Few moving parts
- Robust, tested and proved design
- Optimum flow arrangement
- Low wear, long service life
- Easy wear part replacement

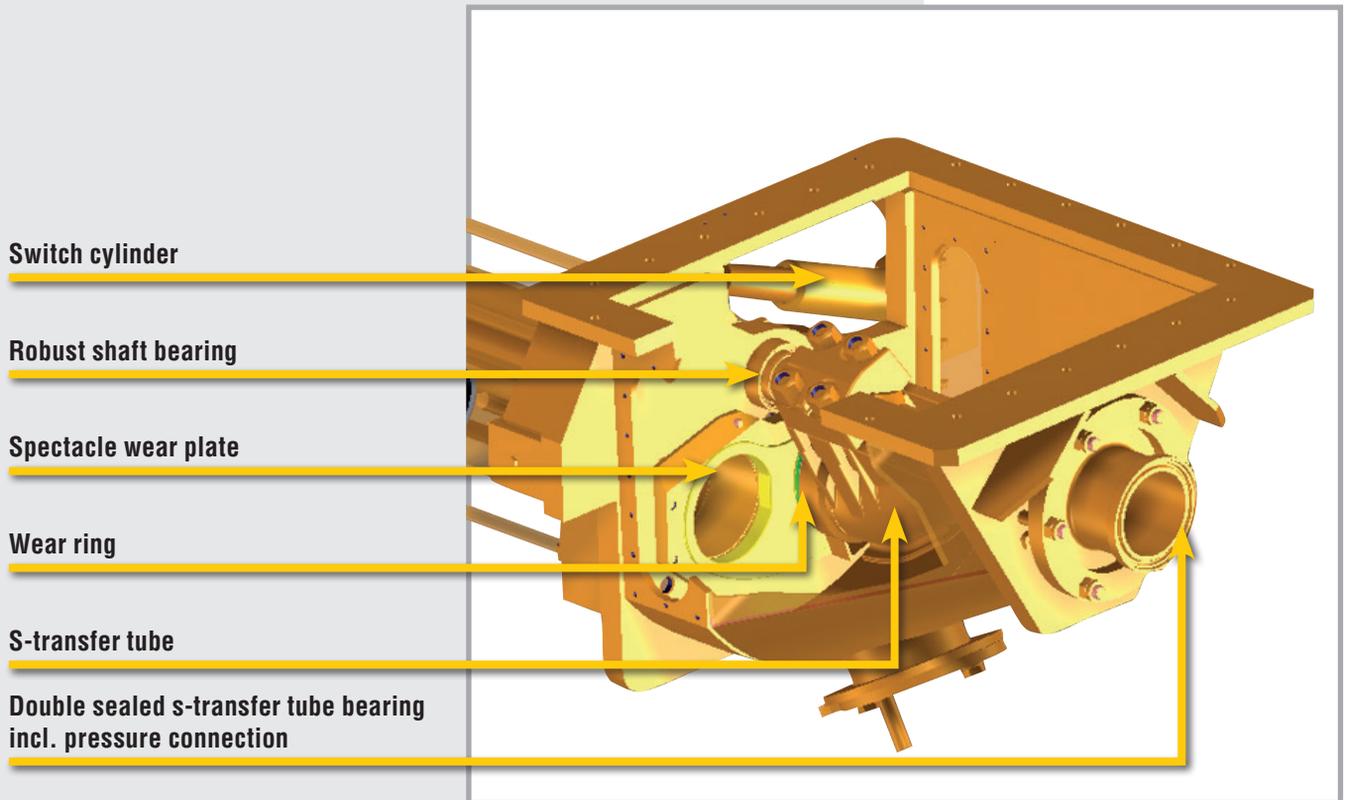


**Putzmeister**

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# Decisive advantages of the S-transfer tube



## Advantages at a glance

### ■ Reliable and powerful operation

- Large unrestricted passages, with no restricting contours in the material flow
- Conveying of foreign bodies up to 2/3 of the size of the discharge outlet
- Powerful, fast switchover thanks to robust hydraulic cylinders
- Simple, tried and tested design based on more than 50 years of experience
- Controlled conveying of material reduces energy costs

### ■ Low wear, low costs

- Automatic seal at the sealing point using a self-adjusting ring
- Fewer wear parts than other piston pump models
- The S-transfer tube has only one sliding sealing point
- Low spare part costs

### ■ Long service life

- Armoured wear parts
- Not sensitive to running dry
- Optimum utilization of wear parts thanks to the adjustability of the S-transfer tube
- Proven thousands of times in various applications
- S-transfer tube switching by two hydraulic cylinders outside the sludge hopper – contamination of hydraulic oil is not possible
- All moving parts are connected to the automatic grease lubrication system

## Large unrestricted passages for optimum material flow

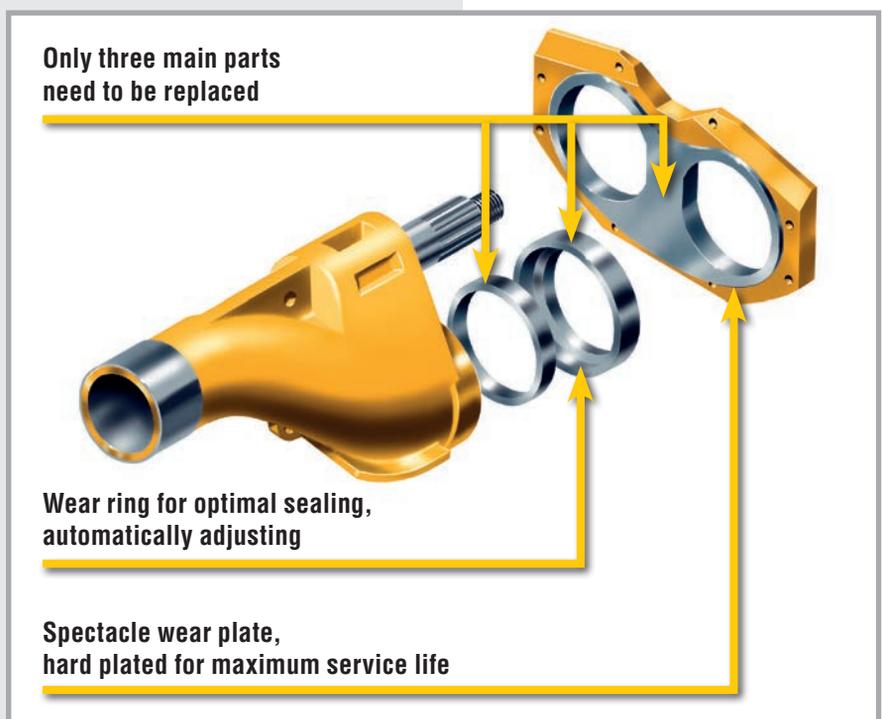
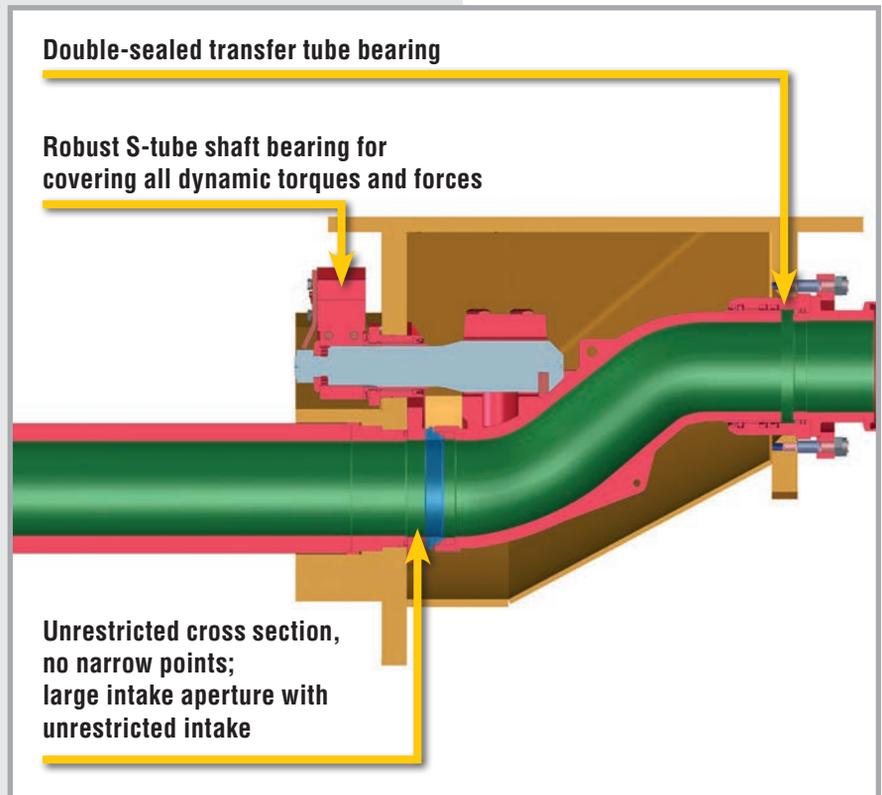
- The large unrestricted S-transfer tube cross section presents no problems for considerably large foreign bodies.
- Foreign bodies with a size of up to a maximum of 70% of the pressure connection diameter can be pumped.
- The S-tube system is extremely insensitive to foreign bodies

## Automatic sealing function minimizes wear

- The wear ring is pressed against the spectacle wear plate by the delivery pressure. The sealing effect is automatically improved as delivery pressures increases.
- The S-transfer tube has only one sliding metallic sealing point.
- Armoured wear parts (hard plating) for maximum service life

## Few wear parts reduce spare part costs

- Wear parts are easy to replace, resulting in short machine downtimes and increased availability.
- By re-adjusting the S-transfer tube, it is possible to fully utilize the wear parts to the limits of their life.



# The S-transfer tube – successfully in use worldwide

- **Tested and proved system thanks to over 35 years of development.**

The potential of the S-transfer tube was not recognized by the competition – **Putzmeister led it to success.**

- **Used thousands of times all over the world in a wide range of mobile and fixed industrial applications**

- **Delivery rates up to 400 m<sup>3</sup>/h**

- **Delivery pressures up to 150 bar for fixed industrial applications, up to 250 bar for concrete applications**

- Drive outputs up to 1600 kW

- **World records for high- and long-distance delivery systems**

- **The “standard” for materials which are difficult to pump, such as**

- Drained sewage sludges with a high proportion of foreign bodies
- Oil sludges, coal sludges, paper sludges
- Bio-waste from household waste
- Recirculated material in biogas plants
- Mineral wastes
- Fly ashes and bottom ashes
- Concrete, coarse concrete, salt concrete
- And many more difficult types of high-density substances



S-transfer tube means power!  
Putzmeister concrete pumps are the world record holders at Burj Khalifa with a pumping height of 606 m!



Pumps with S-transfer tube are used in many applications and can handle the most difficult materials with ease:

Sewage sludge/ - **Sewage plants**  
municipal cake

Backfilling/tailings - **Mining industry**

Drill cuttings - **Offshore/onshore industry**

Paper sludge - **Chemical industry**

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