Heavy Duty Slurry Pumps
- VS™ Vertical Sump

Reliability, Efficiency, Versatility and Durability
KETO Pumps is a designer, manufacturer, and supplier of engineered slurry pumps, solutions and associated products. As well as being able to offer complete slurry pump packages to the global mining market, we are able to support the existing market with spares that fit into the dominant brand.

KETO Pumps is committed to delivering industry leading products and services which meet the technical and commercial challenges of our customers. We operate across the full spectrum of mining industry activities. Our customer focussed aftermarket organisation is positioned to provide comprehensive care for our varied and diverse product lines.

In 2012, global engineering group Clyde Blowers Capital acquired KETO Pumps Australia, First Africa Pumps and Tri-Invest. The merge of the three companies formed KETO Pumps and Systems. Clyde Blowers Capital is a private equity company specialising in engineering businesses. Their current portfolio includes David Brown Gear, David Brown Hydraulics, Parsons Peebles Motors & Generators and Moventas.
KETO Pumps achieve superior performance in the harshest conditions

INNOVATIVE DESIGN AND REDUCED COSTS
KETO Pumps are designed to operate in typically harsh and remote environments. Mining pumps are no exception. KETO Pumps specifically designed to endure in the toughest of mining conditions, offering the most reliable and efficient choice. From long life impellers, to unique sealing solutions we can offer an upgraded part or a complete pumping solution. The features of our pumps and parts include:
- Greater wear life
- Increased efficiency
- Interchangeable with other suppliers
- Short lead times
- Reduced downtime and more reliable service intervals
- Outstanding pre-sale and post sale support
- Prompt and reliable delivery of replacements
- Available in a wide range of materials for your duty
- Reduced operating costs

APPLICATIONS
The KETO VSTM Vertical Sump pump range are designed for heavy duty abrasive and corrosive sump applications such as mineral processing, chemical processing, coal preparation, effluent handling and gravel & sand.

EXTENSIVE EXPERIENCE AND QUALITY
KETO Pumps has accumulated a vast amount of operational experience from installed equipment. With our experience to date and our advanced analysis methods we develop high performing pumpsets and parts for current and future market needs, working closely with system designers and end users.

Our team of pump industry experts are dedicated in providing a full support offering. We have modern manufacturing facilities and service centres located globally within easy reach of your operation, fully equipped with the latest technology and equipment. We are committed to providing every customer with the best products and service at the highest quality standards.

Heavy duty slurry pumps

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INNOVATIVE DESIGN AND REDUCED COSTS
KETO Pumps engineers have responded to industry concerns in developing their range of heavy duty slurry pumps which feature patented innovative designs that can significantly reduce the operational costs of slurry pumping. By addressing key performance areas, KETO Pumps have achieved improved reliability, longer service life and greater efficiency.

The KETO VSTM Vertical Sump pumps are available in six standard setting depths from 0.9m to 2.4m, with other setting depths available on request. The KETO VSTM is built with bearing assemblies specifically designed for heavy duty applications.

These pumps have the versatility to be set up to whatever specification and slurry application required. KETO Pumps keep in stock a wide variety of material options, including 27% chrome white iron and rubber. Specialist materials are available on request for highly acidic or caustic duties.

The standard and recommended pump configuration is belt driven, however direct drive is available on request. They are also available in a pre-fabricated conical sump with quick clean facilities.

KETO Pumps genuine replacement parts also offer outstanding interchangeability with competitor slurry pumps offering customers inventory advantages. This allows improvements to be achieved without complex modifications to existing plant.

KETO PUMPS PRODUCT RANGE
KETO Pumps also offer a comprehensive range of products and services to suit many applications. Some of our key product offerings aligned to the KETO VSTM Vertical Sump pump are the HS™ Slurry Horizontal pump, HHS™ High Head Horizontal pump, MP™ Solid Case Horizontal pump and DW™ Dewatering pump. For more information on our products and services please visit www.ketopumps.com
KETO VS™ Vertical Sump Pump - features and benefits

1. **CONCENTRIC CASING**
   - Minimises shaft load over wide operating range and reduces wear

2. **CANTILEVER HEAVY DUTY SHAFT DESIGN**
   - Requires no shaft seal which translates to no shaft sealing problems and no wetted bearing in the slurry

3. **CAST BEARING HOUSINGS**
   - Superior critical speeds and lower vibration levels than competitor equipment
   - Extended bearing life

4. **TOP AND BOTTOM INLET**
   - Suitable for severe conditions, with no need for priming and self-venting

5. **LARGE IMPELLER PASSAGES**
   - Reduced risk of blockage

6. **REPLACEABLE STRAINERS**
   - Allows for easy maintenance

7. **INTERCHANGEABLE BEARINGS**
   - Interchangeable with KETO horizontal pumps, thereby reducing site inventory levels

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### SEAL ARRANGEMENT

- Standard seal arrangement only

### WET END MATERIALS (VOLUTES / IMPELLERS)

- Rubber RN55
- Butyl Rubber
- 27% Chrome
- Urethane
- Specialist linings on request

### BEARINGS

- Choice of:
  - Heavy duty bearings as standard
  - Severe duty available on request

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*Standard range shown above, specialist engineered units are available on request.*
Optional arrangements and features

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*Other materials available on request

### KETO Pumps offer a wide range of configurations allowing the pump to be tailored to a specific application

#### WET END OPTIONS

Wetted components are available in a wide range of alloys and elastomers. KETO selects the optimum combination of materials for maximum resistance to wear in virtually any industrial application, including those demanding both erosion and corrosion resistance and where larger particles or high density slurries are encountered. A wide range of wet end materials are available including:

**BUTYL RUBBER**
- A special grade rubber is available for services which are moderately acidic, where the slurry comprises fine particles or contain oils

**RN 55 RUBBER**
- This is our recommended standard grade rubber for use in corrosive services where 27% chrome is not suitable

**27% CHROME IRON**
- Recommended for the majority of sump services, this slurry grade white iron ensures tramp washed into sump as well as sharp particles and elevated temperature slurries are handled with ease

**KIBA™ BEARING ASSEMBLY OPTIONS**

The heavy duty cantilever shaft avoids the need for lower submerged bearings, which can be the cause of early bearing failure.
- Heavy duty roller bearings, located above mounting plate
- Bearings are not submerged
- Labyrinth/flinger bearing protection
- Rigid, large diameter shaft
- The vertical cantilever design with no gland or submerged bearings avoids the need for expensive gland or bearing flushing water.

**STANDARD**
- Ideal for common pit depths
- Interchangeable with dominant brand

**HEAVY DUTY**
- Shaft has wide diameter with larger bearings to reduce deflection and increase long bearing life

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**IMPELLER OPTIONS**

**STANDARD DOUBLE SUCTION SLURRY IMPELLER**
- Ideal for general sump services

**VOXET IMPPELLER**
- Ideal for air entrained duties and fragile pumpages as carbon transfer
KETO Pumps understand the process and demands of the mining industry and can offer comprehensive services tailored to your needs. Our dedicated service centre engineers and support ensure your pump, whatever the make or model, is up and running, optimising performance and minimising downtime. Our global network of service facilities are fully committed to supporting our installed base wherever it may be.

KETO offer full service offerings and overhaul of slurry pumps, service exchange for improved life bearing assemblies with a 12 months warranty with no questions asked policy (please visit www.ketopumps.com for more details), and full hire options for unexpected break downs. We also offer a Pump Service Exchange, saving you the time and cost of stockcng inventory on site and repair pumps in less than ideal conditions.

The combination of our in-depth technical expertise and first-class facilities ensures reliable quality, delivery and service every time. Our service offerings include:
- Installation and commissioning
- Inspection and maintenance
- Repair and overhaul
- Service exchange programme
- Technical services
- Pump assessment
- Upgrades and re-rates
- On-site / off-site support
- Training
- Spare parts

**Standard hydraulic range - coverage charts**

**Global aftermarket solutions**
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KETO pumps reserves the right to incorporate our latest design and material changes without notice or obligation. Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Please contact your local sales representative for product availability in your region.

For more information visit www.ketopumps.com

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