

KETO GLOBAL PARTNER IN PUMP SOLUTIONS GLOBAL PARTNER

GLOBAL PARTNER IN PUMP SOLUTIONS

KETO are specialists in the design, manufacture and service of pumps, parts and associated products. We cover the most aggressive applications including mining, aggregate and industrial markets. You can trust our expertise, technology and support services to meet your total pump and rotating equipment requirements.

Our mission is to provide cost effective solutions ensuring quality, safety, excellence and reliability in every aspect. These values underpin all of our services, from rapid response parts to universal repairs and upgrade services to complete pumping solutions.

We maximise performance by integrating innovative products, application know-how and service offering to achieve lower total cost of ownership, increased uptime, reduced costs and energy savings. We have the expertise and infrastructure to deliver first class solutions with the ability to respond to your needs quickly and effectively.

This approach provides the basis of positive partnerships with our clients. Our strength is our commitment to customer collaboration with total support that you can depend on.

KETO GLOBAL PARTNER IN PUMP SOLUTIONS GLOBAL PARTNER IN PUMP SOLUTIONS KETO

DELIVERING MAXIMUM VALUEFOR OUR CUSTOMERS

We are your trusted partner to provide you with reliable, results-focused solutions. Our expertise, product quality and comprehensive service offering mean you can count on KETO, no matter what.

INNOVATIVE KETO PRODUCT PORTFOLIO

We've developed our ranges of high performing pumpsets and parts through close collaboration with our customers and significant operational know-how.

Combining patented design, state-of-theart technology and superior materials, our products are designed to endure even in the most demanding applications. Our equipment is simple to install, requires less maintenance, consumes less energy and lasts longer. Furthermore, KETO parts and components are dimensionally interchangeable with other pump brands. All of our designs have been optimized, rationalising each part's needs, which results in inventory advantages.

With many years of industry experience and application knowledge, our experts work with you to achieve the optimum performance specifically designed for your application.

CUSTOMISED SERVICE SOLUTIONS

We offer a wide range of services to optimise the performance of your plant and reduce your total ownership costs. KETO Serve™ custom support services are tailored around your needs, always ensuring reliability and availability.

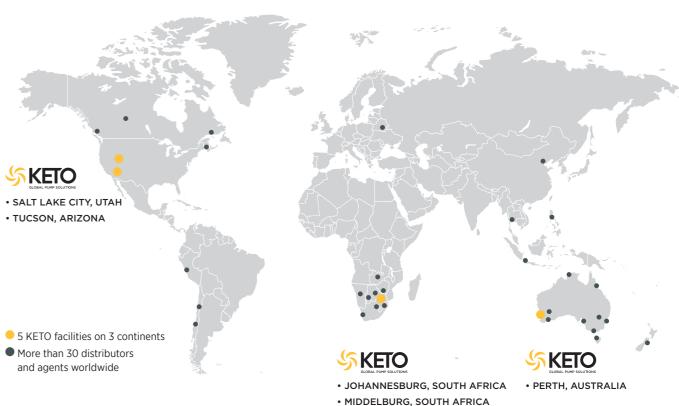
We understand how to maintain and service even the most difficult pumps and rotating equipment for maximum performance and trouble-free operation. Our dedicated service team works with you to identify when to replace parts or carry out maintenance and when to upgrade existing equipment for optimum product life. Our service is based providing peace of mind with a long-term measurable action to reduce costs and keep your equipment and process running at peak performance.

LOCAL PRESENCE, GLOBAL SUPPORT

Our global position combined with our regional strength allows us to be able to respond to our customers' needs quickly offering reliable, responsive, agile service and support.

Our global network of KETO facilities, distributors and authorised service providers, with our experienced industry professionals and strong customer focus, ensures the consistent delivery of our product and services to the highest standards. As your service partner, we know your needs, setup, equipment and history, which ensures your ongoing effective operation.





KETO GLOBAL PARTNER IN PUMP SOLUTIONS

FOCUSSED ON REDUCING TOTAL COST OF OWNERSHIP



KETO PRETECH™ SOLUTIONS

We partner with you to carry out a site inspection and technical audit to understand requirements and identify reliability improvements, cost savings and ensure your pumping equipment delivers its best performance.

Our team of experts reviews your operation with our **KETO PRETech™ Solutions** which focus on:

- Performance (extending equipment lifetime and maximising uptime)
- Rationalisation (minimise inventory)
- **Efficiency** (optimising processes and reducing energy consumption)

Our post review report, tailoring our technology to meet your challenges, will:

- Outline savings and benefits
- Propose an action plan on recommendations including cost savings of parts, possible upgrades and modifications
- Propose improvements for service and optimising maintenance.

Our objective is to help reach your goals and reduce your total cost of ownership, with the minimum disruption to your existing operation.



KETO PRETech™ Solutions to reduce your Total Cost of Ownership

Performance Rationalisation

Efficiency



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INNOVATIVE KETO PRODUCT PORTFOLIO

We have designed and manufactured a range of high performing pumps engineered for slurry, sump, froth and fluid applications made to withstand the most challenging conditions. These include horizontal and vertical slurry pumps, sump pumps and trailer mounted pumpsets.

Our pumping equipment is built to high standards and our innovative designs provide excellent performance, versatility, long wear life, ease of maintenance and reliability.

Our team of engineers is skilled in analysing the pump end use, duty and pumped fluid to select the appropriate equipment and materials for your process application, maximising the longevity of your pumps and parts. We work closely with each customer to determine the best pumping solution. All our products are fully supported by our global presence, assuring fast after-sales care and product support.

Why you can rely on KETO:

- · Cost effective solutions
- · Proven patented technologies
- Extended wear life
- · Ease of maintenance
- · Increased efficiency
- KETO parts are backwardly compatible with our own and other suppliers' pumps
- Versatility, easily modified for changing conditions
- Quality manufactured materials
- Wide range of superior materials for your duty, such as chrome alloy, natural rubber, polyurethane and many specialist materials
- · Rapid delivery times
- · Global availability and expertise

Our core competence is in the design and manufacture of pumps and systems for applications including:

- · Portland Cement & Lime
- Hard Rock Milling/Flotation
- Leaching
- Copper Smelting
- · Soda Ash/ Trona
- · Mine Dewatering/ ARD Treatment
- · Coal Fired Power
- Gas Fired Power
- Oilfield/Drilling
- · Oil Refining
- Aggregates/Sand
- Food & Beverage
- · Potable Water
- Waste Water
- Sugar (Beets)
- Phosphate/Potash
- · Pulp & Paper
- Float & Bottle Glass







K-HS™ Severe Duty Horizontal Pump

HORIZONTAL SLURRY PUMPS

We offer a comprehensive range of horizontal slurry pumps engineered with the latest hydraulic and high performing wear technologies to cope with the most severe corrosive and abrasive slurry applications. Our horizontal slurry pumps are designed for mineral processing, chemical processing, coal preparation, effluent handling, gravel and sand as well as other speciality applications.

With a range of KETO parts and material combinations such as chrome alloy, natural rubber and polyurethane our pumps have the versatility to ensure the most optimum pumping solution for any given application.

Models:

K-HS™, K-HSPP™, K-L™, K-MP™, K-P™, K-G™



K-VS™ Heavy Duty Vertical Sump Pump

SUMP PUMPS

Our range of versatile sump pumps is designed to handle diverse applications whilst ensuring reliable performance and excellent wear endurance. It suits all rugged mining and industrial applications and is ideal for handling abrasive and corrosive liquids and slurries, while submerged in sumps or pits.

Each pump is available in different spindle or column lengths depending on your project specification. Constructed in a wide range of materials including corrosion resistant stainless steel, high chrome and natural rubber, our pumps can be configured to meet every system or application.

Models:

K-VS™, K-TVS™, K-CPL™, Ferromaster™



K-VSF™ Vertical Spindle Froth Pump

FROTH/TANK PUMPS

Our range of horizontal and vertical froth and tank pumps is ideally suited for mineral mining process plants, flotation froth circuits, pulp and paper, sewage and effluent applications. Froth and viscous slurries are handled efficiently and without the issues usually associated with pumping products with high viscosity.

With its robust design and simplified maintenance, our standard range is supplied with parts in a variety of different wear-resistant materials including natural rubber, urethane and high chrome alloy.

Models:

K-HSF™, K-VSF™

HORIZONTAL SLURRY PUMPS	RANGE	FLOWS TO	HEADS TO	PRESSURES TO
K-HS™ Severe Duty Horizontal Pump	25 mm (1") to 500 mm (18")	7,500m³/h (33,022 USgpm)	100 m (328ft)	2,100 kPa (305 psi)
K-HSPP™ Super High Pressure Severe Duty Pump	50 mm (2") to 450 mm (18")	6,500m³/h (28,619 USgpm)	85 m (278ft)	6400 kPa (928 psi)
K-L™ Heavy Duty Horizontal Pump	200 mm (8") to 400 mm (16")	5,100 m³/h (22,455 USgpm)	65 m (213 ft)	2,100 kPa (305 psi)
K-MP™ Heavy Duty Solid Case Horizontal Pump	50 mm (2") to 150 mm (6")	1,150 m³/h (5,063 USgpm)	85 m (278 ft)	800 kPa (116 psi)
K-P™ Heavy Duty Solid Case Horizontal Pump	25 mm (1") to 250 mm (10")	2,000 m³/h (8,806 USgpm)	85 m (278 ft)	700 kPa (101 psi)
K-G™ Dredge and Gravel Pump	100 mm (4") to 250 mm (10")	1,725 m³/h (7,595 USgpm)	60 m (196 ft)	1400 kPa (203 psi)
SUMP PUMPS	RANGE	FLOWS TO	HEADS TO	PRESSURES TO
K-VS™ Heavy Duty Vertical Sump Pump	38 mm (1.5") to 250 mm (10")	1,195 m³/h (5,261 USgpm)	58 m (190 ft)	-
K-TVS™ Medium Duty Vertical Sump Pump	990 mm to 1370 mm standard setting depths	120 m³/h (528 USgpm)	30 m (100 ft)	-
K-CPL™ Vertical Sump Pump	38 mm (1.5") to 250 mm (10")	1550 m ³ /h (6,800 USgpm)	52 m (180 ft)	-
Ferromaster™ Sump Pump	75mm (3")	170m³/h (750 USgpm)	40 m (130 ft)	-
FROTH/TANK PUMPS	RANGE	FLOWS TO	HEADS TO	PRESSURES TO
K-HSF™ Horizontal Froth Pump	50 mm (2") to 200 mm (8")	2,000 m ³ /hr (8,800 USgpm)	60 m (196 ft)	1,725 kPa (150 psi)
K-VSF™ Vertical Froth Tank Pump	50 mm (2") to 200 mm (8")	x m ³ /hr (x USgpm)	20 m (65 ft)	-

electrical cabinets and bunded fuel tanks,

depending on the application. All pump

of corrosion or wear resistant materials.

packages can be customised with options

such as diesel or electric drive and a variety

The K-BRT™ Bore Installation/Retrieval Trailer design allows for cost-effective, safe and efficient use of resources to minimise operational downtimes. Key features include dual winches capable of multi-speed and independent operation to deliver safe and effortless installation and retrieval. Casette reel design allows for back-to-back operation and easy storage. It removes 100% of working under live load.

MOBILE DEWATERING EQUIPMENT & SUBMERSIBLE PUMPS

We are specialists in delivering and supporting mobile dewatering pumps and equipment to aid the removal and disposal of water to maintain site safety and productivity. We utilise our expertise, engineering and manufacturing capabilities to deliver high quality, reliable solutions to meet all your dewatering needs. Our equipment is built to withstand harsh, arduous operating conditions, whether for open pit drainage, borefield dewatering, underground dewatering or water transportation applications. Our dedicated field and in-house teams are on standby with full service and support.

Our comprehensive offering of K-DW™
Dewatering Pump Sets is available in a variety
of sizes and capacities for a multitude of
dewatering applications. Each unit is custom
built to suit site specification with regard to
safety, transport, and mobility. We can supply
trailer, skid or pontoon mounted pumps, foot
valve or self-priming, generating equipment,

Our K-W™ Series Stainless Steel Submersible
Borehole Pump range offers market-leading
reliability and efficiency. Made entirely of
corrosion-resistant stainless steel, K-W™
pumps are available in a range of sizes and
ideal for a wide variety of applications. They
can be supplied complete with cooling
shroud, submersible electrical cable, riser
column, surface plate, headworks, valves,
electrical control cabinet and cable.

To complement our range of dewatering pumping equipment we also fabricate a unique offering of mobile bore headworks and retrieval trailers in-house. Our K-HWT™ Bore Headworks Trailers are custom designed to improve safety and increase the efficiency of bore pump installation and removal







K-DW™ Dewatering Pump

MOBILE DEWATERING EQUIPMENT & SUBMERSIBLE PUMPS	RANGE	FLOWS TO	HEADS TO	PRESSURES TO
K-DW™ Dewatering Pump Sets	50 mm (2") to 250 mm (10")	2,000 m ³ /h (8,800 USgpm)	350 m (1148 ft)	-
K-W™ Series Stainless Steel Submersible Pump	32 mm (1.25") to 150 mm (6")	5 - 250 m³/h (22 - 1,100 USgpm)	550 m (1,804 ft)	-
K-HWT™ Bore Headworks Trailer	100 mm (4") to 350 mm (14")	250 m³/h (1,100 USgpm)	-	2,000 kPa (290 psi)
	FLEXIBLE RISING MAIN	HOSE REEL CAPACITY TO	CABLE REEL CAPACITY TO	WORKING LOADS TO
K-BRT™ Bore Installation/Retrieval Trailer	50 mm (2") to 150 mm (6")	200m (656 ft)	200m (656 ft)	4 tonne



KETO GLOBAL PARTNER IN PUMP SOLUTIONS

FLUID PROCESS & WATER PUMPS

KETO's fluid process and water pumps have been designed as a reliable solution for a variety of centrifugal water and process applications. Our complete range of pumps is well equipped for fluid management in a range of mining, chemical and industrial applications.

Our K-CP™ ASME/ANSI B73.1 standard dimensional process pump range provides unparalleled performance and versatility. Designed to perform in tough industrial applications including chemical, petrochemical, pulp and paper, mining and general industries. Available in a wide variety of materials depending on the application.

We offer a full range of K-VT™ Vertical Turbine pumps designed to operate in wells or sumps; product lubricated, threaded or flanged construction. All have the flexibility of various options to meet your demands for a variety of applications, including mining, municipal, agricultural and industrial process.

Models: K-CP™, K-VT™

Built for reliable performance in tough environments, KETO pumps have the versatility to ensure the optimum pumping solution for any given application

SPECIALTY PUMPS

Utilising technology identical to other KETO pumps, our specialty models provide the same high level of performance and satisfaction but in a design tailored for your application. Our team of pump experts have developed an unrivalled range of speciality pumps for some of the most critical processes.

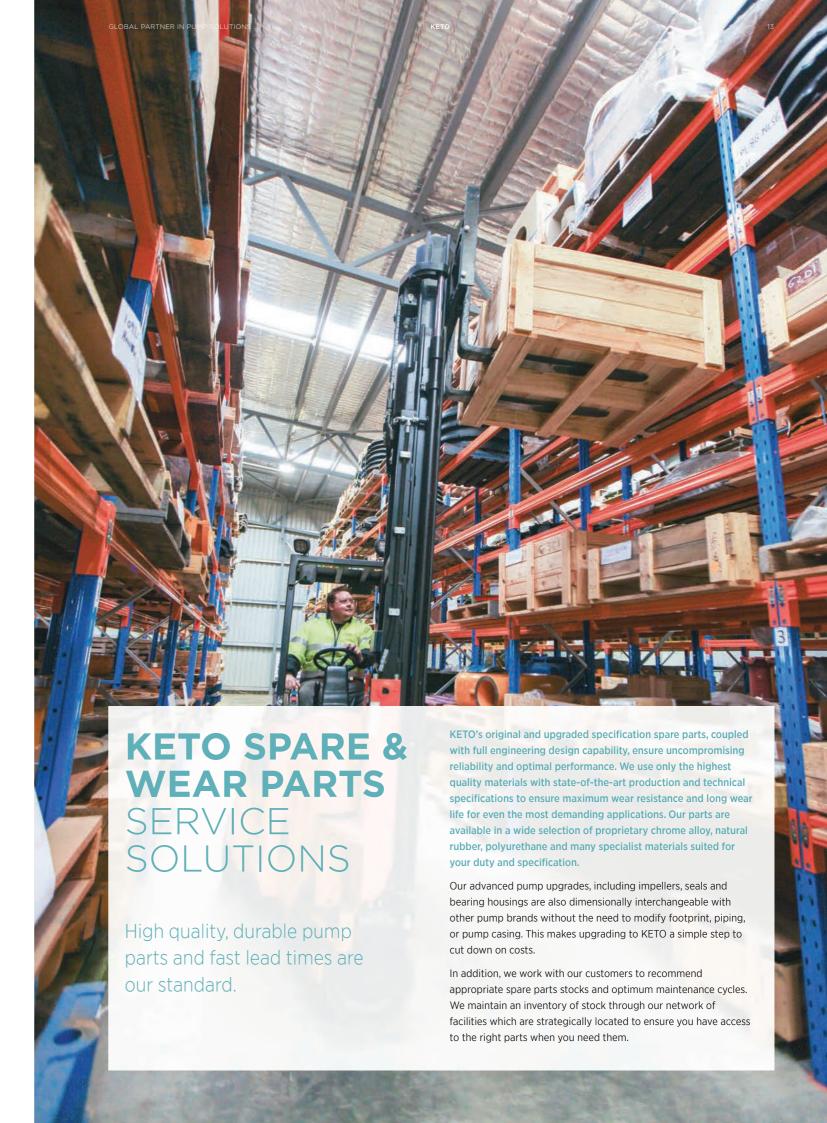
The high efficiency K-EP™ Eductor Pump has been specifically designed to service the mining and dredging industries where increased pump life and reliability is essential. Ideally suited to pumping minerals or materials that would normally be damaged by conventional pumping methods, it has the ability to cope with heavy wear conditions associated with large particle transportation.

Models: K-EP™



FLUID PROCESS & WATER PUMPS	RANGE	FLOWS TO	HEADS TO	PRESSURES TO
K-CP™ Chemical Process Pump	38 mm (1.5") to 250 mm (10")	1,364 m³/h (7,000 USgpm)	223 m (730 ft)	2600 kPa (377 psi)
K-VT™ Vertical Turbine Pump	152 mm (6") to 760 mm (30")	4,542 m³/h (20,000 USgpm)	-	13,790 kPa (2,000 psi)

SPECIALTY PUMPS	RANGE	FLOWS TO	HEADS TO	PRESSURES TO
K-EP™ Eductor Jet Pump	50 mm (1") to 350 mm (13")	Tailor made to suit application	15m (50") without booster pump	-



GLOBAL PARTNER IN PUMP SOLUTIONS GLOBAL PARTNER IN PUMP SOLUTIONS

KETO ADVANCED SI URRY PUMP UPGRADES

Our KETO K-ORE™ range of advanced pump upgrades maximise the potential of your slurry pumps and go beyond any other in offering superior performance, quality materials and outstanding interchangeability. Our upgrades, which feature patented designs, turn your pump into a hassle free pump, which reduce operating costs.

K-IBA™ HEAVY DUTY BEARING ASSEMBLY

The K-IBA™ heavy duty bearing assembly is an innovative design to protect your pump against contaminants. It also reduces grease consumption, improves maintenance intervals and lowers inventory costs.

- · Easy to maintain cartridge style bearing assembly
- Bearing assembly can be replaced in-situ
- · Modern bearing seals for increased reliability
- Patented grease and oil flinger allows a simple choice of oil or grease lubrication and requires greasing only every few months
- Directional grease port prevents over-consumption of grease
- Various material options available including carbon and stainless steel

K-ISS™ MECHANICAL SEAL

The K-ISS™ mechanical seal (external flush) combines the best features of several sealing options into one cost-effective alternative. It automatically compensates against changes in suction pressure and wet end wear and utilises up to 90% less seal water than alternative solutions.

- Fits into existing parts, no modifications required for installation and requires less maintenance than other sealing options
- Incorporates a slurry-free zone to improve sealing, the only part in contact with slurry is the seal adaptor
- · Can cope with high suction pressures while remaining leak free, the water flush pressure is automatically adjusted by the constant flow control valve in the system
- Available in both single and double seal options

LONG LIFE KARBIDE™ SHAFT SLEEVES

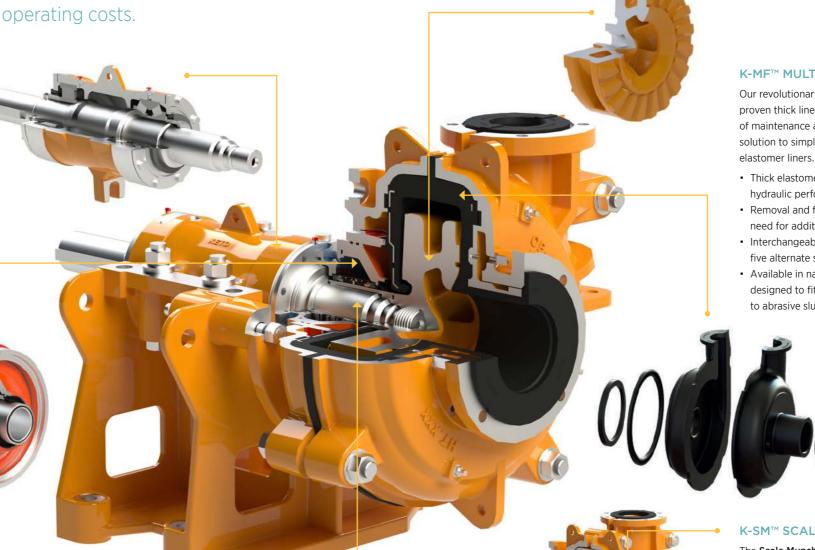
The long life Karbide™ shaft sleeves result in a significant extension to the wear life of pump components and improve pump efficiency over its service life, optimising uptime. The benefits are in the additional wear life of the impeller, throat bush, bearing assembly with power savings in spare part costs.

- · Allows for easy maintenance and removal
- · Expand sealing options
- Extended replacement intervals and minimal maintenance requirements
- Excellent resistance to both corrosion and abrasion/erosion in the most severe operating environments
- For specialist duties a wide range of sleeve material combinations can be developed specific to your process

K-HEE™ SEVERE DUTY HIGH EFFICIENCY IMPELLER

The K-HEE™ severe duty high efficiency impeller is engineered with the latest hydraulic and wear technologies for high efficiency and increased wear life.

- KETO utilises a chemically bonded sand casting process which improves surface finish and further increases wear life
- Reduced site inventory, can be used for both fine and coarse slurry applications
- Reduced operating costs, higher pump efficiency sustained over a longer pump
- Superior resistance to recirculating flows, twisted vanes enable better eye inlet conditions, controlling flow paths
- · Available in a wide range of materials, including chrome iron, rubber, urethane, Kerimethane[™] and specialist materials



K-MF™ MULTIFIT LINERS

Our revolutionary K-MF™ MultiFit™ elastomer liners combine industry proven thick liner improvements for extended wear life with the ease of maintenance and interchangeability. The MultiFit™ liner is our solution to simplify the implementation, installation and selection of

- Thick elastomer for extended wear life, reliability and improved hydraulic performance
- Removal and fitting is easier, safer and faster by eliminating the need for additional tooling and excessive manual handling
- Interchangeability and reduced inventory, MultiFit™ liner can replace five alternate supplier liner designs
- Available in natural rubber, neoprene, EPDM and polyurethane all designed to fit a wide range of pumping applications from corrosive to abrasive slurries

K-SM™ SCALE MUNCHER™

The **Scale Muncher**[™] can be retrofitted to existing pump supplier designs. It replaces scale traps and aggregate screens, used to prevent choking of the impeller. There is no need to empty scale trap baskets, which eliminates safety and environmental hazards whist reducing

- Improved pipe work arrangement by replacing traps with standard pipe work
- Cost and space savings in design stage of new installations
- Power savings through elimination of head loss across scale traps
- Improved NPSH condition and potential life improvement through elimination cavitation
- Extended life of tank through reduced number of shut-downs to empty scale traps

KETO GLOBAL PARTNER IN PUMP SOLUTIONS GLOBAL PARTNER IN PUMP SOLUTIONS KETO

KETO SERVE™ OFFERING ENSURES RELIABILITY & HIGHEST AVAILABILITY

Our reputation as a reliable service partner mirrors the excellent quality of our pumps and associated products. We support all of our own and other suppliers' pumps and rotating equipment, providing local supply, service and engineering support.

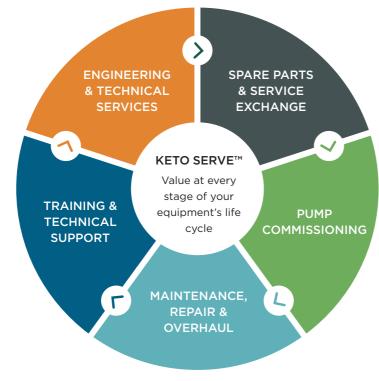
Our broad offering of services supports you throughout the whole life cycle of your equipment. We bring all types of rotating equipment up to latest OEM standards including pumps, mechanical seals, blowers, gear boxes & drive systems. Whether you require expert technical support, emergency repair or workshop services, KETO has a solution for your equipment needs with the ability to respond promptly.

Our local first class facilities are fully equipped with the latest tools and equipment. When it is not possible to remove equipment and transport it back to our facilities we send our team of engineers to carry out the work on site.

KETO SERVE™

Advantages of our service offering:

- Primary source supplier for all your pumping and rotating equipment needs
- Service and support with the quality of KETO products
- Cost effective solutions, tailored to your needs
- Global service network
- · Rapid delivery times
- Core team experts
- Quick response teams at hand for breakdown of critical equipment
- Product recommendations that:
- Reduce downtime
- Lower maintenance costs
- Enhance profitability
- Reduce inventory
- Reduce energy
- Extended wear life



You can count on KETO's to keep your equipment and process running at optimal performance throughout the life-cycle





KETO SPARE PARTS & SERVICE

Our original or upgraded spare and wear pump parts offering ensures reliability with no compromises on quality, delivery or service.

All our parts and components are designed and engineered to conform to the latest standards and ensure the reliable performance of your equipment. For urgent replacement parts you can ensure prompt availability on demand.

We also offer pump service kits for a wide range of products within our portfolio. Each kit contains original equipment manufacturer spare parts custom developed specifically for each pump system and requirement to ensure trouble-free operation and ease of maintenance.

SERVICE EXCHANGE/ REPAIR PROGRAMME

Our service exchange programme has been established to allow the immediate replacement of critical parts including slurry pump bearing assemblies and complete pump sets. This provides additional benefits including reduced stock holding, lead times and cost efficiencies.

When a pump goes down we provide you with an exchange unit. Our team are then able to use their expertise to offer you a new replacement or repaired part. We provide a choice of service level options allowing you to select the best fit for your productivity and cost-efficiency. All re-manufactured components are built to as-new performance and are inspected, tested and supplied with a new product warranty.

PUMP COMMISSIONING

The long-term performance and operating costs of a pump can be significantly affected by how well it has been installed and commissioned. KETO Serve™ technicians place all their experience and expertise at your service so that your system operates and runs to peak performance and is as energy efficient as possible from start-up.

Our experts professionally commission new, upgraded or repaired equipment and run onsite testing to ensure the equipment is fully and correctly set up and working according to the process needs without compromising on safety. We can also assist in the isolation and removal of redundant equipment.

GLOBAL PARTNER IN PUMP SOLUTIONS

MAINTENANCE, REPAIR & **OVERHAUL SERVICES**

We maintain, repair and overhaul all types of pumps and rotating equipment regardless of OEM. We guarantee quality, precision and service at a competitive, cost-effective price. We provide all levels of service to repair and refurbish equipment so that it is returned to as new condition.

From inspection and analysis of the equipment, refurbishment or replacement of key components, to testing, final assembly, and return to the customer, each step in the process is guided by best practices. Where repair is related to causes beyond expected wear and tear, we can work to uncover the root-cause and provide recommendations to extend the life of your equipment.

Even the best process equipment will only continue to perform properly if it is well maintained and upgraded regularly. We offer cost-effective customised programmes to help you implement a plan to extend the life of your equipment, ensuring maximum performance and trouble-free operation. We can also advise for scheduled shut-downs and upgrades.

ENGINEERING & TECHNICAL SERVICES

We provide expert engineering and technical consultancy services including pump selection, equipment assessment, reverse engineering and design upgrades across all industries. Working with our own or others' equipment, we are able to bring the benefits of our latest products, technology and knowhow to help you enhance your equipment for improved performance, reliability and cost

We can conduct an expert review of your complete equipment process and system to optimise your plant. Our team troubleshoots existing problems and offers innovative solutions that can resolve your equipment issues. Each project is unique and there are no standard solutions. We constantly seek opportunities to improve performance and help you benefit from our full range of

TRAINING & TECHNICAL SUPPORT

We offer a range of tailored in-house and on-site industry training courses, from basic centrifugal theory and pump selection to maintenance and product support. We recognise the importance training has to play in the safe, effective and efficient operation of equipment. We have a dedicated team of subject experts providing courses developed for the needs of engineers, operators and maintenance staff. Our in-depth training courses are a great opportunity to extend your knowledge, learn about the latest developments and maximise the potential of your team and your plant. All our training and technical support solutions are customised to your needs and equipment.







