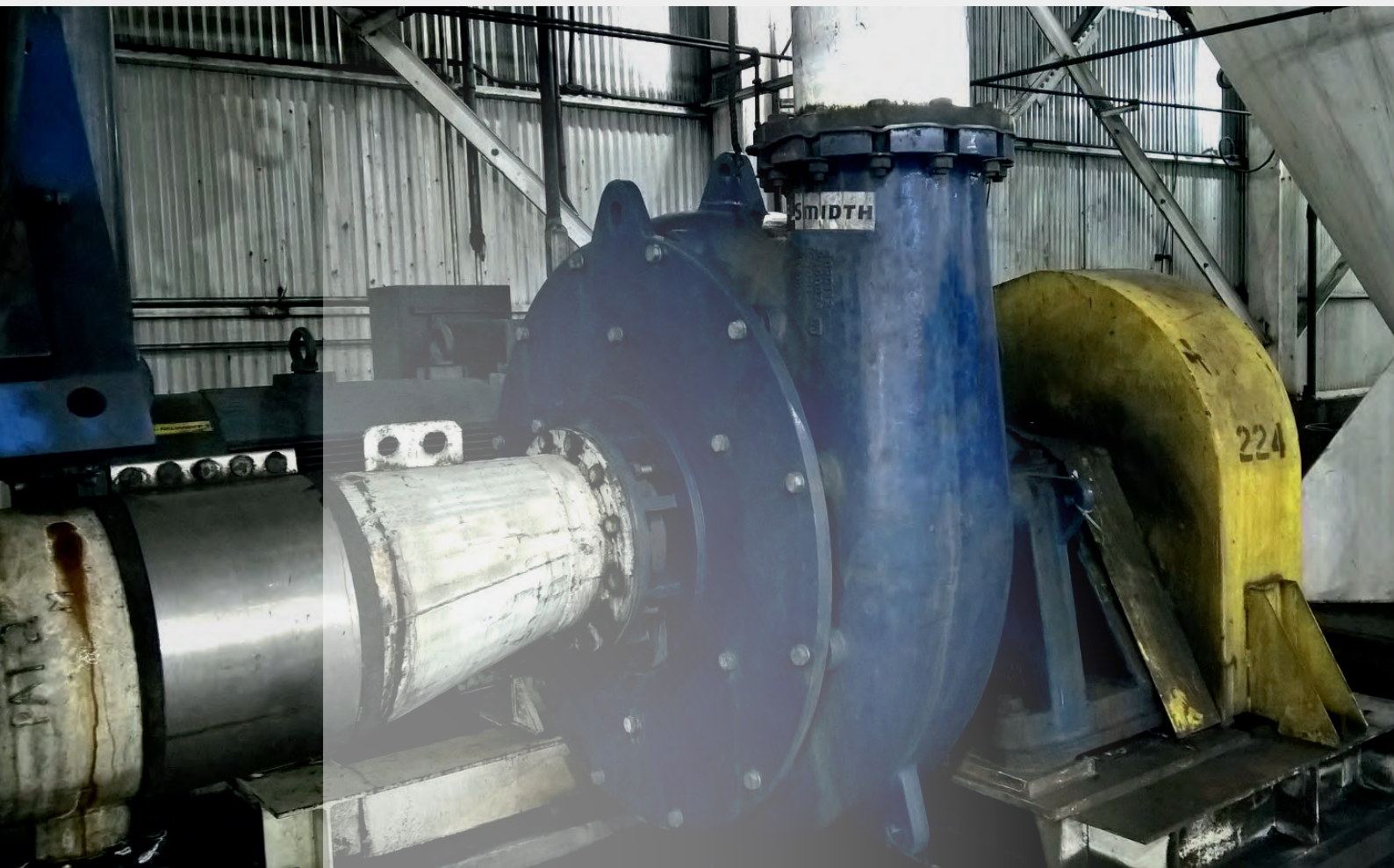


# KREBS®

PUMPS, CYCLONES AND VALVES

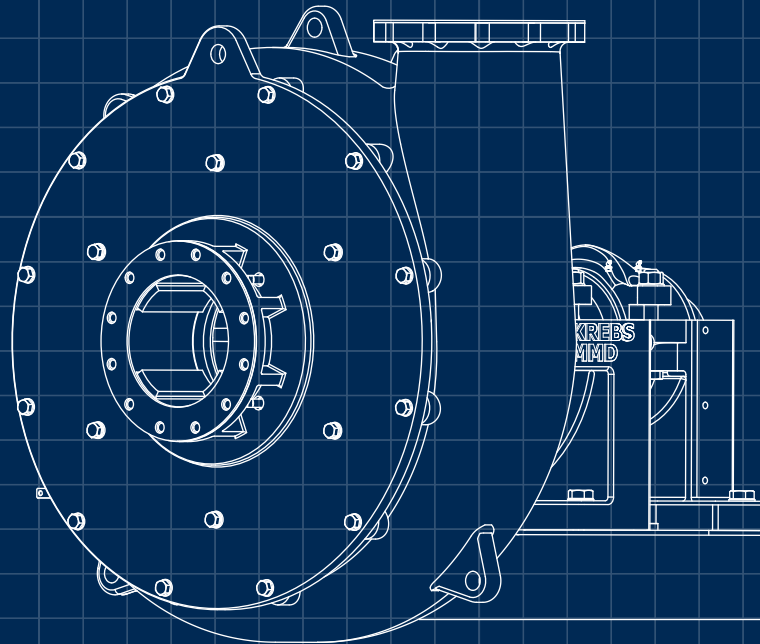
## gravelMAX™ pump

Designed for abrasive slurries with large solids



# Efficient pumping in aggressive applications

Why sacrifice wear life to pump the largest solids and most abrasive slurries? This is the question we asked which lead to the development our heavy-duty gravelMAX pump. With large internal clearances and a wide impeller, our gravelMAX presents the ideal solution to optimise passing size, efficiency and wear life.



## Key benefits

■  
Increased  
wear life

■  
Pumps large  
and abrasive solids

■  
Pulls a higher  
vacuum

■  
Reduces cost  
per ton

# gravelMAX™ benefits of our optimized design

Many slurry pump applications in coal, dredging and hard rock mining require the ability to pump large solids. Traditionally, operations used open impellers or extremely oversized pumps to get the job done – at the cost of ineffective performance. Our gravelMAX is designed for high efficiency, and long wear life and tackles the most abrasive slurries.

## Increased wear life

Our unique suction side sealing design – the wear ring – solves both the grinding and recirculation problems within the pump by maintaining clearances between the impeller and the suction side. By maintaining the design performance without increasing the speed, the wear ring feature extends the life of all wet end parts and reduces the power consumption.

## Pumps large and abrasive solids

A wide diameter impeller and increased cutwater clearance allows for the passing of large solids. The addition of the wear ring feature provides a large clearance between the impeller and suction side to ensure solids are not ground up in the pump as they would be with conventional designs.

## Pulls a higher vacuum

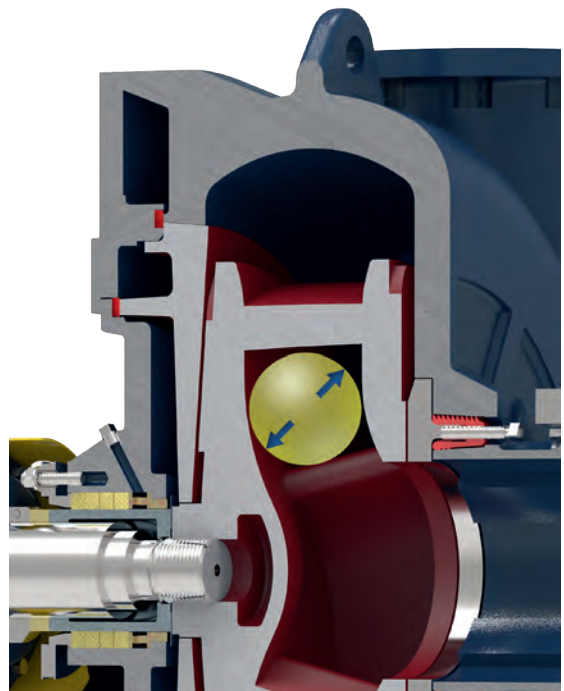
By eliminating the suction-side recirculation that breaks the vacuum at the eye of the impeller on conventional pumps, the wear ring advantage allows the gravelMAX to pump a higher percent solids and higher density solids than any other pump in its class. The ability to pull a higher vacuum makes our gravelMAX the ideal pump for the dredging industry.

## Reduces cost per ton pumped

The gravelMAX pump's increased clearances, wide diameter impeller and suction-side sealing system work together to offer even and predictable wear rates, less downtime, increased throughput and, ultimately, reduced cost-per-ton pumped.

**gravelMAX**  
**Pump size / Passing size**

Pump size		Maximum passing size	
(in)	(mm)	(in)	(mm)
6 x 4	150	2.75	70
8 x 6	200	5	127
10 x 8	250	6	152
12 x 10	300	7	178
14 x 12	350	8	203





# Design options

## To maximize solids passing size

### Impeller

- High efficiency impeller customizable to the maximum passing size required

### Casing

- Increased cutwater clearances maximizes solids passing size
- Heavy-duty thick outer casing designed to handle impacts of large and abrasive solids

### Power frame

- Heavy-duty cast iron pedestal with external bearing assembly adjustment mechanism
- Drilled for overhead motor mounting assemblies

### Adjustable wear ring

- Reduces suction-side recirculation
- Adjustable under operation
- Closes clearance at the impeller
- Maintains hydraulic performance
- Bearing assembly movement not required to adjust impeller clearances within the pump

### Reverse-taper roller bearings

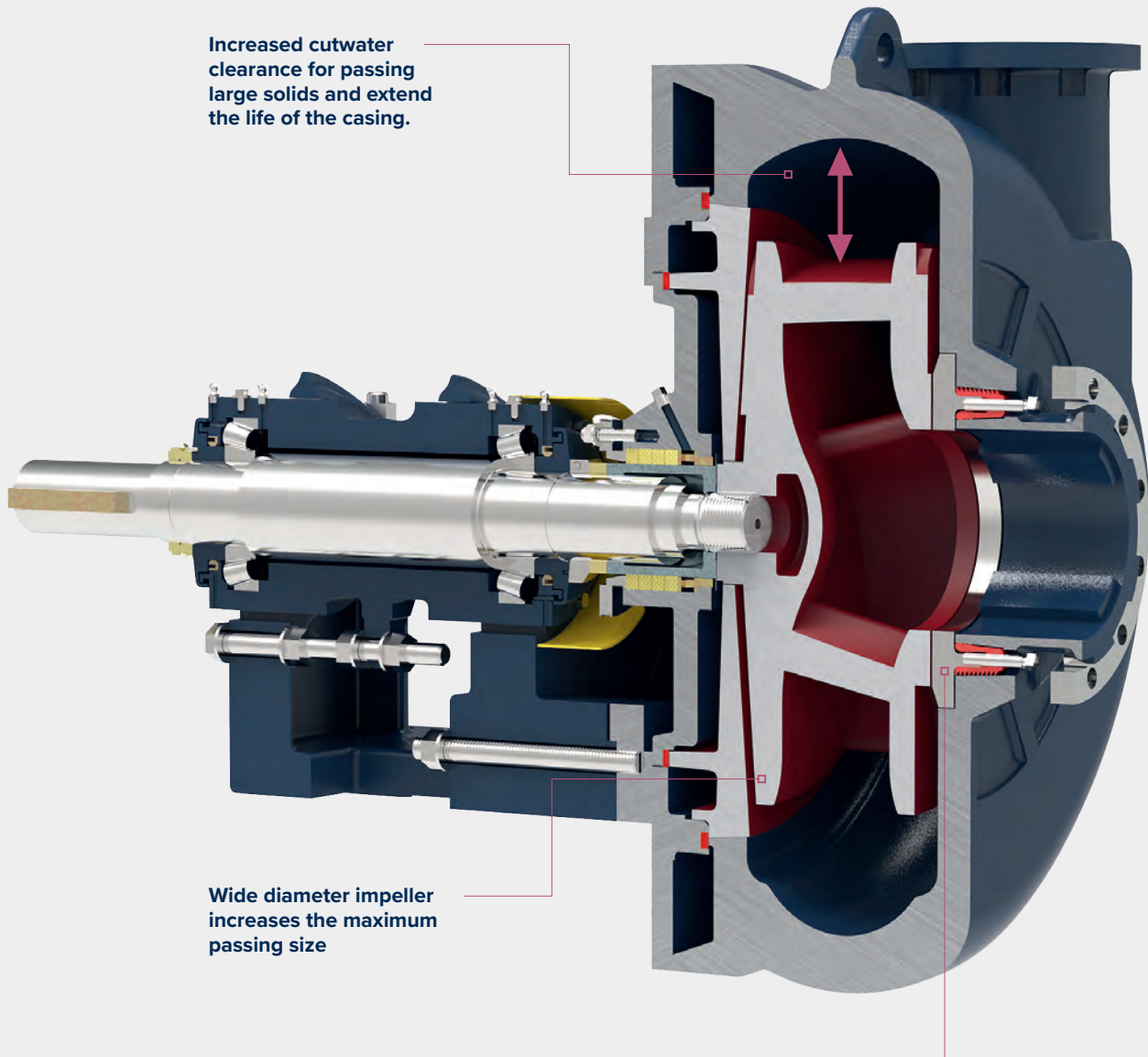
- Increase the effective load span to improve life
- Pumping action of taper rollers discharges grease to the outside, preventing ingress of slurry and eliminating possibility of failure due to over-greasing
- Heavy-duty shaft and taper roller bearings rated at 100,000 hours minimum of B10 life



Our gravelMAX pump in a heavy media cyclone feed application in coal processing.



Our gravelMAX pump handles a wide range of solids sizes up to 8" top size.



Increased cutwater clearance for passing large solids and extend the life of the casing.

Wide diameter impeller increases the maximum passing size

**Adjustable Wear Ring**  
Closes the suction-side impeller clearance during operation to reduce recirculation and maintain hydraulic performance.

# Innovating across industries

## Providing world class service

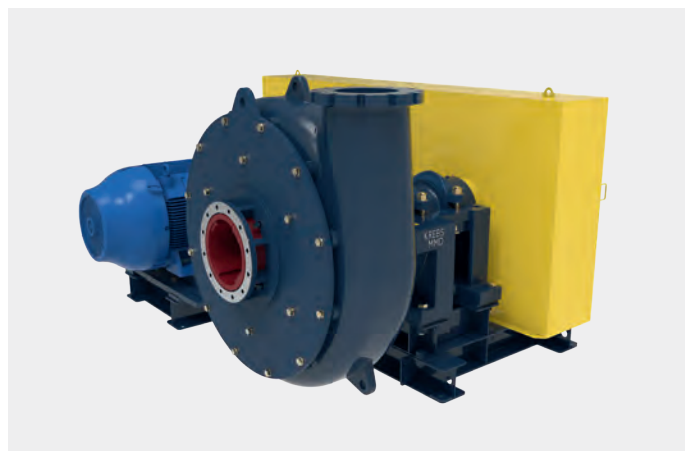
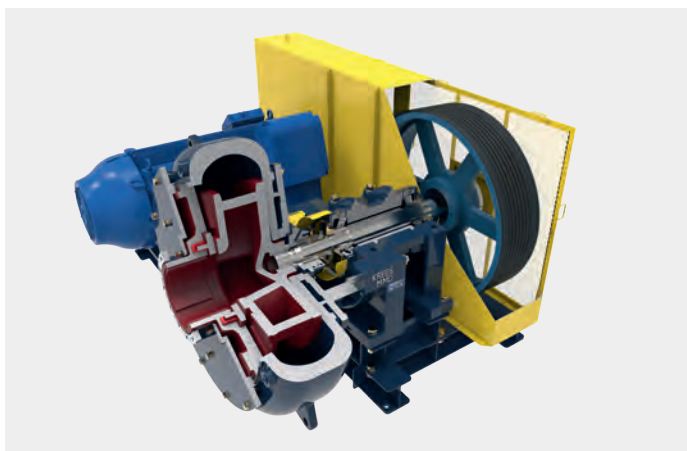
We are continually innovating and improving our technology to provide the best pumping solutions across multiple industries. We use our pump test facilities to deliver KREBS® pumps with increased efficiency, reduced water consumption and overall cost savings to our customers.

### Designed for multiple applications:

- Aggregates (sand plants, cyclone feed, tailings)
- Dredging
- Coal (heavy media cyclone feed)
- Froth
- Heavy-duty abrasive slurries
- Any application requiring large solids passing

### World-class service and pump test facilities

Our performance test lab is further proof of our commitment to advancement of the industry – through systems and service development, new product offerings, technical services and collaboration with outside entities. The ability to perform comprehensive testing on our products is not only necessary to meet your needs and deliver a quality product and service solution to you, it is essential for us in meeting the increasing technical demands of the industry as a whole.



### GLOBAL SALES LOCATIONS

#### FLSmidth - Australia

Pinkenba, QLD, Australia  
Tel: +61 7 5519 5700  
krebsaustralia@flsmidth.com

#### FLSmidth - Chile

Santiago, Chile  
Tel: +56 2 2463 8350  
krebschile@flsmidth.com

#### FLSmidth - Philippines

Ortigas Center, Pasig City, Philippines  
Tel: +63 2 687 9251  
krebs-philippines@flsmidth.com

#### FLSmidth - Beijing

Beijing P.R. China  
Tel: +86 10 8468 9100  
krebschina@flsmidth.com

#### FLSmidth - Brasil

Sao Paulo, Brasil  
Tel: +55 15 3416 7400  
krebsbrasil@flsmidth.com

#### FLSmidth - Austria

Neusiedl am See, Austria  
Tel: +43 2167 3345  
krebs europe@flsmidth.com

#### FLSmidth Private Limited

Chennai, India  
Tel: +91 44 4748 1000  
krebsindia@flsmidth.com

#### FLSmidth - South Africa

Johannesburg, South Africa  
Tel: +27 0 10 210 4000  
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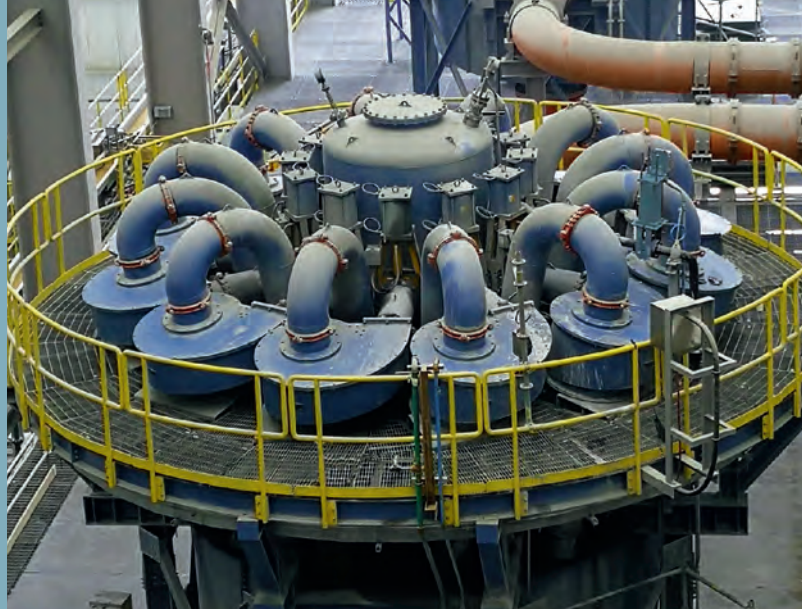




## We deliver reliability and slurry to your process

Our knife gate slurry valves are designed for the most demanding high pressure applications.

✉ [krebs@flsmidth.com](mailto:krebs@flsmidth.com)



## With KREBS separation systems it is easy to see what you have been missing

Finer, sharper particle separations at high capacities.

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**FLSmidth Inc.**  
**Tucson Operations**  
5505 W. Gillette Road  
Tucson, AZ 85743  
USA

Tel: +1 520 744 8200  
Fax: +1 520 744 8300  
[krebs@flsmidth.com](mailto:krebs@flsmidth.com)

For more locations see global contact list on previous page or visit us at [www.flsmidth.com](http://www.flsmidth.com)

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# Bringing better solutions to light

in the cement and mining industries

The future is full of possibilities and you are leading the way. But it's never a straight journey and it's easy to lose sight of true potential. With an ally by your side, who shares your ambitions and who sees your world from different angles, we will find the right way together.

For more than 135 years, we have challenged conventions and explored opportunities. Across more than 50 countries, we are 13,000 employees who combine our unique process-knowledge on projects, products and services to drive success. We develop the most advanced technology in our industries and offer market-leading product and service ranges.

Rooted in Danish values, we activate our knowledge and experience to navigate your complexity and bring better solutions to light. So no matter where in the world you are, we are here to help you discover new ground and achieve sustainable productivity enhancement.

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**FLSmidth A/S**  
Vigerslev Allé 77  
2500 Valby  
Denmark

Tel. +45 36 18 10 00  
Fax +45 36 30 18 20  
[info@flsmidth.com](mailto:info@flsmidth.com)

**[www.flsmidth.com](https://www.flsmidth.com)**