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

<table>
<thead>
<tr>
<th>Pump size</th>
<th>Maximum passing size</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>(in)</td>
</tr>
<tr>
<td>6 x 4</td>
<td>150</td>
</tr>
<tr>
<td>8 x 6</td>
<td>200</td>
</tr>
<tr>
<td>10 x 8</td>
<td>250</td>
</tr>
<tr>
<td>12 x 10</td>
<td>300</td>
</tr>
<tr>
<td>14 x 12</td>
<td>350</td>
</tr>
</tbody>
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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.

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