Mill Duty Xtra Heavy pump (MDX), the heart of the mill circuit, is designed specifically for the most extreme duty conditions. The pump’s service cycles can be matched with scheduled mill outages, increasing the mill’s availability and productivity. With a long wearing design and use of high abrasive resistant materials, these pumps deliver reliable tonnage while keeping annual operating expenditure to a minimum.

**OUTOTEC GIW SLURRY PUMPS**

**MDX SERIES**

**BENEFITS**
- Improved availability by matching service cycles with mill outages
- Reduced maintenance costs with long wearing white iron materials
- Maximized suction liner and impeller wear life to reduce component costs
- Safe and consistent maintenance changeouts
OPTIMIZED PRODUCTIVITY FOR GRINDING CIRCUITS

The MDX series of Outotec GIW™ slurry pumps* is optimized for heavy-duty use in the grinding mill circuit of a concentrator plant. With Outotec’s extensive expertise in comminution processes and global service and support network, we support you throughout the pump’s life cycle, improving the productivity of your process and operations.

The MDX pumps offer many unique features that improve reliability, performance and productivity of the grinding circuit.

**Lower specific speed design**
A large diameter impeller results in slower pump rotational speed than competing designs, leading to extended wear life. The lower specific speed design also allows the pump to better meet the variable flow conditions encountered in mill circuits.

**Oversize shrouds**
Larger shrouds and extended vanes work in conjunction with the slurry diverter to provide additional clearing action, further reducing recirculation and grinding wear between the impeller and suction liner.

**Longer wearing materials**
MDX slurry pumps offer a wide range of white iron materials designed specifically to resist the abrasive nature of aggressive slurries. This, combined with thicker cross sections, translates into long and reliable pump service life.

**Adjustable suction liner**
Allows nose gap adjustment on the fly, which in turn reduces downtime and extends the wear life.

**Deep base circle**
Minimizes aggressive particle impingement and encourages sliding wear. Typical abrasive wear drops dramatically.

**Patented inlet 5 vane impeller**
Designed to efficiently transport aggressive slurries while maximizing pump performance and wear life, and minimize vibration.

**Slurry diverter**
The latest technology dramatically increases suction liner life by reducing particle recirculation between the impeller and liner.

**Reduce downtime by matching life cycles**
Select the MDX pump for your next mill circuit application to help ensure cost-effective and continuous operations. The MDX pump maximizes productivity and minimizes cost by matching operating cycle times with scheduled mill outages.

**Comprehensive service offering**
Our extensive service portfolio and customized solutions cover all phases of your plant’s life cycle, and our service scope is always tailored to meet your unique business challenges.

- Advisory Services, including technical and process audits, equipment inspections
- Maintenance Services, including installation and commissioning, component repair and rebuild services
- Spare and Wear Parts
- Training Services

Options are available to customize the MDX to suit a wide range of applications.

* GIW is a trademark of GIW Industries, Inc.
THE MDX SERIES OFFERS A WIDE RANGE OF OPTIONS

Whatever needs you may have for mill duty pumping, the MDX pump offers a suitable solution. From the MDX 150 all the way to the MDX 750, the pumps offer flow rates up to 14,000 m$^3$/h. The pumps are a perfect fit for SAG, ball and rod mill discharge as well as cyclone and screen feed applications.

Custom options
- Reduced eye suction liners
- Adjustable liner assemblies
- Quick release wet end
- Full vanes to fit oversized shrouds

1. Suction liners and hub liners are available in a wide variety of white irons
2. Open back shell offered on larger sizes for right or left hand pumping applications

<table>
<thead>
<tr>
<th>TECHNICAL DATA</th>
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<tbody>
<tr>
<td>Discharge</td>
<td>150 to 750 mm</td>
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<tr>
<td>Flow rates</td>
<td>Up to 14,000 m$^3$/h or 61,650 gpm</td>
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<tr>
<td>Total head</td>
<td>Up to 51 m or 170 ft</td>
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<tr>
<td>Pressure rating</td>
<td>Up to 9.6 bar or 140 psi</td>
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