MAX Dense Medium Cyclones

Your Specialist in Process Equipment
MAX Dense Medium Cyclones

The MAX Range of Cyclones
Multotec has developed the MAX range of cyclones, the ultimate in alumina tiled cyclone engineering design. Computational Fluid Dynamic Analysis, 3D computer-aided design and extensive field experience were combined to produce the MAX cyclone design.

These cyclones couple the highly efficient Multotec scrolled evolute inlet design with an engineered tile wear surface, thus ensuring MAXimum efficiency of separation and MAXimum wear life. The MAX range of cyclones embodies the considerable specialised technological expertise and experience of Multotec.

The Multotec Scrolled Evolute Inlet Design

Advantages:

- MAXimum efficiency of separation
- Cost effective
- Superiority of design confirmed by Computational Fluid Dynamic Analysis
- Field tested
- Higher capacities than other inlet configurations
- Minimised turbulence
- Reduction in wear rates – especially on the vortex finder
- Overall operating costs are reduced

Tangential Velocity Distributions

Tangential

Involute

Scrolled Evolute
Engineered Tiles

The use of standard pressed tiles, which are hand cut, results in gaps between the tiles. The epoxies used to bond the tiles wear more rapidly than the alumina tiles. As wear progresses, the tile surface becomes increasingly uneven, resulting in accelerated wear.

Engineered Tiles

Engineered tiles are pressed with chamfered sides and then cut precisely, whilst in the green state, to the required shape. This ensures that gaps between the tiles are minimised.

Standard Tiles

Each tile is specifically designed for its place in the complete tile kit, ensuring a very tight fit with a minimum of space at the joints. Tile widths are selected to provide a smooth internal surface. The end result is a long-lasting wear surface.

The final product: a scrolled evolute cyclone with a premium quality, precision engineered, alumina tile wear surface.
**Design Options**

**Overflow Discharge**
- Vortex extension or overflow elbow
- Vortex extensions are cheaper, easier to maintain and simplify inspection

**Extended Barrel Section**
- Increases residence time and efficiency of separation
- Ideal for feed solids that contain high percentages of fine or near density material

**27% Chrome Cast Iron Cones**
- Used for applications where large tramp metal may be fed into the cyclone

**Parallel Throat Spigots**
- Help preserve spigot size for longer
- Cyclone cut density is, therefore, maintained more consistently

**Oversize Spigots**
- Worn spigots can be replaced with oversize spigots
- Larger diameter allows for it to be fitted to worn cones without creating an inward step
The MAX range of cyclones is available with the following internal fittings:

**Inlet Nozzle** - A, AB and B

**Vortex Finder** - XA and A

**Spigot** - Normal, High Capacity and Extra High Capacity
<table>
<thead>
<tr>
<th>Country</th>
<th>City</th>
<th>Tel:</th>
<th>Fax:</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Brisbane</td>
<td>+61 (7) 3442 0100</td>
<td>+61 (7) 3200 7733</td>
<td><a href="mailto:sales@multotec.com.au">sales@multotec.com.au</a></td>
</tr>
<tr>
<td>Australia</td>
<td>Perth</td>
<td>+61 (8) 9406 3500</td>
<td>+61 (8) 9302 1732</td>
<td><a href="mailto:sales@multotec.com.au">sales@multotec.com.au</a></td>
</tr>
<tr>
<td>Canada</td>
<td>Edmonton</td>
<td>+1 (780) 433 8825</td>
<td>+1 (780) 433 8836</td>
<td><a href="mailto:canada@multotec.com">canada@multotec.com</a></td>
</tr>
<tr>
<td>Canada</td>
<td>Montréal</td>
<td>+1 (450) 651 5858 (ext. 203)</td>
<td>+1 (450) 651 0002</td>
<td><a href="mailto:canada@multotec.com">canada@multotec.com</a></td>
</tr>
<tr>
<td>Chile</td>
<td></td>
<td>+56 (2) 745 3317/3302</td>
<td>+56 (2) 745 3432</td>
<td><a href="mailto:chile@multotec.com">chile@multotec.com</a></td>
</tr>
<tr>
<td>Botswana</td>
<td></td>
<td>+267 297 4524/4525</td>
<td></td>
<td><a href="mailto:botswana@multotec.com">botswana@multotec.com</a></td>
</tr>
<tr>
<td>Ghana</td>
<td></td>
<td>+233 302 517 821</td>
<td></td>
<td><a href="mailto:multotec@multotec.wa.com">multotec@multotec.wa.com</a></td>
</tr>
<tr>
<td>Mozambique</td>
<td></td>
<td>+258 25 240057</td>
<td>+258 84 064 9544</td>
<td><a href="mailto:mozambique@multotec.com">mozambique@multotec.com</a></td>
</tr>
<tr>
<td>Mozambique</td>
<td></td>
<td></td>
<td></td>
<td><a href="mailto:moz@multotec.com">moz@multotec.com</a></td>
</tr>
<tr>
<td>South Africa</td>
<td></td>
<td>+27 (0) 11 923 6000</td>
<td>+27 (0) 11 394 8701/5099</td>
<td><a href="mailto:marketing@multotec.com">marketing@multotec.com</a></td>
</tr>
<tr>
<td>Zambia</td>
<td></td>
<td>+260 212 313 354</td>
<td>+260 212 312 422</td>
<td><a href="mailto:multotec@multotec.co.zm">multotec@multotec.co.zm</a></td>
</tr>
</tbody>
</table>

www.multotec.com

- Screening Solutions
- Mineral Processing Equipment
- Sampling Solutions
- Wear Lining Solutions
- Mill and Scrubber Linings
- Solid / Liquid Separation Solutions
- Conveyor System Solutions
- Pumps
- Process Water Treatment and Metals Recovery

Multotec products are subject to continuous development and Multotec reserves the right to make changes to the specifications and design of its products without prior notification.