

MULTOTEC
CANADA

THE MAX RANGE OF CYCLONES

MAX DENSE MEDIUM CYCLONES

THE HEART OF THE MULTOTEC CYCLONE

General Features

Maximum separation efficiency, low running costs,
innovative designs and technology

Key features

♦ Maximum efficiency of separation, cost-effective,
superiority of design confirmed by Computational Fluid
Dynamic Analysis, field-tested, higher capacities than
other inlet configurations, minimum turbulence reduction
in wear rates, especially on the vortex finder, and overall
lower operating costs



THE MAX RANGE OF CYCLONES MAX DENSE MEDIUM 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.

MAX Dense Medium Cyclones

Maximum separation efficiency, low running costs, innovative designs and technology

DESIGN OPTIONS

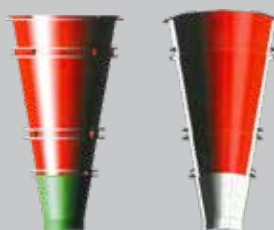
Extended Barrel Section

- Increase residence time and efficiency of separation
- Ideal for feed solids that contain high percentages of fine or near density material



Overflow Discharge

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



27% Chrome Cast Iron Cones

- Used for applications where large tramp metal may be fed into the cyclone



Oversize Spigots

- Worn spigots can be replaced with oversize spigots
- Larger diameter allows them to be fitted to worn cone without creating an inward step

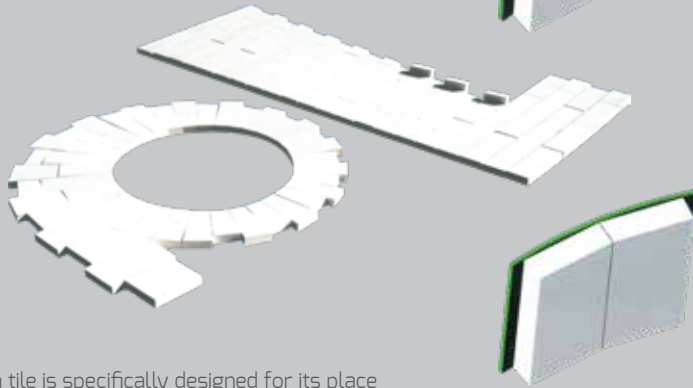
Parallel Throat Spigots

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



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.

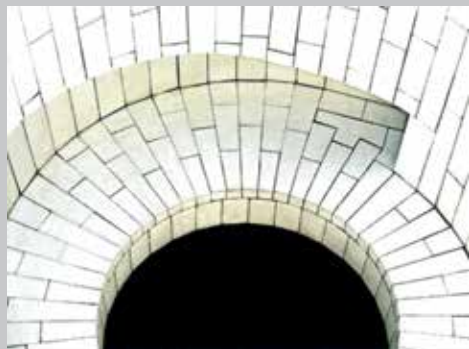


Standard Tiles

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.

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.



The final engineered solution

The final product - a Scrolled Evolute cyclone with a premium quality, precision engineered, alumina tile wear surface.

The Multotec Scrolled Evolute Inlet Design

Advantages

Maximum efficiency of separation

Cost effective

Superiority of design confirmed by Computational Fluid Dynamic Analysis

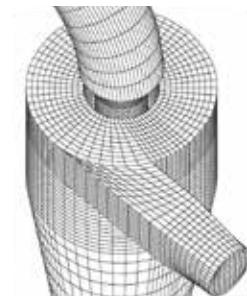
Field tested

Higher capacities than other inlet configurations

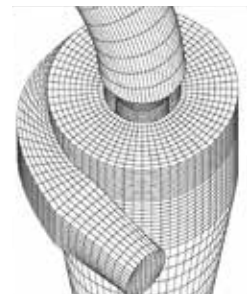
Minimised turbulence

Reduction in wear rates - especially on the vortex finder

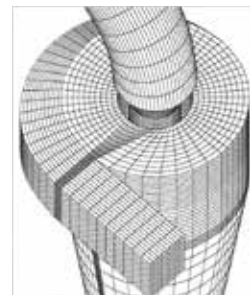
Overall operating costs are reduced



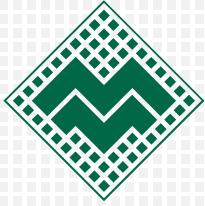
Tangential Design



Involute Design



Scrolled Evolute Design



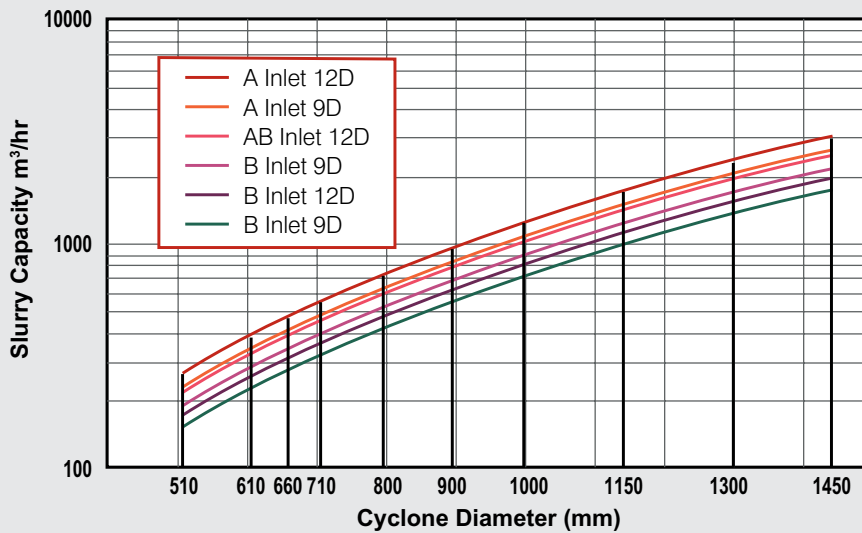
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MAX Capacities - 'A' Vortex Finder



MAX Capacities - 'XA' Vortex Finder

