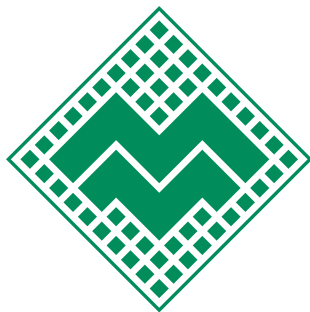




MULTOTEC

Compression Moulded Rubber Liners



Your Specialist in Process Equipment



Compression Moulded Rubber Liners

Through extensive research and the development of rubber technology and manufacturing methods, Multotec constantly upgrades its rubber lined cyclones as a complete system.

Manufacturing

Compression moulded rubber liners were designed and manufactured by independent tool shops with proven records of quality workmanship. Specialist moulds result in a cavity-shaped part being produced from a sliding section, which presses down to form the component. The heated moulds receive pre-cut and weighed proportions of Multotec's custom-mixed, green formulation of natural uncured rubber. The moulds remain closed until the rubber is 100 % uniformly cured through the cross section of the component. This process ensures that the product is dimensionally consistent and of a better material quality. Uniform curing also hardens the rubber right through, instead of just producing a hard outer casing.

Benefits

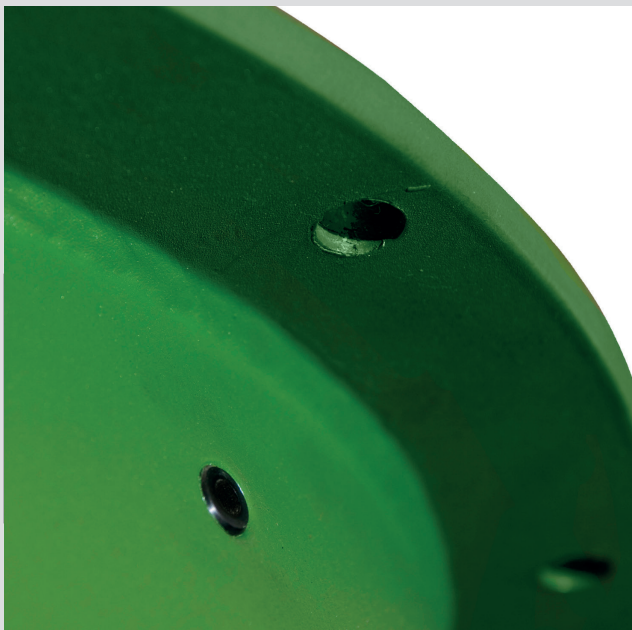
As the production rate of compression-moulded rubber products is significantly higher than that of hand-laid rubber products, lead times are significantly lower than the standard hand-laid rubber range. This is a major advantage, especially in a breakdown situation.

The compression moulded rubber is a further enhancement of the already successful HC range of rubber lined cyclones with industry tested design features, which are:

Weep holes

All major housings are designed with weep holes to alert plant personnel when a liner needs replacement. The advantages of weep holes are twofold:

1. They prevent damage of the cyclone housings
2. They permit maximum life to be obtained from any liner, thus reducing operating costs

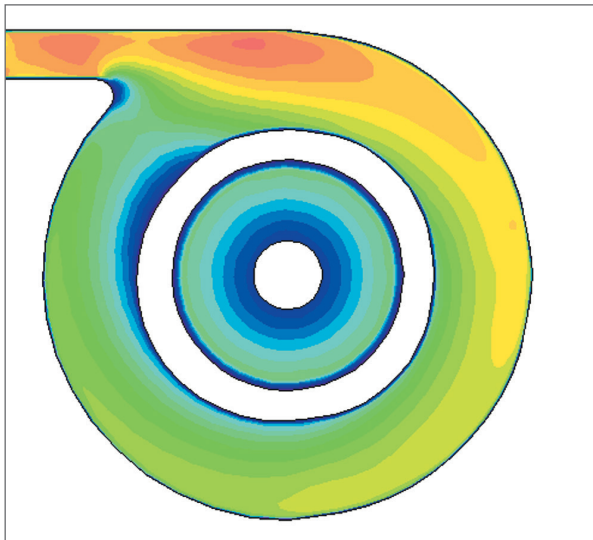


The weep hole on the HC cyclone range

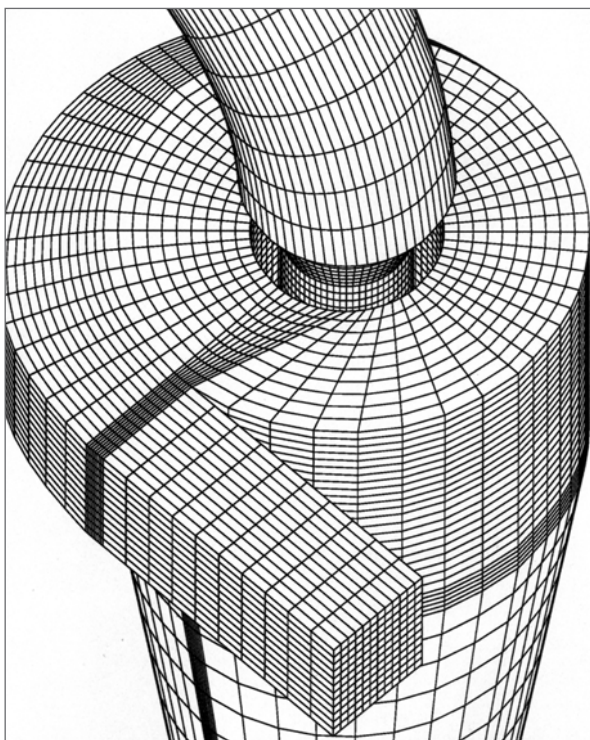
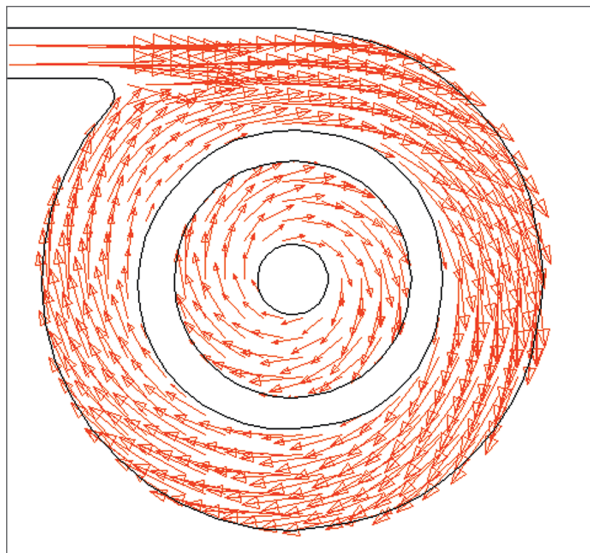


The HC cyclone complete with compression moulded rubber liners

Evolutes:



The ribbon inlet design with patented pressure bulge, for the PC range.



The scrolled evolute design of the HC and HR cyclone ranges.

Scrolled evolute

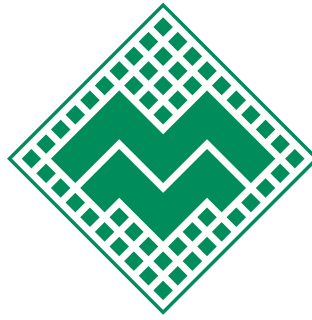
Extensive testing and simulations by Multotec has proven that the scrolled evolute inlet design has the following advantages:

1. Allowing the particles to follow their natural downward spiral as a result of the scroll on the inlet reduces both wear and turbulence, which increases the wear life of the inlet.
2. Due to lower turbulence in and lower pressure drop across the inlet head, the cyclone has a higher capacity than other inlet designs.
3. The smooth evolute entry into the inlet allows the particles to align themselves as they move into the cyclone before being subjected to the centrifugal action of the cyclone. This alignment results in a more efficient separation process within the cyclone.
4. With the scrolled evolute inlet, the feed entering the cyclone does not impact directly on the vortex finder, as is the case with other designs. This reduces wear on the vortex finder considerably and extends efficiency over the life of the cyclone. Normally, the vortex finder has the same life as the inlet head.
5. The rectangular inlet nozzle ensures that the feed is introduced in a thin band around the cyclone wall, which further minimises turbulence and provides additional benefits in terms of improved wear life and efficiency of separation.

Interchangeable components

The interchangeability of the cyclone components holds the following advantages:

1. Cost is saved as only the worn component needs to be replaced.
2. Changes in plant operation can be accommodated by changing components to alter cyclone performance.



MULTOTEC



www.multotec.com

Please visit our website for contact details of all our global locations.

Screening Solutions	Mineral Processing Equipment	Sampling Solutions
Wear Lining Solutions	Mill and Scrubber Linings	Solid / Liquid Separation Solutions
Conveyor System Solutions	Pumps	