KREBS® gMAX®
Molded Urethane Cyclones

Mission Zero Towards zero emissions by 2030

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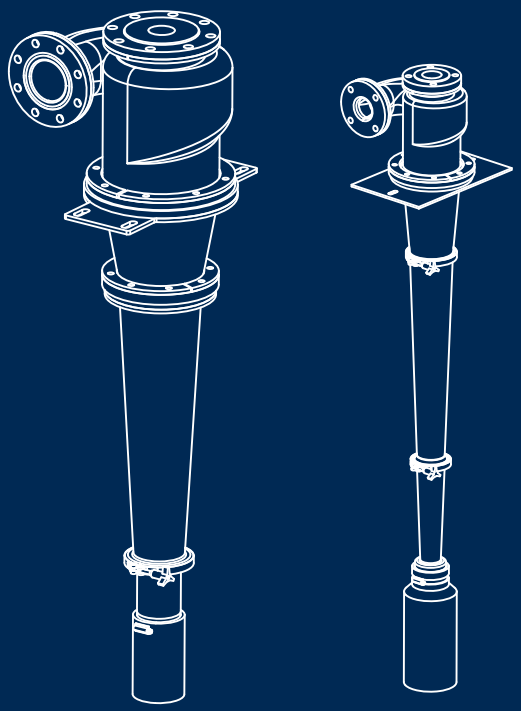
Performance and longevity

Most separation equipment demands you make a choice. You end up sacrificing production, wear life and even end product quality looking for the best solution to your wet processing needs. Our urethane cyclones are different. You gain the best of all worlds – from capital outlay to capacity to quality to long wear life.



Key benefits

- Finer, sharper particle separations
- Fewer cyclones needed for optimal performance
- Low capital cost
- No moving parts; wear resistant for long service life
- Minimal maintenance required

Urethane cyclones that are up to your tough wet-process challenges

Look no further than KREBS® urethane hydrocyclones. Our urethane cyclones are ideally suited for solids classification and separation in wet processes.

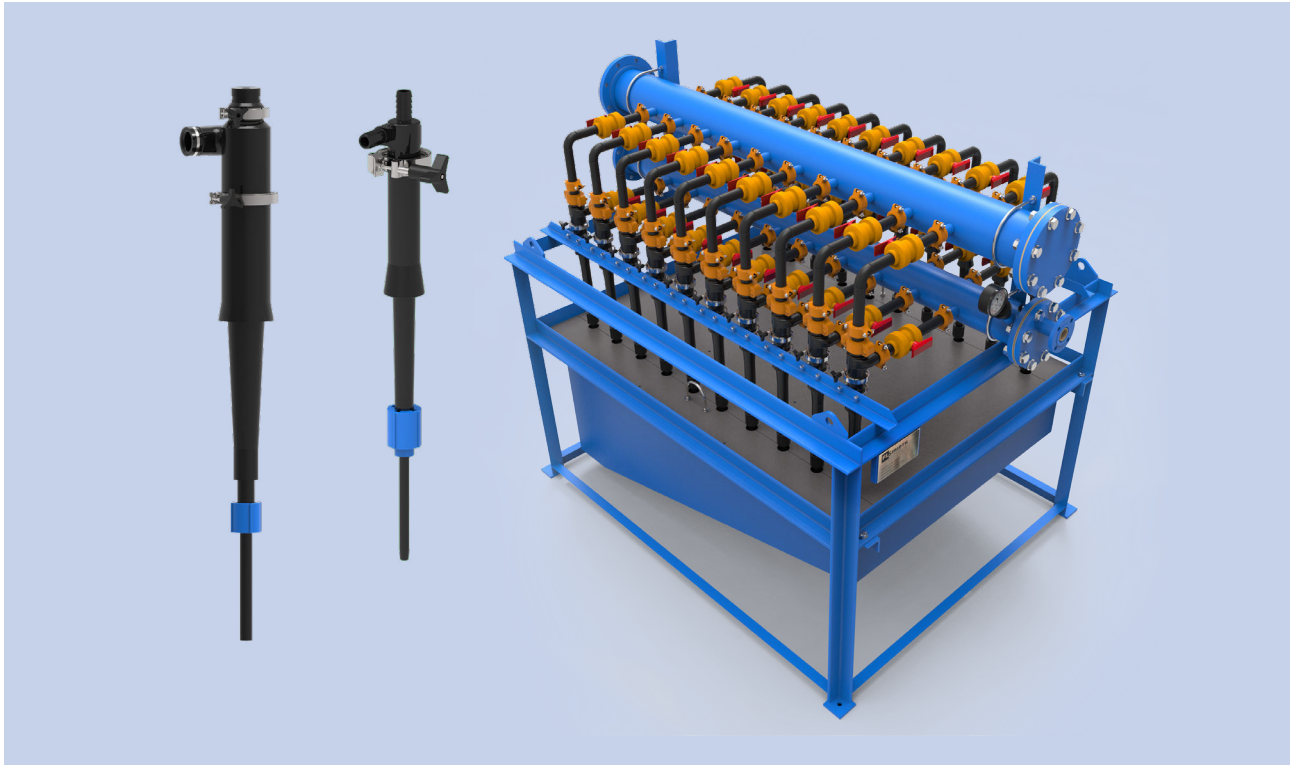
Their lightweight construction, small footprint, and ease of handling make them a good option for both mining and industrial applications. Quality urethane construction delivers the abrasion and corrosion resistance you require.

And with no moving parts, they require minimal maintenance. Available in KREBS® patented gMAX® geometry, the performance is second to none.

In high-process capacities, numerous urethane cyclones can be manifolded together into radial or inline configurations that work within tight spaces. As an added benefit, we can easily retrofit urethane cyclones into your existing processes.

Urethane cyclone applications

- Water treatment
- Minerals processing
- Coal processing
- Industrial



Inline manifold system

Separate yourself from the rest

The highs and lows of running your operation are easily reflected in your wet processing needs. You demand high capacity and low maintenance. Optimum product quality and minimum downtime. Long service life and low capital outlay. Your operation depends on equipment that will perform as it is designed to do – day in and day out.

KREBS® Urethane cyclone capacity table (10-30 psi)

Cyclone dia. (inches)	Urethane cyclone models	Capacity GPM	Capacity m³/hr
0.5”	U0.5	0.7 – 1.2	.2 – .3
1”	gMAX1U	2.9 – 4.9	.7 – 1.1
2”	U2-gMAX	7.4 – 24	1.7 – 5.5
3”	U3-gMAX	14 – 55	3.2 – 12.5
4”	gMAX4U	24 – 76	5.4 – 17.3
6”	gMAX6U	57 – 147	13 – 33
10”	gMAX10U	96 – 500	22 – 114
15”	gMAX15U	500 – 1,200	114 – 273

Exceptional resistance to corrosion. Light weight construction for ease of handling and installation.

A full line of moulded urethane separation solutions

We offer a complete line of KREBS® urethane hydrocyclones ranging in size from 13 mm to 254 mm (.5-in to 15-in) in diameter. Separation d50's as fine as 3 microns are possible, with flow rates per cyclone ranging from 2.27 litres per minute (.6 gpm) to 5,300 litres per minute (1,400 gpm). We can combine multiple units into a manifold arrangement for unlimited capacities.

Our gMAX® technology is available in most urethane sizes. The gMAX cyclone incorporates modern apex and cone designs that feature performance-enhancing benefits. We modified the cyclone inlet and cylindrical sections to minimise turbulence and wear, but still provide the capability to operate at much higher capacities than other hydrocyclones of the same diameter.

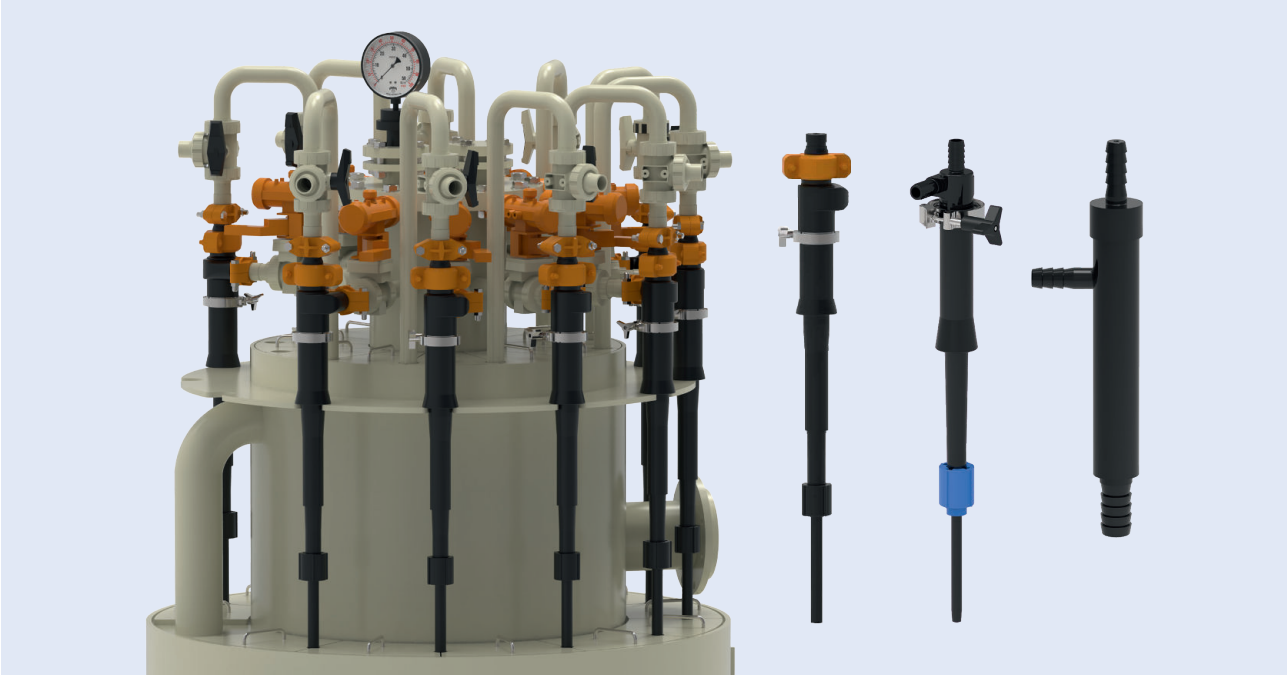
We analyse your separation requirements to determine your required cyclone size.

If your process flow exceeds the capacity of an individual cyclone, we recommend installing multiple cyclones on a common manifold to achieve your necessary process capacity. Cyclone manifolds are available in a variety of configurations and are custom tailored to your application.

We also provide food grade urethane cyclones for drinking water and food processing applications.

Canister manifold system

A radial manifold with integral overflow/underflow launders that share a common wall. Canister manifolds typically are rubber-lined, and generally offer better access to isolation valves for operational flexibility and maintenance purposes.



Spider manifold system

A spider radial manifold design commonly used with small-diameter (less than 152 mm or 6-in) cyclones. The primary advantage is a very small footprint and reduced underflow launder size. Spider manifolds are more suited to process low concentration, relatively non-abrasive slurries.

Inline manifold system

Generally appropriate only for processing of fine solids that do not readily segregate in the pipe. Benefits include lower cost and a geometry that typically connects more easily to plant piping. Typical applications include, removal of fine solids in chemical and water treatment processes.

Pod System

Where 1” or 2” diameter cyclones are required for the desired separation and process flows are very large, pod style manifolds combine several standard size cyclone “pods” onto a radial manifold system. This provides very high capacity while offering some turndown capability, spare capacity, and fewer valves to maintain.

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KREBS® product offerings for Mining and Industrial

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- KREBS® Knife Gate Valves
- KREBS® DeSanders
- KREBS® Vessels

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