

One Source

KREBS® slurryMAX™ Split Case Design Slurry Pumps



**slurryMAX™ pump products
designed for heavy duty to the
most extreme slurry applications**

FLSMIDTH
KREBS

KREBS® slurryMAX™ pumps

Split case design slurry pumps for all applications

Applications Include

- Mining and mineral processing
- SAG mill discharge recirculation
- Copper
- Iron-ore
- Gold
- Oil Sands
- Cyclone feed
- Tailings
- Mill discharge
- Sand and gravel
- Industrial processing
- Heavy-duty abrasive slurries

Suction Side Hydraulic Recirculation

Following the dramatic success of the millMAX™ metal slurry pump, FLSmidth Krebs incorporated the patented features into the slurryMAX™ split case design pump product range.

The range includes the same proven feature with externally adjustable wear ring that closes the suction side impeller clearance between the suction liner and the eye of the impeller. In the case of rubber lined pumps this clearance eliminates the problem conventional rubber lined pumps experience - that of pressure pulsations caused by the close proximity of the rotating raised expelling vanes to the suction liner, necessary to maintain flow, and subsequently generating heat in the liner and rubber devulcanization failure.

The ability to control the suction side clearance reduces the hydraulic recirculation and therefore contributes to maintaining the design flow over the life of the pump, increasing the life of the impeller.

The extra-thick rubber lining has rigid reinforcement to prevent collapse onto the rotating impeller under upset vacuum conditions. Impellers are available in various sizes of metal or elastomers. High pressure casings are available for applications requiring multiple pumps in series.

slurryMAX pump size ranges from 3" (75mm) to 20" (500mm). See table on page seven for more product design and sizes.



slurryMAX™ Pump Products

slurryMAX™ Pump

This heavy duty, split case design pump, incorporates hydraulic efficiency and the proven millMAX Wear Ring technology to create the most efficient and longest lasting pump of its kind. With multiple liner and impeller material options, the slurryMAX is designed to handle the majority of applications of any plant across multiple industries.

slurryMAX™-XD Pump

The slurryMAX-XD has found success all over the world in the most aggressive applications for the last 9 years. Extremely thick elastomer liners and heavy duty impeller give this pump extended wear life on top of the advantages gained from the millMAX Suction Side Sealing System.

slurryMAX™-HP Pump

The high pressure version of the slurryMAX-XD, perfect for multistage high pressure pumping systems. With more bolts and ribs added to the outer casing, the slurryMAX-HP uses all of the same extreme wear parts as the XD, allowing for long life and consistent performance.

slurryMAX™-XHP Pump

The slurryMAX-XHP was added to the range to allow customers to design pumping systems with more stages and final discharge pressure. The XHP still uses the same wear parts as the XD, but with an even more robust outer casing than the HP.



slurryMAX™ -XD Pump



slurryMAX™ -HP Pump



slurryMAX™ -XHP Pump

KREBS® slurryMAX™ XD & HP Pumps

The Krebs slurryMAX™ pump design includes the following:

Casing Liners: Designed to withstand slurry turbulence and allow for a wide operating flow range. Natural rubber is the standard due to its ability to withstand abrasion.

Wear Ring: Adjustable wear ring assembly to permit closing of suction side impeller clearance during operation.

Impeller: Designed for high slurry efficiency and hydraulic performance. Machined surface at the eye for wear ring adjustment and high expelling vanes. Multiple options are available, including high efficiency and elastomer options.

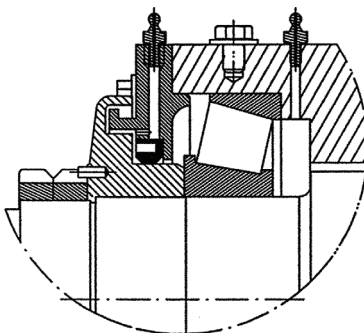
Outer Casing: The outer casing is made of rib reinforced iron to contain extreme operating pressures

Power Frame: Heavy duty cast iron pedestal with external bearing assembly adjustment mechanism. Drilled for overhead motor mounting assembly.

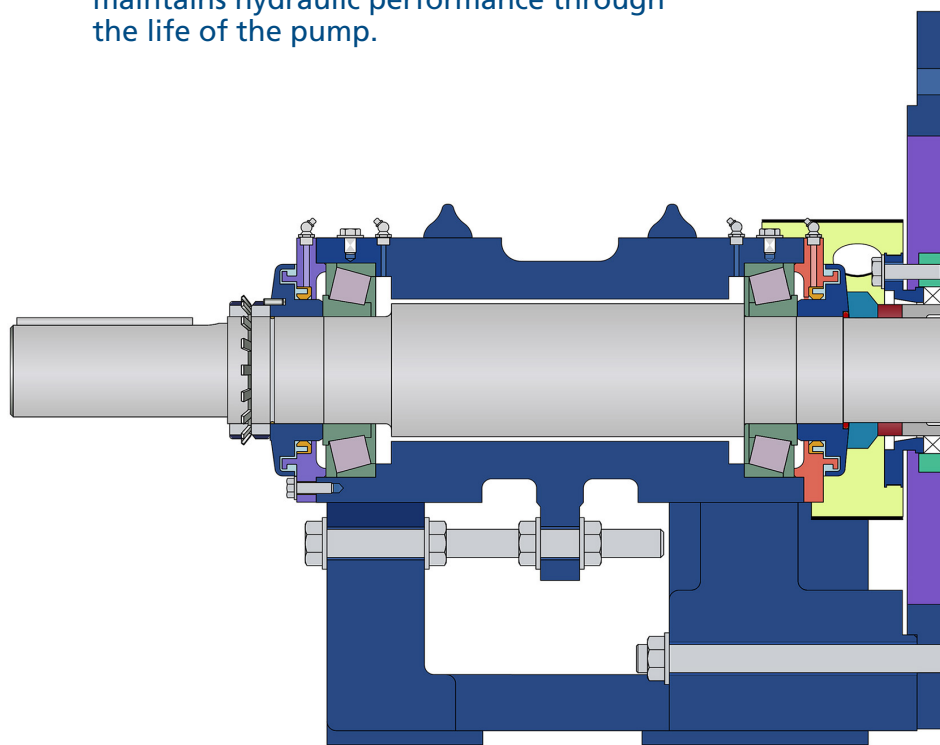
Bearing Assembly: Heavy duty shaft and indirect fitted taper roller bearings rated at 100,000 hrs B-10 life minimum.

Reverse Taper Roller Bearings: ►

- Increases effective load span to improve life
- Main bearing failure is due to under greasing
- Pumping action of taper rollers discharges grease to the outside, preventing ingress of slurry

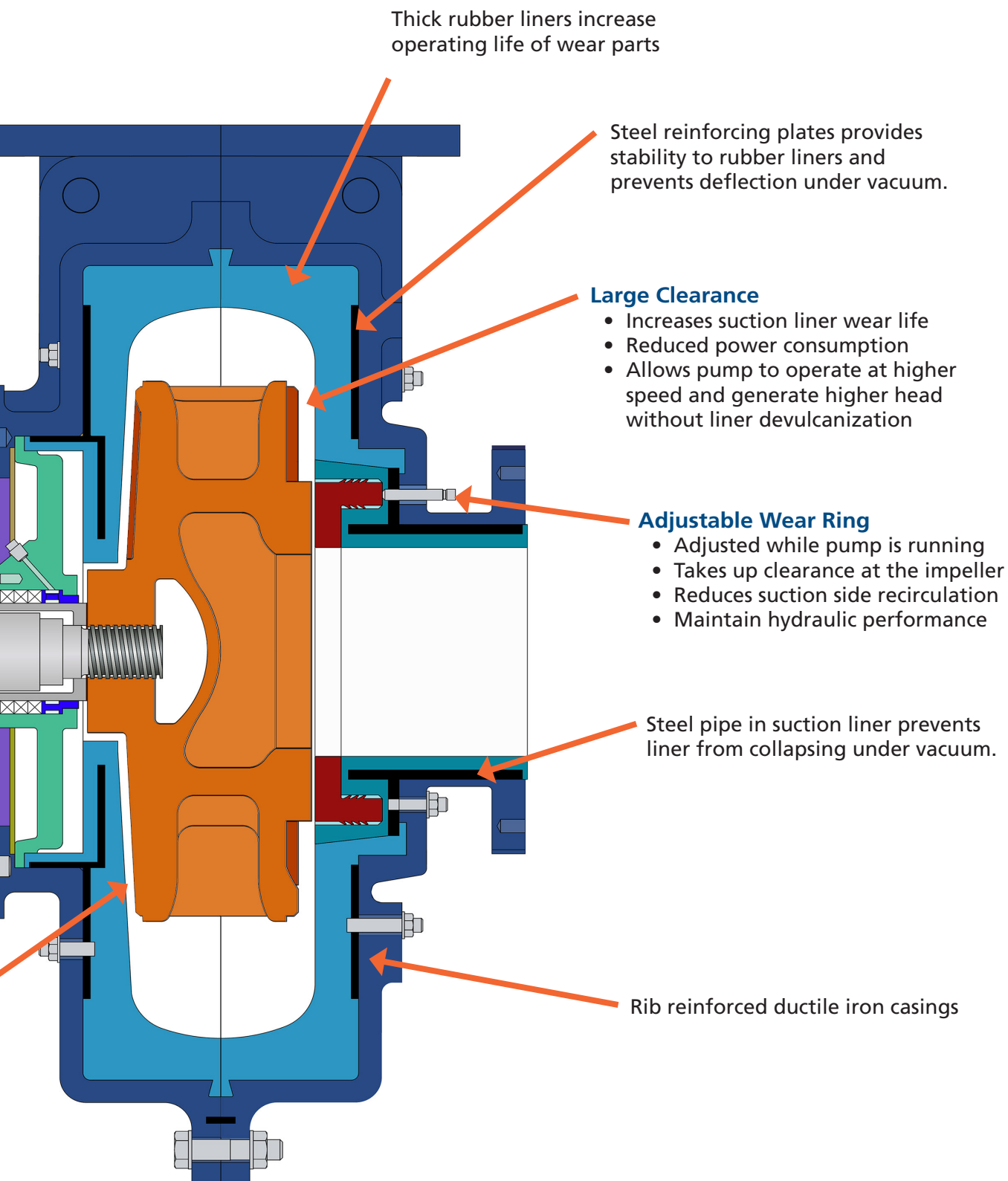


No movement of the bearing assembly to adjust impeller clearances within the pump is required after start up as the wear ring adjustment maintains hydraulic performance through the life of the pump.



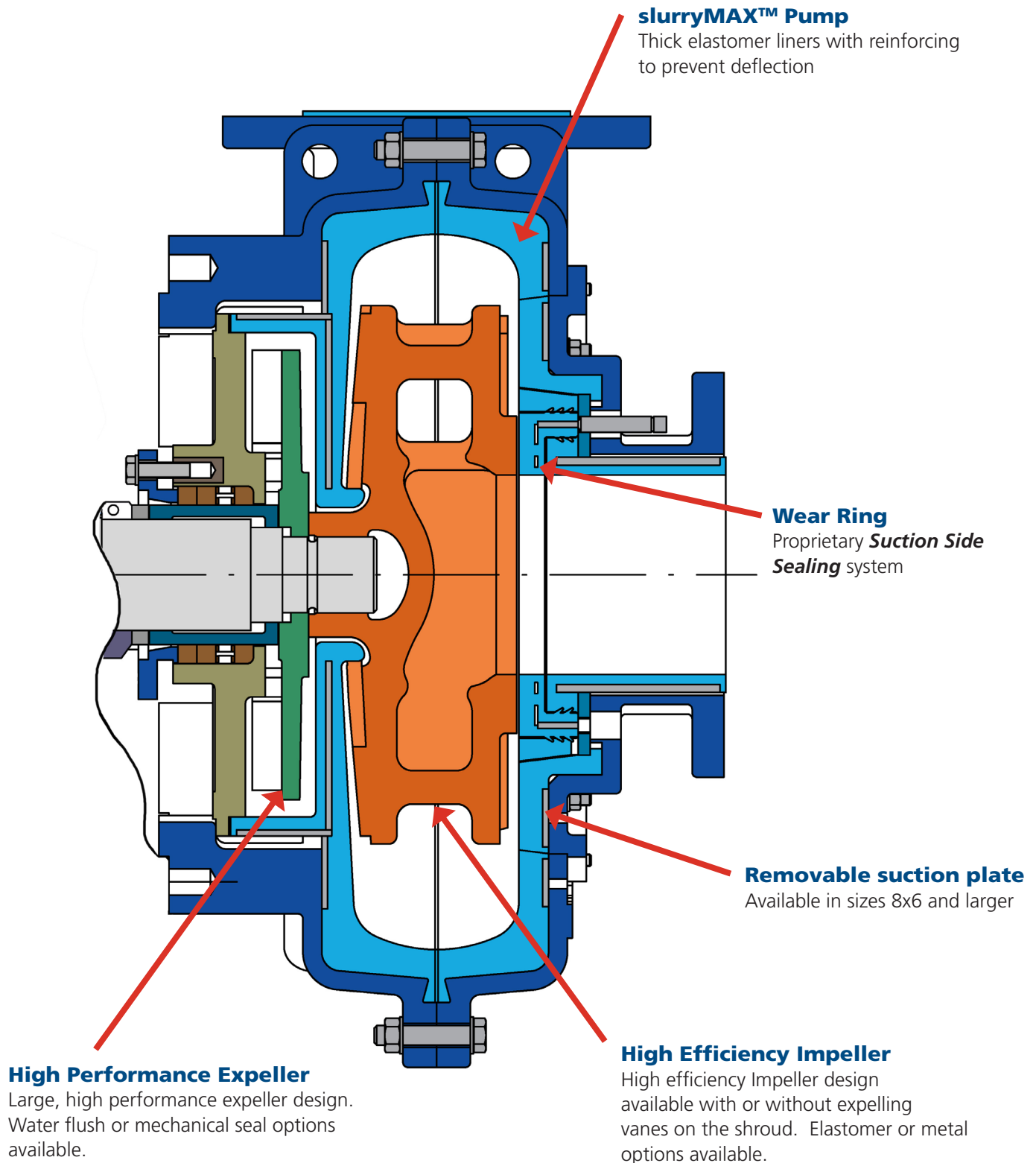
Narrow Clearance

Reduces pressure at gland to assist centrifugal dry gland seal or reduce gland water pressure.





slurryMAX™ design & material options



Specifications

The casing is constructed of tough spheroidal graphite iron. Casing and suction inlet are lined with natural rubber. Alternate elastomer and metal liners are also available.

High-chrome impellers which are resistant to “tramp” metals and are capable of higher tip speeds and are offered as standard. Elastomer lined impellers are available.

Pumps feature a patented, adjustable, suction-side, sealing system that features a wear ring that runs against the machined face of the impeller near the eye.

Wear ring can be adjusted throughout the life of the wet-end parts and is adjusted while the pump is running.

Generous clearance between impeller and suction liner limits the cyclical wear of the rubber associated with the trapping of solids between the liner and the impeller.

The slurryMAX-XD includes radial impeller vanes both which “clear” solids and reduce pressure at suction-side clearance - reducing solids grinding and recirculation respectively.

Tight back liner clearance maximizes packing and shaft sleeve life - normally this clearance is opened up as impeller wears and needs adjusting.

Reverse taper roller bearings purge grease to the outside preventing ingress of slurry and over-greasing of bearing cartridge.

KREBS slurryMAX™ pump product range

slurryMAX	slurryMAX-XD	slurryMAX-HP
3x2	3X3	3X3
4X3	4X4	4X4
6X4	6X6	6X6
8X6	8X6	8X6
10X8	10X8	10X8
12X10	12X10	12X10
14X12	14X12	14X12
16X14	16X14	16X14
---	20X18	---



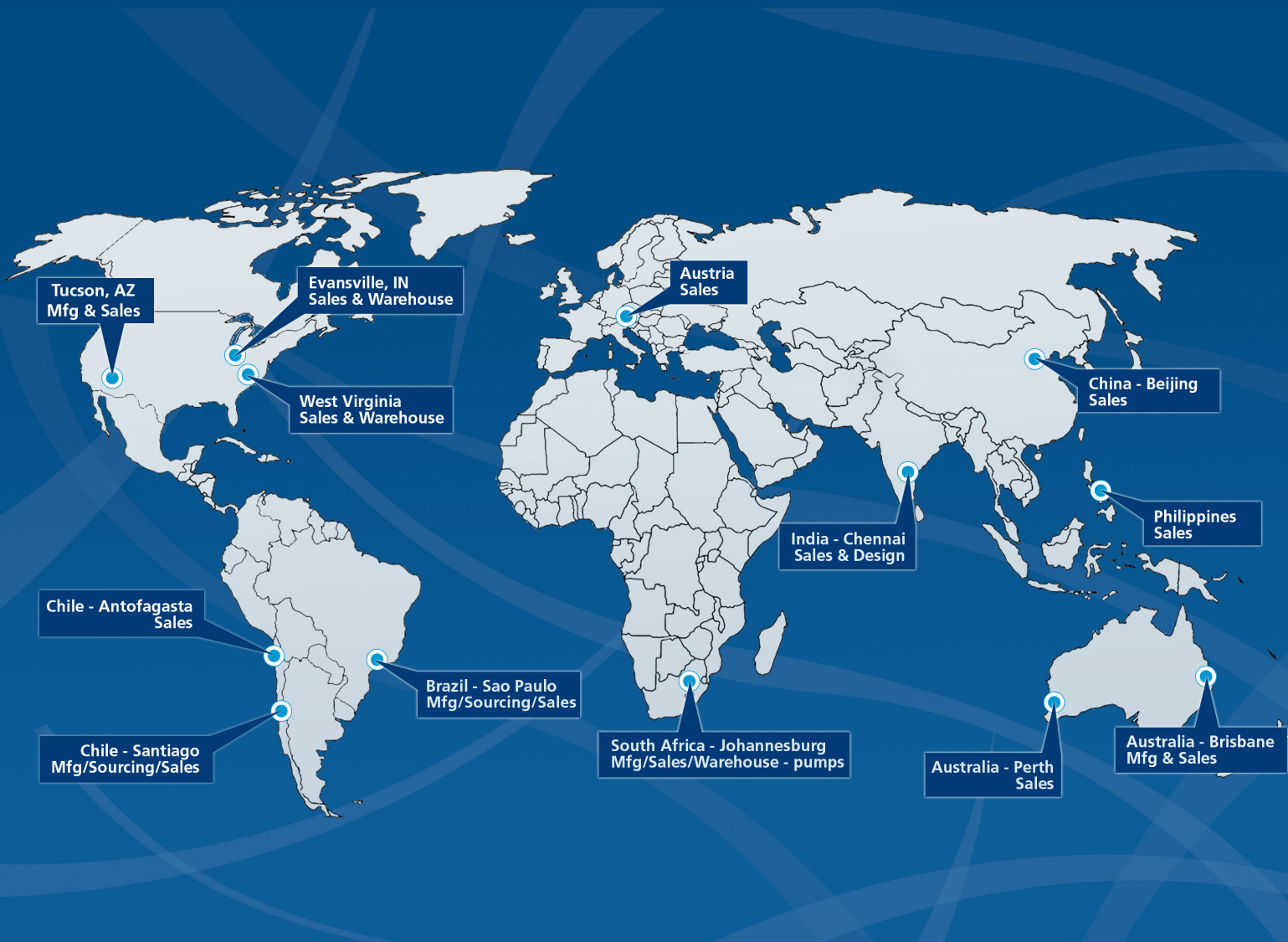
World-class Service & Pump Test Facilities

The FLSmidth Krebs performance test lab serves to further enhance our commitment to the advancement of the industry through development activities, new product offerings, technical services, and collaborations with outside entities. The ability to perform comprehensive testing on our products is not only necessary to meet our customers’ needs, it is essential to meeting the increasing technical demands of the industry and delivering a quality product.



Global Pump Sales

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