

## **Cost Effective Protection:**

Krebs cyclones are a highly efficient cost effective device for removing mill scale from quench water in metal forming plants such as steel, aluminum, brass and copper mills. Krebs Cyclones that are typically used for mill scale removal are typically effective down to 400 mesh (37 microns). Finer separations are possible with multiple numbers of small diameter cyclones.

With the solids removed, the water can be reused and downstream equipment such as valves , pumps, nozzles and other process equipment are protected from abrasive wear. Effective removal of the solids increases plant efficiency, lowers maintenance costs and reduces downtime.

Each system is custom designed and Krebs has many different cyclone sizes to meet the customers' requirements on separation and capacity. Cyclones have a high capacity and take up much less space than clarifiers or filters.

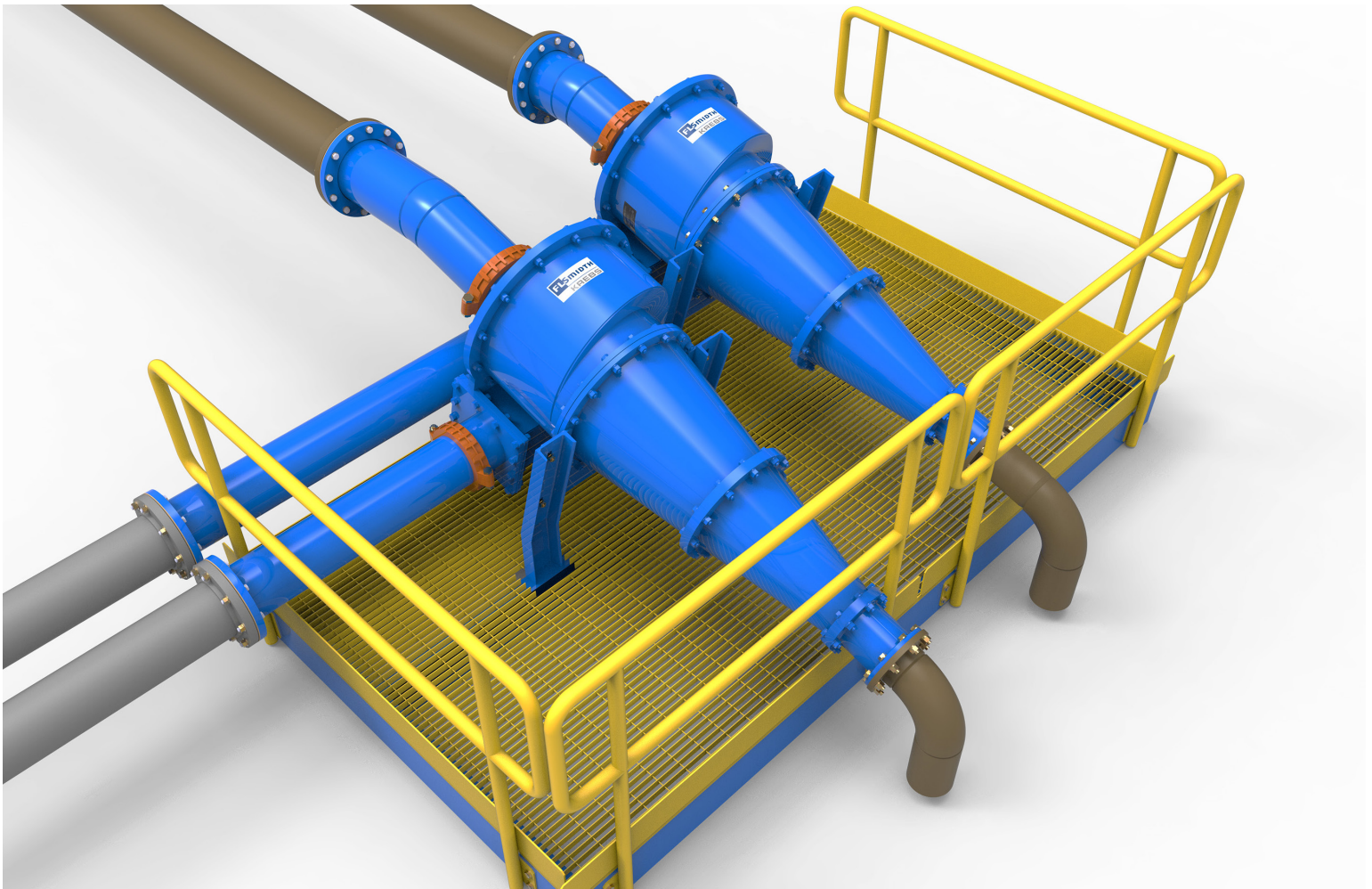
Krebs offers many different materials of construction depending on the customer's needs. Some materials that we can offer are gum rubber liner, ceramic liners, abrasion resistant steel and some hard iron liners.

If oil or grease is present in the water we can also offer our DeOiling cyclones to remove the oil and grease.

## **KREBS® CYCLONES DELIVER**

- High Separation Efficiency
- Compact Size
- No Moving Parts
- High Abrasion Resistance
- Replaceable Liners in High Wear Areas
- Heavy Duty Construction
- Unique interior Geometry to Reduce Turbulence and Improve Performance
- Weight and Space Reduction Compared to Clarifiers or Filters
- Flexible to Changes in Feed Solids Concentrations and Flow
- Minimal Maintenance or Operator Attention Low Operating Costs





After the water is sprayed on the steel it flows to a sump and is then pumped to the cyclones where the scale and other heavy solids are removed. The underflow of the cyclone which contains the steel and some water is discharged to a bin or small holding area where the water can gravity flow back to the cyclone feed sump. The overflow of the cyclone goes to a sump where the water is then pumped to the quench water spray nozzles. Sometimes the cyclones are designed so that the overflow of the cyclone is pressurized so that the water can report directly to the spray nozzles

### FLSmidth Krebs Service

For over six decades FLSmidth Krebs has been the leader in hydrocyclone solutions. Our engineering support is recognized throughout the process industry for exceptional technical design, competence and responsive customer service. Visit us on the web: [www.flsmidthkrebs.com](http://www.flsmidthkrebs.com)

For more information on any of our products please contact one of our **Regional Sales Offices** below.

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