

**Wear and Corrosion Resistant...**

## **Engineered Ceramics for Pneumatic and Hydraulic Systems**



**KALOCER**  
*lined cyclones*

### **Hydro cyclones**

Kalenborn offers a wide range of ceramic linings for hydro cyclones. Typical lining materials include:

- **ABRESIST**  
fused cast basalt
- **KALCOR**  
zirconium corundum
- **KALOCER**  
high alumina ceramics
- **KALSICA**  
silicon carbide ceramics

Various material combinations in different wear areas have proven successful.

Self supporting structures without steel bodies are also possible with KALSICA.

Extreme wear often exists in the apex areas of the hydro cyclones. Kalenborn highly recommends apex nozzles made of KALCOR and KALOCER in these areas or in cases of extreme wear KALSICA.

Kalenborn provides liners in a wide range of dimensions according to the customer's specifications.

It is possible to line different parts of the steel assemblies. This can cover the complete body of the hydro cyclones.

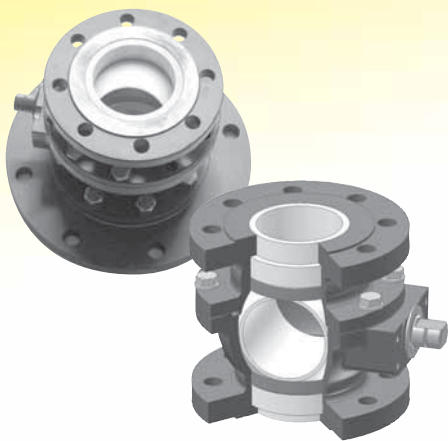


**KALSICA**  
*nozzles and apex*

**KALSICA**  
*self supporting structure*

**For Hydro Cyclones and Valves:**

**ABRESIST, KALCOR, KALOCER or KALSICA can be a Long Term Solution**

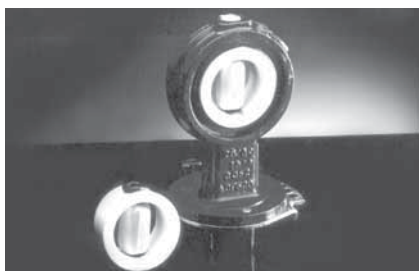


**Ball valves**

Engineered KALOCER high alumina ceramics is the answer when it comes to the high wear in hydraulic and pneumatic conveying pipelines. The valves are proven for long term function. On the other hand ball valves made of steel can often only last for several weeks.

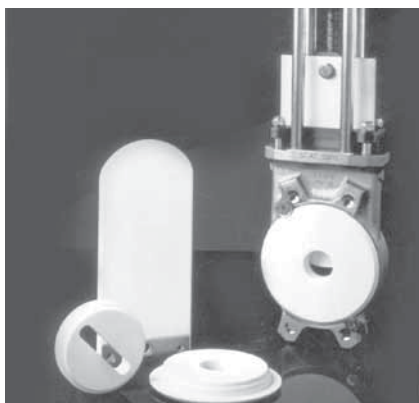
**Design features:**

- ID 25 to ID 100
- flanges according to DIN or Rd 6a



**Turnable control valves**

Turnable control valves are often used in hydraulic and pneumatic systems. With high abrasion the wear life of this equipment can only be several weeks. The solution is a liner made of KALOCER high alumina ceramics and the turnable valve of KALOCER as well.



**Slide gate valves**

Slide gate valves can also work under extreme conditions in hydraulic and pneumatic systems. For long lasting solutions Kalenborn proposes the use of ceramic inserts and lining material. Proven in these applications are KALOCER high alumina ceramics. The slide gate is a combined steel/ceramic design.

**All technical details and dimensions according to customer's specification.**

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