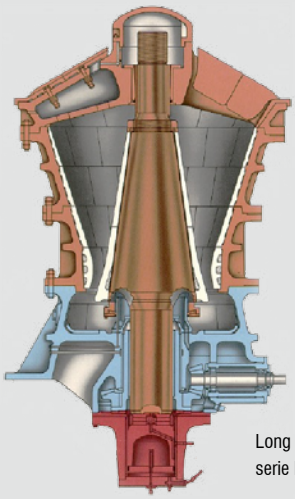
A034

Inductive sensors

induSENSOR



Long stroke sensor
serie EDS

Exact crusher gap adjustment in rotary crushers

Rotary crushers for quarries or ore mines can grind up to 3500 t of material to the desired grain size in one hour. For this purpose, an eccentric bearing bush generates a rotary-oscillating movement of the crusher axle, thereby constantly changing the gap between the crusher jaws and the crushing cone. For grinding, the set gap continuously moves along the inside perimeter of the crushing room. With a long-distance sensor in the hydraulic cylinder, the crushing gap can be exactly adjusted by raising and lowering the axle.

Reasons for choosing the system

The eddy current long-distance sensors measure the piston position in the piston axle exactly and reliably without contact or wear.

Requirements for the measurement system

- Measuring range: 160 … 630mm
- Accuracy: 0.3% FSO
- Resolution: 0.05% FSO
- Bandwidth: quasi static
- Integrated electronics
- Robust, short design

Ambient conditions

- Temperature: -10 to 70°C
- Medium: oil
- Pressure: up to 300 bar

System design

Eddy current long stroke displacement sensors series EDS

- EDS-160-F-SRB-I
- EDS-250-F-SRB-I
- EDS-300-F-SRB-I
- EDS-400-F-SRB-I
- EDS-630-F-SRB-I