

## Automatic Crack Detection of **Rollers** using **eddydector**<sup>®</sup> (1-channel)

Dimensions of parts :  $\varnothing$  3.65mm x 7.2mm

Material : steel, hardened and nitrified

Minimum crack : 0.03mm deep

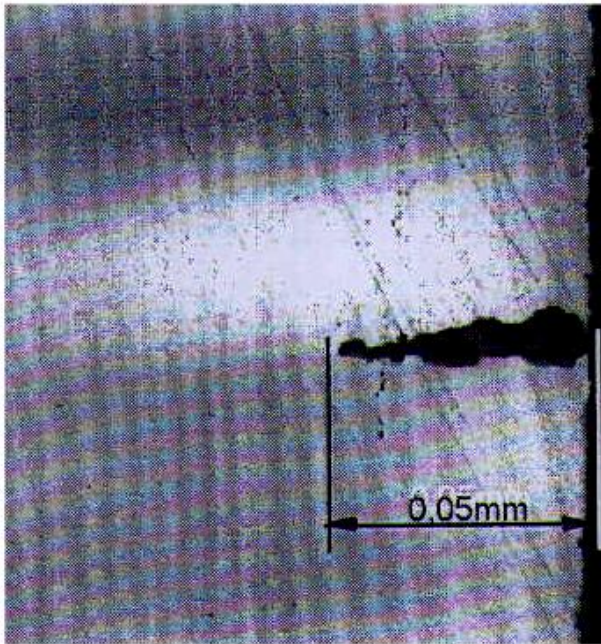
Cycle time : 2.8 parts/sec

The test parts reach the crack detection station in a tube via vibration feeder. A driving wheel moves the rollers at a constant speed to the crack detection station.

Here the parts are accelerated by two driven cylinder rollers to reach a speed of approx. 900 RPM. The crack probe is capable of detecting surface cracks of a minimum crack depth of 0.03mm.

After the crack detection, the rollers are tipped into an output channel and passed on to the left or right channel of the sorting bridge, depending on the sort decision CRACK YES/NO.

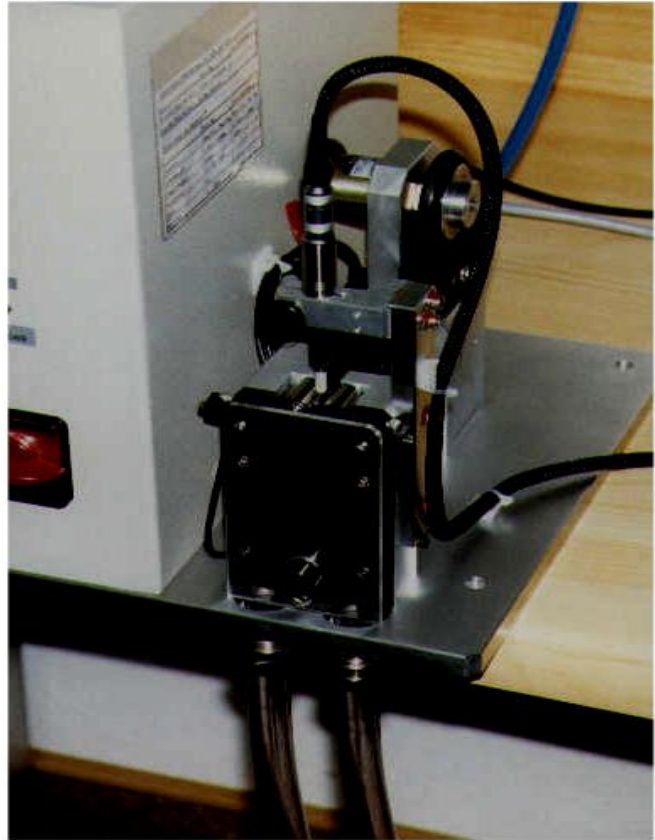
The crack detection handling system is ready for connection to ibg **eddydector**<sup>®</sup> (1 channel).

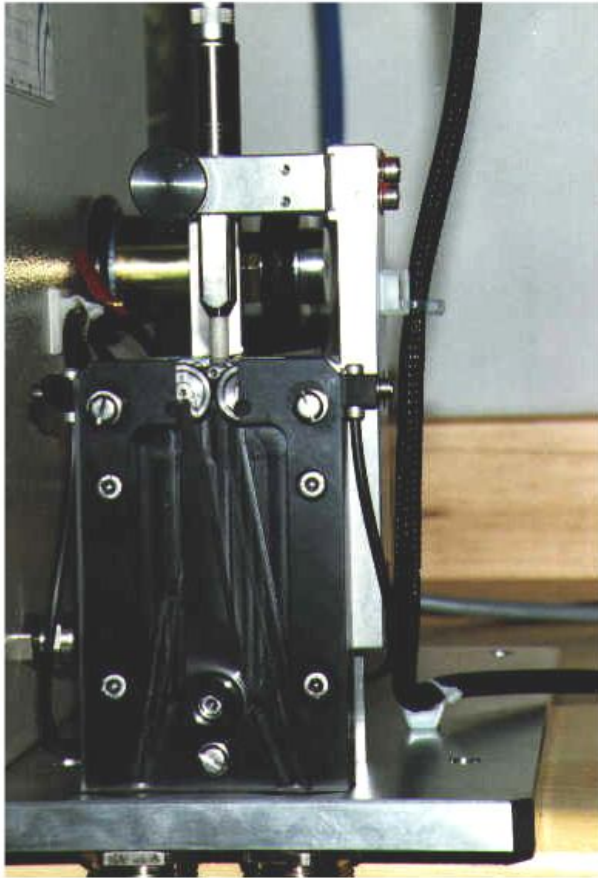


Natural crack (50 $\mu$ )  
760-fold scale-up

*View on crack  
detection system*

- *Driving wheel*
- *Cylinder rollers*
- *Sorting flap*
- *OK/NG channels*
- *Electronic components*





*Test part on cylinder  
rollers, scanned  
by test probe*

*Sorting flap clearly visible*

*Distance of probe to surface of test part: 0.5mm*

