

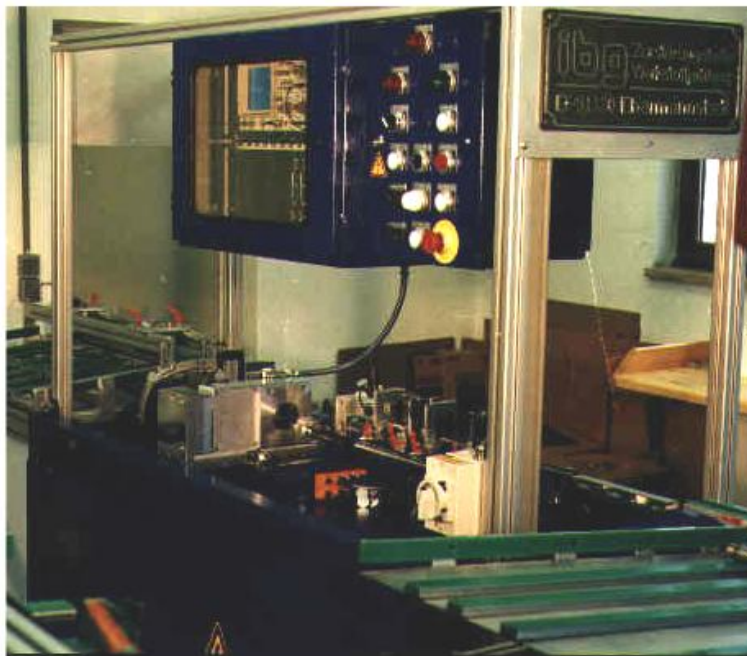
*Automatic Crack Inspection for*  
**Hydro Steering Racks**  
*by means of a Rotating System*



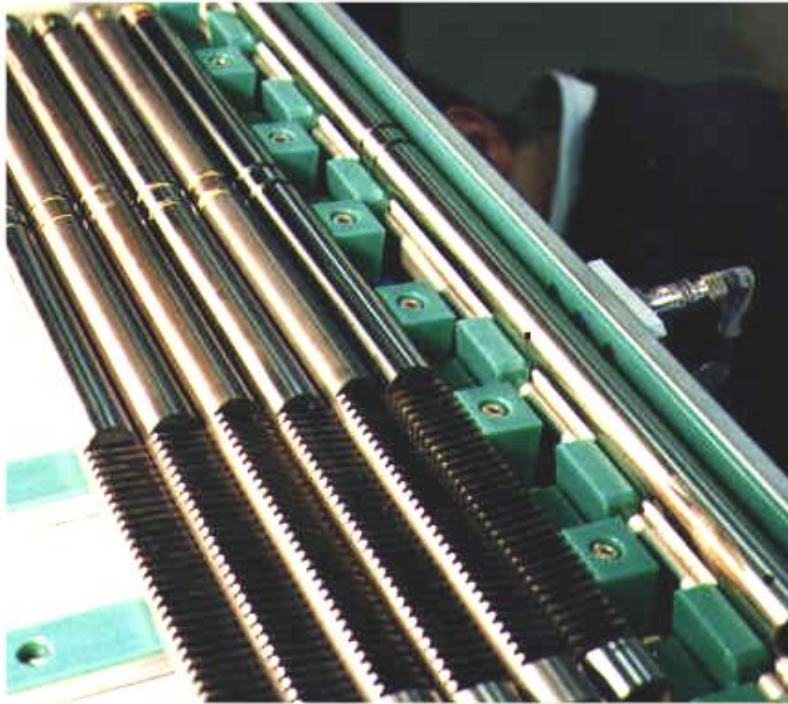
*Crack Specification :*  
*Depth : 50µm*  
*Width : 80µm*  
*Length : 3,75mm*

*The steering racks are tested along the even shaft after the last surface finishing. The parts are dry and washed.*

*Test speed: 200mm/sec.*  
*Test rate: ca. 600 parts/hour*  
*Continuous tracing with 2 channels*  
*Blanking out of the toothed area and piston location*  
*Careful transport of the parts by means of servo drives*  
*Non-contact crack inspection, no wear of test and rotating head*  
*Retrofitable by pattern and hardness test*  
*(eddyliner®P16 for multi-position tests)*

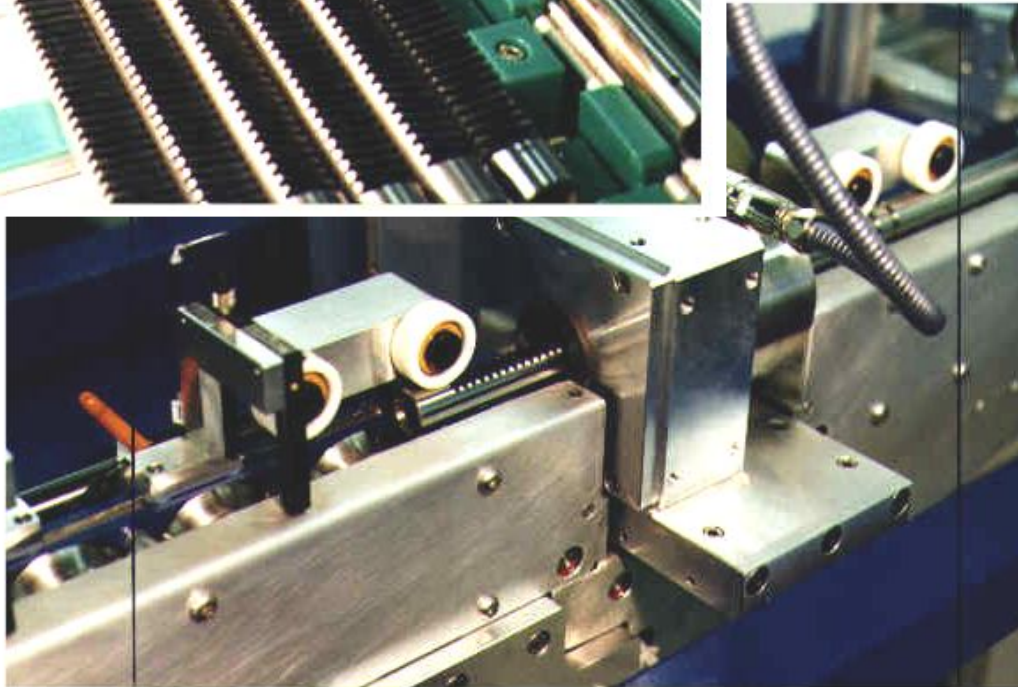


*Crack inspektion device with a view on the operating side*  
*Steel cabinet for test instrument*  
*Rotating head in maintenance position*  
*Rigth: feed and escapment of parts*  
*Middle: Rotating system*  
*Left: Sorting gate for O.K. parts and n.O.K. parts*



*Steering racks with escapement.*

*Feed of the steering racks by timing belt. The parts are gradually accelerated to transporting speed by means of a servo drive so that they are carefully transported.*

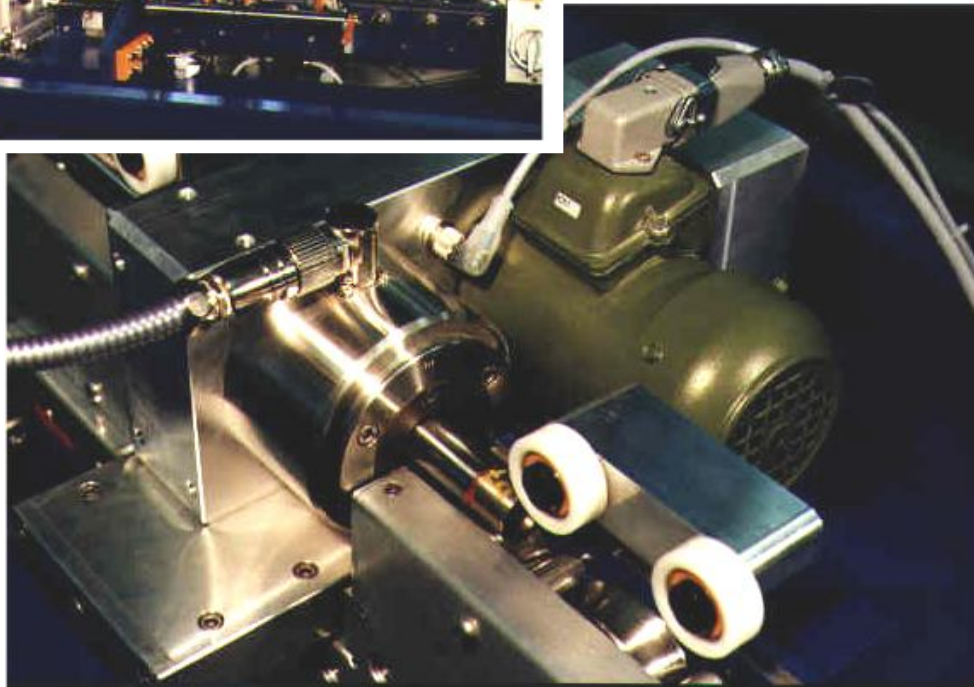


*Rotating head with precise part guiding. The driven profile rolls are adapted to the diameter of the steering racks.*



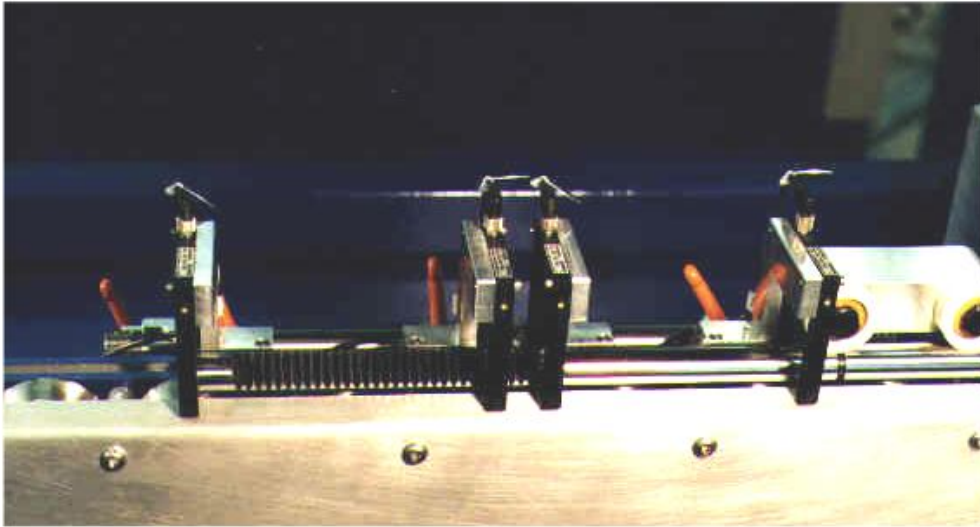
2 Channel crack inspection device **eddydetector**<sup>®</sup> with storage oscilloscope.

Operating pannel and part counting device for O.K. and n.O.K. number.

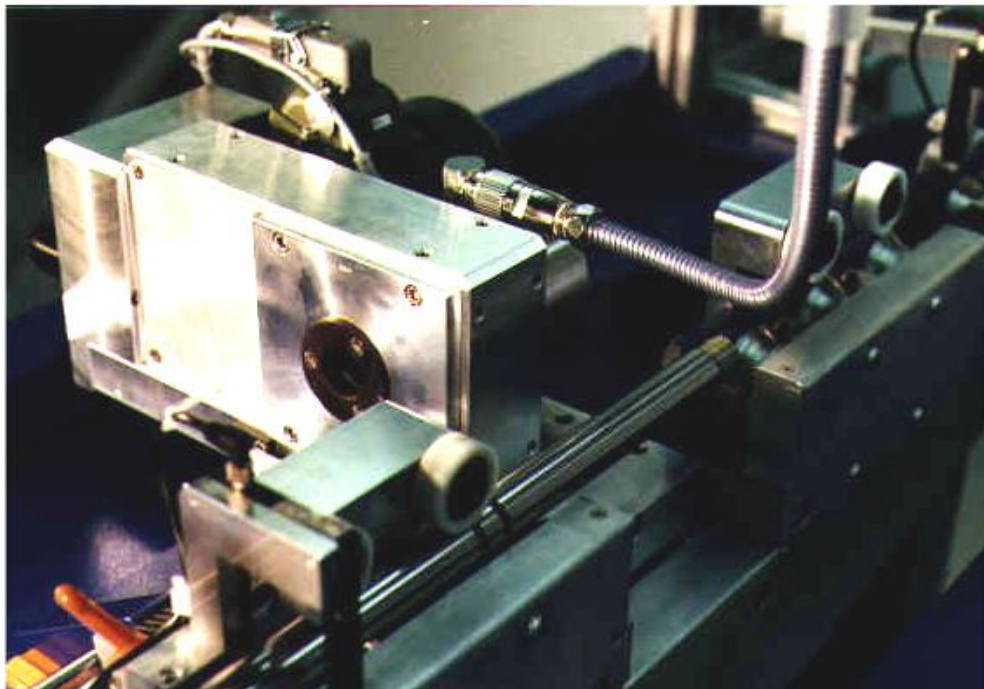


A good guiding mechanism of the steering racks is achieved by the short overall length of the rotating system. Here you can see the feed of the rotating head. The connecting parts of the probes as well as the rotation monitoring and motor are clearly indicated.





*The blanking out of the toothed area and piston location are carried out by an adjustable fork type light barrier. The exact position of the light barrier is indicated by an example steering rack. For this reason adjusting is made very simple.*



*In case of maintenance the operating head can be moved outside the work area by means of a precision guiding mechanism. The parts can then be bypassed.*