

## Test facility for shock absorbers

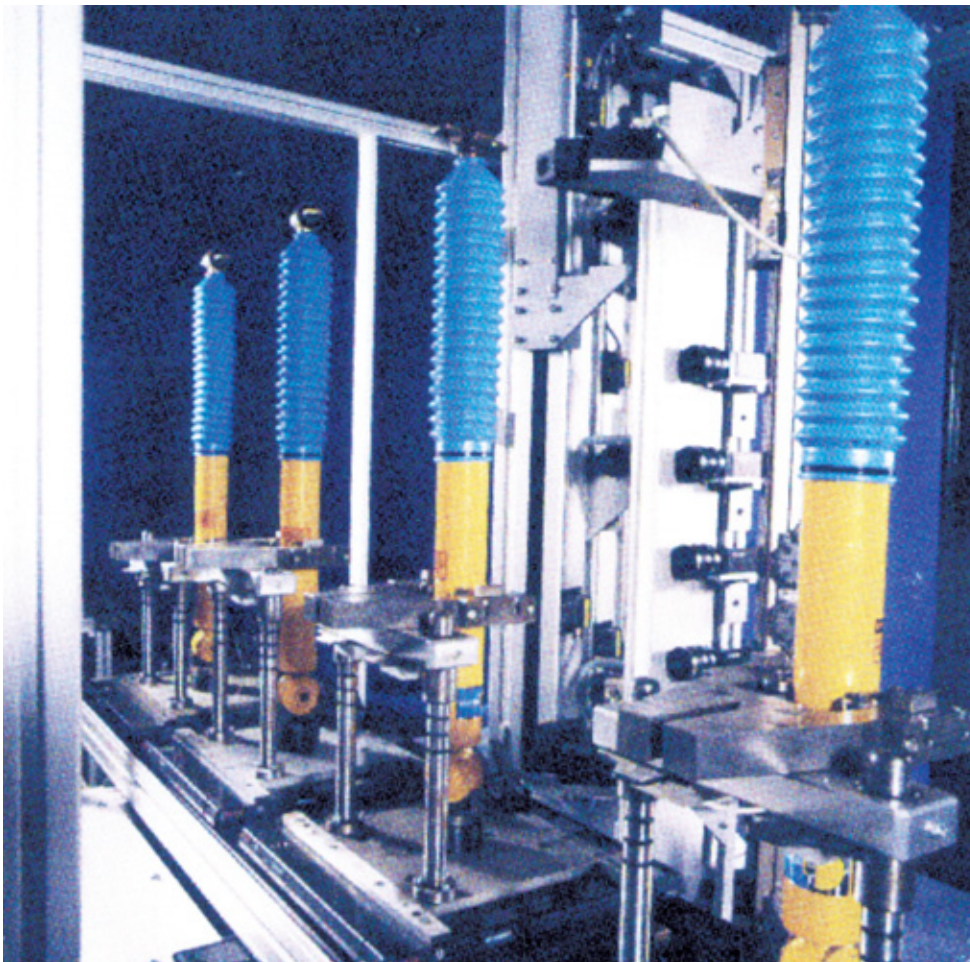
After production the shock absorbers pass through a quality inspection facility on a transport system. Here, they are inspected for dimensional conformance, material faults and the presence of certain features. Two laser-based optical displacement sensors and appropriate CCD cameras enable the measurement of up to eight absorbers per minute. New types of absorber can be quickly learnt through the special teach-in routines. With the vertical and horizontal travel of the sensor, scanning of the circular contour, for example on the black rubber inserts on the knuckle eyes, is possible. Impermissible cracks or blow-outs are reliably detected. If quality defects are found, a shock absorber is provided with a fault printout on adhesive labels and included in the quality statistics.

## Measurement system requirements

- Measurement range: 20 mm
- Accuracy: 0.02 mm
- Resolution: 0.01 mm
- Bandwidth: 1 kHz
- Measurement object: Black rubber  
Shiny metal

## Ambient conditions

- Temperature: 15 to 30 °C
- Medium: air



# Application

## Measurement system setup

2 x ILD2000-20

2 x KH2000

2 x C2000-3

1 x PS 2000

1 x PC-System

## Reasons for the system selection

- Non-contacting and wear-free.
- Large base distance with a small measuring spot diameter.
- High accuracy with different measurement object surfaces.
- Visible laser, Protection Class 2.

