HAFNER

Measuring Automaton for Cylinder Liner

Brief description

- measuring automaton post-process

Measuring task

- measurement of diameters (diameter comparison)
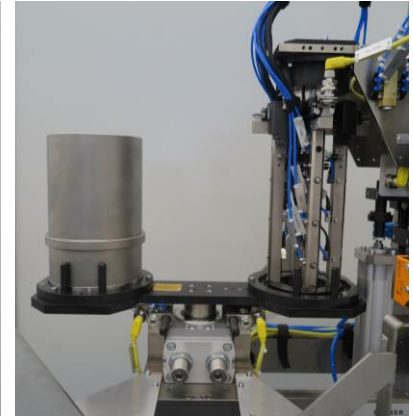
Technology

- tactile
- static

Tolerances

- Ø tolerance 20 µm

Special features

- cycle time: 15 s
- loading/unloading: with a handling supplied by the customer
- calibration: automatic
- changeover: manual
- control system: external control

3464699/he

Measuring Automaton for Rotor

<u>Brief description</u>

- measuring automaton post-process

<u>Measuring task</u>

- Measurement of diameters and lengths, form tolerances an orientation tolerances, temperature compensation
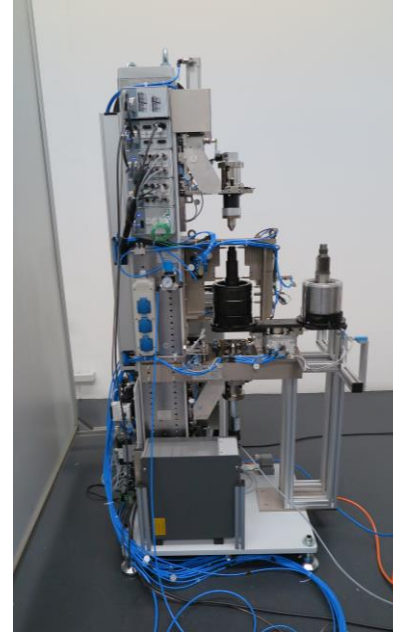
<u>Technology</u>

- tactile
- dynamic

<u>Tolerances</u>

- Ø tolerance 10 µm
- running tolerance 15 µm

<u>Special features</u>

- cycle time: 25 s
- loading/unloading: with a handling supplied by the customer (portal)
- calibration: automatic
- control system: external control
- temperature compensation

3463097/he

Measuring Automaton for Axial Angular Contact Ball Bearing

<u>Brief description</u>
- measuring automaton for 100% check and classification

<u>Measuring task</u>
- measurement of diameters, lengths, assembly size, temperature/compensation of the temperature
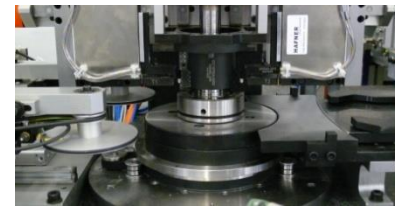
<u>Technology</u>
- tactile as well as contactless, pneumatical
- dynamic

<u>Tolerances</u>
- length 7 µm, tolerance ± 2 µm

<u>Special features</u>
- cycle time: between 21 - 76 s., depending on the type
- loading/unloading: with an integrated handling
- calibration: automatic
- changeover: manual
- traceability and sorting of the workpieces
- nok-classification
- batch mode for 250 different types of workpieces

3433469/he

Measuring System for Combustor

Brief description

- measuring system for sample check

Measuring task

- measurement of diameters

Technology

- tactile
- static

Special features

- loading/unloading: manual
- calibration: manual

3440428/ib

Measuring Devices for Oil Pump

Brief description
- measuring devices for 100% check and classification

Measuring task
- measurement of distance, assembly size, parallelism

Technology
- tactile
- static

Tolerances
- < 10 μ

Special features
- loading/unloading: manual
- calibration: sophisticated calibration concept
- changeover: without changeover
- batch mode for 70 different types of work pieces
- matching of single parts for assembling process

3443991/ba

Measuring automaton for workpiece "Konus"

Brief description
- measuring automaton for 100% check

Measuring task
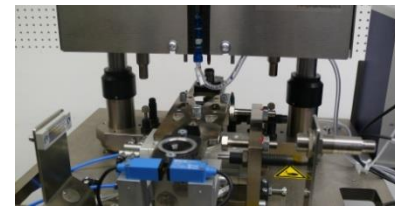- measurement of diameters, lengths

Technology
- tactile
- contactless, pneumatical
- static

Tolerances
- Ø-tolerance: 11µm

Special features
- cycle time: 8 s
- loading/unloading: with a robotic handling supplied by the customer
- calibration: automatic
- control system: external control
- sorting of the workpieces with robotic handling according to their determined status
- integrated into customers automation cell

3451271/ib

Measuring and Setting Device for Blankholder Distance Sensor

Brief description

- measuring device for 100% check

Measuring task

- measurement of heights

Technology

- tactile
- static

Tolerances

- ± 0,1 mm

Special features

- loading/unloading: manual
- calibration: manual
- changeover: without changeover for 4 types of workpieces
- dial gauges with digital readout as well as green/red status signal
- set up of the three pins by the operator by means of the displayed value shown on the respective dial gauge without removal of the workpiece

2551684/eis