Mahr | Dimensional Metrology – SPC Measuring Stations

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Engineered Solutions

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SPC-Measuring Table for Cylinder Head

Measurement Task

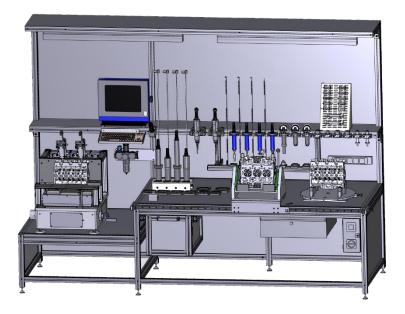
• Diameter

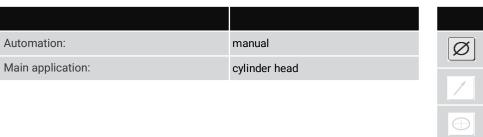
- Distances (e.g. depth of valve guide after pressing)
- Go/NoGo-Inspection
- Surface (optional)

The Solution

Measuring table with various hand-held measuring devices (pneumatic and tactile), multi-point measuring device for the depth of the valve guide and (optional) surface measurement. The measuring table is designed for direct use in production for quality control during production.

The measuring table can be designed and equipped individually according to customer specifications.





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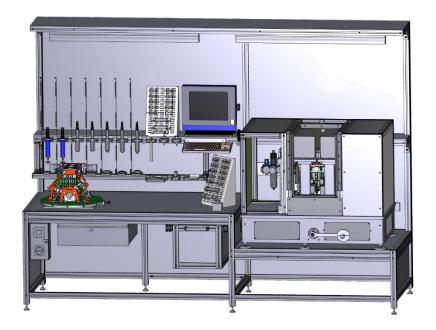
Measuring Table for Cylinder Block

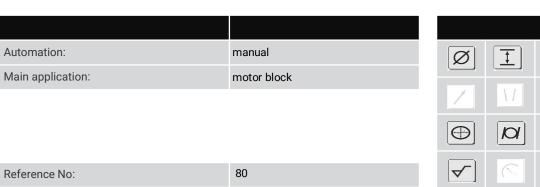
Measurement Task

- Diameter
- Roundness
- Cylindricity
- Distances
- Go/ NoGo-Inspection
- Surface (optional)

The Solution

Measuring table with different hand gages (pneumatic and tactile), multipoint measuring fixture for different distances and (optional) surface measurment unit. Measuring tables are equipped and manufactured to customer specifications.





Measuring Station for Double Clutch Components

Measurement Task

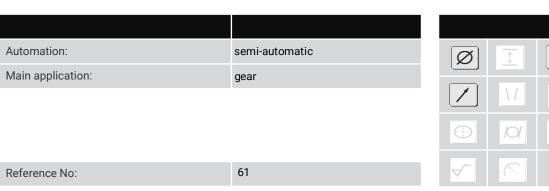
For measuring distances, diameters, axial and radial runout and concentricity in production environment. Dimensional check of doubleclutch assemblies after the welding process. Repeatability: \pm 0.02. The real-time measurement results allow an immediate impact on rejects or rework results on the production.

The Solution

Semiautomatic measuring station for different assemblies of a double clutch. The workpieces are placed manually on a mandrel. A manual QR scanner captures the ID number of each statistical data control point. After closing the protective hood and pressing the start button, a dynamic measuring process for various features is carried out. The evaluation of the measurement results takes place via an integrated measuring software. A touch screen is used to visualize control and measurement results. The automatic recognition recognizes different workpiece types and loads the associated control and measuring programs. The desing is suitable for a 100% measurement directly on the processing machine. Due to the compact and mobile construction, a quick change of the site is possible. The cycle time is between 15 and 60 seconds, depending on the quantity and type of measurement characteristics.



Mal



Measurement of Disc Carrier for Automatic Gear

Measurement Task

- Radial run-out
- Axial run-out
- Teeth to teeth run-out
- Two-ball diameter
- Concentricity

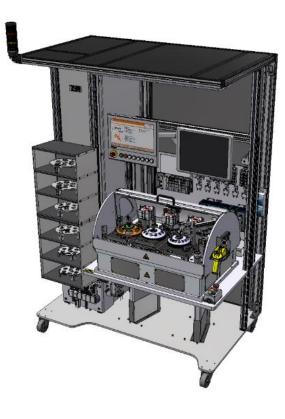
The Solution

Parts are recognized via Barcode-Scanner. The corresponding measuring programm is automatically been loaded.

The work piece is loaded manually to the measurement station. After closing the housing, the dynamic, full-automatic measurement is been performed.

On the left hand side master workpieces are beeing stored for regular calibration of the station.

The working desk is optimized for ergonomics and full ajustable in flexible heights.



Automation:

Main application:

Reference No:

