

The Festo Checkbox in practical application: 100% quality for large quantities of components

FESTO



Müller Präzision GmbH, Cham **Stainless steel precision components**

The requirements

- Integration of the component control system
- Inspection to different quality criteria
- High quality requirement with high cycle rates
- Large quantity of variants
- Frequent component changes
- Separating out of incorrect parts

The solution

- Festo Countbox – standard unit:
- Fully automatic mobile quality inspection system
- Retooling via push-button for different product variants through selection of electronically stored component data
- Simple operation, no programming required
- Countbox assembly onto mobile unit

The benefits

- Automatic quality assurance
- High cost savings
- High processing speeds
- Modular design
- Compact size
- Flexible application
- Simple batching

Intelligent production delivers precision!

The Countbox automates quality

Müller Präzision GmbH

The demand for high production quality should not fall victim to higher costs and increasing quantities. Müller Präzision GmbH prove how precision and economic efficiency go hand in hand and can provide the foundation for a profitable future. In this case, different precision components made of stainless steel such as axes, shafts, pins and bolts are turned, milled or rolled.

Up to now quality finishing such as checking, reworking and batching had to be carried



the parts...



the Countbox...



the system...

out externally involving high costs and logistics requirements. In order to reduce these costs and maintain an optimum clearly arranged overall process, quality inspection had to be integrated into the production process; preferably by mechanical means to remain competitive irrespective of high quality requirement and to provide a flexible basis for future requirements.

Accurate inspection of different precision components at high cycle rates!

The company's high capacity production of 14,000 to 15,000 components per hour involving different product groups imposes high performance pressure on all inspection units. That large component quantities can cause quality problems has been proven by the fact that in part the conformity of mass-produced components no longer met customer requirements. Plans were made to integrate a mobile, automatic quality and sorting system in-house. To inspect and separate the different component types, the system also required highly reduced retooling times.

Robust optical system and intelligent electronics!

The solution was Festo's Countbox. A flexible, mobile inspection and separating system for fast, mechanical quality inspection and sorting of components. The inspection of large quantities of different products involving various checking criteria is now carried out electronically in-house by means of optics and intelligent computing. This saves costs for external reworking, considerably reduces the error rate and even increases the inspection

rate. With Festo's Checkbox the required quality can now be met every time, even with high component throughput.

The requirements

- Maintaining product quality with increased cycle rates
- Reliable inspection for damage and machining burrs
- Inspection of dimensional accuracy
- Reliable recording of production data
- Reduced processing times
- Effective, frequent part changes

The solution

- Industry compatible, precision optics
- Teach-in contour recognition
- High characteristics resolution
- High conveyer speed
- Integrated counting and sorting function

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