Reliable recognition of more than 100 different parts An easy task for the Identbox

It is difficult to reconcile increasing quality demands and cost effective manufacturing. MUBEA, a medium-sized supplier to the automotive industry, was also presented with this challenge. Products produced by the company range from valve springs through to axle springs and stabilisers.

MUBEA performs all of the manufacturing processes required for the production of springs: from raw materials through to the finished product in conformance with the highest of quality standards.



The Parts...



The Identbox...



The System...

In addition to the individual manufacturing operations – winding, hardening and grinding – quality inspection plays a decisive role at the end of the process sequence.

Feeding of inspected components:

Finished valve springs are fed to a fully automated testing and measuring instrument. It is extremely important that only the correct spring type find its way to the automatic testing equipment, and that it does not exhibit any defects, as this could incur damage to the test instrument. Furthermore, the numerous types of springs i.e. beehive springs, springs with various pitch characteristics and taper springs – present the feed system with an enormous challenge.

Flexible feeding for correctly positioned parts

Thanks to its teach-in capabilities, including memory storage of taught-in data, the Identbox offers an optimal solution for minimising set-up time. Incorrectly positioned parts are returned by means of a rollover station which is controlled by an I/O interface.

Defective and incorrect parts are reliably ejected. This allows for a throughput rate of 60 to 70 parts per minute.

Flexibility, reliability and quality assurance – these are the strengths of the Identbox

- Reduces changeover time to an absolute minimum through the use of an electronic components memory, and allows for changeovers by simply pushing a button
- Exceptional system availability even with 3 shift operation thanks to return of incorrectly oriented parts and targeted ejection of incorrect or defective parts by means of compressed air
- Simple operation teach-in as opposed to programming
- Clearly defined interfaces and a modular systems concept save time during start-up
- Uniform, high quality finished products through the use of integrated quality inspection
- Resistant to interference, no maintenance required

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The Festo Checkbox in practical application: Exceptional flexibility, reliable position recognition





Muhr and Bender (MUBEA), D-Attendorn Positionally accurate feeding of valve springs

The Tasks

- Feeding of valve springs to a measuring and marking system
- Flexible position recognition for more than 100 types of springs
- 100% reliable recognition of different types

The Solution

- Festo Identbox standard unit: – Simple integration into
- a linked conveyor system – Rapid systems changeover
- within seconds thanks to electronic component memory and teach-in capabilities
- Expansion through the use of a rollover station

The Benefits

- Simple integration and initial start-up
- Reduced set-up time
- Reliable position recognition
- Elimination of incorrect parts