

MSE 2

MULTIPLE-USE SCREW INSERTION UNIT

“Increase your productivity with Bihler’s multi-purpose screw-insertion unit MSE 2”

The patented, NC controlled multi-purpose screw-insertion unit excels through high stroke rates. The MSE 2 allows you to distinctly increase the production speeds of your manufacturing plant and to benefit from larger batch sizes and even higher profitability. Due to its compact design it can be integrated easily into all production, assembly and transfer lines. It is also possible to mount several units side by side. Equipped with a lifting device, which avoids that the machine is stopped when defective screws arrive, the MSE 2 is the ideal tool to increase your manufacturing productivity.

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Convincing advantages

- Stroke rates of over 200 1/min are possible
- Program with torque control and rotation angle control
- Compact design for parallel installation of several units
- Automatic supply of screws
- Rotary table with standard grippers
- Correct positioning of screws in rotary table
- Program-controlled pitch
- Patented torque coupling ranging from 0.1 to 2 Nm
- Spring-mounted bolting tool for less wear on bits
- Rapid bit-exchange system
- Check for presence of screws
- Applicable for different threads and screws
- To be mounted in vertical and horizontal position
- Can also be used for spring coiling

Simultaneous operating principle

The MSE 2 consists of a compact drive block with 2 AC servo motors. The high stroke rates are made possible by an interconnected rotary table with standard grippers, which performs the following simultaneous operations:

1. screw supply
2. screw check
3. bolting
4. tightening screw to specified torque

Operation sequence and timing of both servo motors are subject to a specific program:

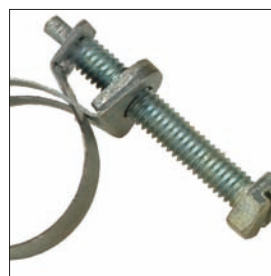
- a) feed screw to rotary table (already fixed in correct position)
- b) turn rotary table to next position
- c) lower bolting tool and screw down screw with x turns
- d) tighten screw to specified torque
- e) move bolting tool to zero position (reference position)



Intelligent lifting device

The pneumatic lifting device serves to raise and lower the MSE 2 for most rapid tool change. In case of a bolting error (screw without thread) the device automatically lifts for a moment. The manufacturing plant keeps running without break and the defective part is sorted out.

The lifting device can be attached to presses, automatic punching and bending machines, or other manufacturing lines. Via a cross slide the bolting tool can be adjusted by 20 mm in the x axis direction and by 80 mm the y axis direction.



(Subject to change without notice 06/08)