

## MAFU Spring Feeding Device Medical Industry



This system provides a solution for the provision and supply of springs with open legs for the medical industry. The springs are automatically unraveled, isolated, and fed in the correct position to the customer's assembly table.

Through the use of sensors, doubled, hooked or wrong positioned springs are detected and sorted out, or they are aligned in the defined position by a high-speed handling with a rotary gripping device.

### The MAFU feeding device offers the following advantages:

#### Economy:

Thanks to the fully automation of the plant and the high cycle time of 2.0 seconds per spring, the plant is an economically highly interesting solution for the supply of springs with open legs in the mass production of disposable injectors or similar applications.

#### Quality:

Through the use of sensors it is guaranteed that doubled or entangled springs are identified and sorted out. Additionally, thanks to the high-speed handling with the rotary gripping device, the two positions of the torsion springs are processed at 100%.

#### Ergonomics:

Due to the space-saving design of the system, it can be positioned almost anywhere. The structure of the system as a standalone module ensures the modular use of the system in any type of installation.

### Fields of application:

Disentangling, separation and feeding of hook springs for the assembly of disposable injectors for the collection of blood drops.

### Sectors:

Medical Sectors

### Customer:



### Range of parts:

Cylindrical springs with a hook at the end. The springs are mounted in a disposable injectors and serve as a stop for the syringe needle, to prevent it from penetrating too deeply into the finger tip. Dimensions of the springs: 22 x 45 mm.



# MAFU

## Spring Feeding Device

### Medical Industry

#### Method of functioning:

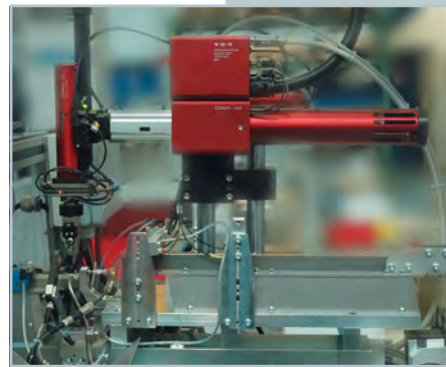
##### Pre-disentangling:

The entangled springs are pre-disentangled in the MAFU disentangling drum onto a conveyor rail on which they are moved forward by vibration. Thanks to a sensor, doubled or entangled springs are identified and discarded.



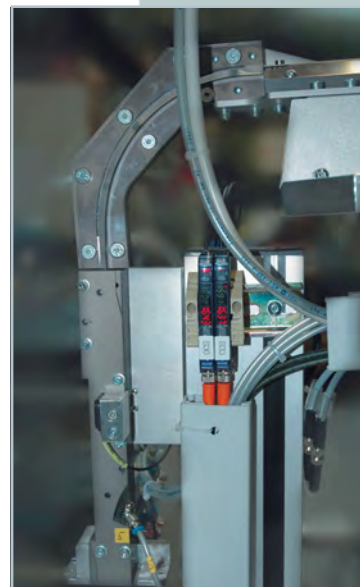
##### Position recognition and orientation:

A sensor checks the correct position of the hook springs. In case of wrongly positioned springs, the rotary gripper of the high-speed handling device directs the springs in their defined position and then places them on to another conveyor rail.



##### Supply to the assembly table:

In the following, 90 degree coiled arc segment, the springs are fed to a customer-provided round table for further processing. At the transfer point, the MAFU positioning and separation module governs the correct transfer.



# MAFU

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