

## CAP INSERTER WITH A VISION SYSTEM TYPE: Z-1084



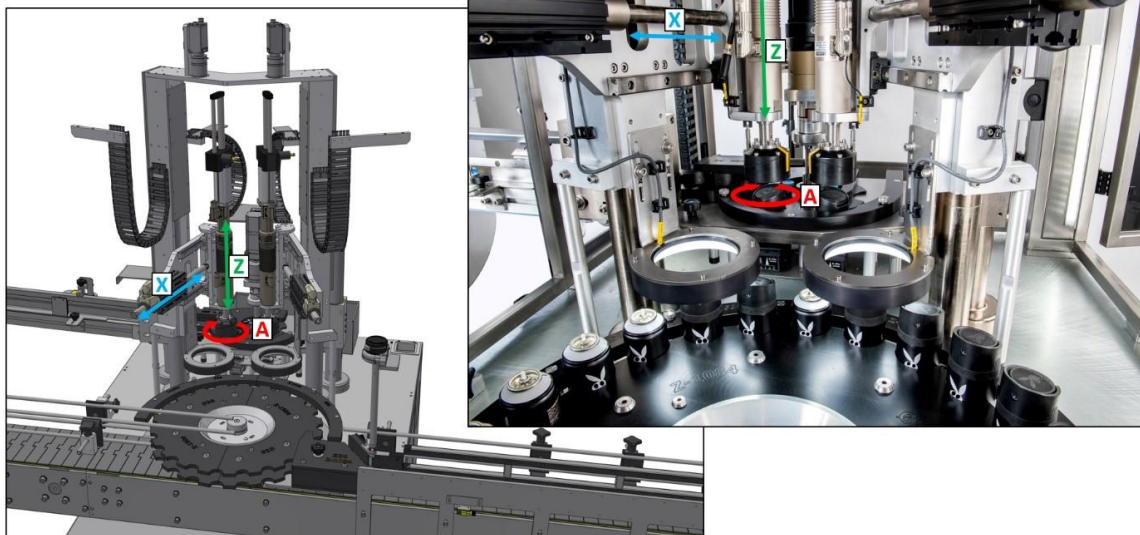
The Z-1084 unit is designed for automatic placing of aerosol caps which, due to their asymmetrical geometry and integrated graphic pattern, require orientation (rotation) with respect to the aerosol can they are placed on. The vision system based on Omron components (sensor, lens and illuminator) is designed to detect the position of the cap relative to the marker on the container, which enables the determination of the rotation angle set for the head equipped with a vacuum gripper holding the caps.



The movement of the gripper tip is realised by LinMot magnetic linear-rotary actuators. The machine is equipped with Mitsubishi servo drive, indexing the containers with a double step, so in one cycle there is the orientation and seating of 2 caps simultaneously - all systems are doubled (vision system, vacuum gripper, magnetic drives). The rotation of the head in each gripper is realized by JVL servo drives. The whole system is controlled by a dedicated S7 series PLC from Siemens. Simatic HMI panel equipped with a 12" touch screen is responsible for communication with the operator. Due to the full automation of the entire cycle, all settings are only programmable from the touch interface. The use of Asem router, allows for comprehensive remote diagnostics using Ethernet or 3G/4G interface.

#### Main functions of the device:

- Orientation of asymmetrical caps
- Elimination of faulty caps (e.g. unrecognized type, damaged caps)
- Diagnosis of pressure generated during cap application
- Elimination of mechanical settings, all adjustments from the program level.
- Remote diagnostics



## Working parameters

Capacity: 120 pcs/minute  
Working pressure: 0.6 ÷ 0.8 MPa (6÷8 bar)

## Dimensions and weight

Width: 1540 mm  
Length: 1195 mm  
Height: 2549 mm  
Weight: ~935 kg

## Supply

Supply type: Electric and pneumatic  
Required supply voltage: 3x230 VAC, 50Hz  
Power: 0.75 kW  
Required supply pressure: 0.8 ÷ 1.0 MPa (8 ÷ 10 bar)  
Compressed air quality: Class IV according to ISO 8573-1 standard for temp. 15 ÷ 35°C  
Air consumption: 42 m<sup>3</sup>/h  
Connection: External thread G<sup>3</sup>/<sub>4</sub>"

