

MACHINE FOR PACKAGING BULK MATERIAL

– „DOZA-L“



Figure 1. Machine for packing bulk materials

The main features of the device:

- *Inbox volume of 75 liters*
- *Transport and distribution of materials due electrical vibrator*
- *The transfer of materials into packaging bags*
- *Packaging of volume compressible materials by the worm gearing*
- *The possibility of setting mass of dosing*
- *The possibility of setting the duration of dosing*

Device components and application:



Figure 2. Display of device components

1. Control part

Components:

- PLC
- Power Supply
- User Panel
- Contactors
- Protective elements

Description:

- The operator through the panel defines the parameters of the process
- PLC through its input and output signals manages the process

2. Input part

Components:

- Vibrating funnel
- Funnel carriers with rubber bumpers
- Adjustable height continuation for output material

Description:

- Operator puts the material in a vibrating funnel
- Material falls into the system for transportation and distribution
- Through an adjustable continuation the height of the material adjusts at the outlet of the funnel



Figure 3. Input funnel

3. The system for material transportation and distribution

Components:

- Tray for transfer and distribution of material
- Electric vibrator

Description:

- On the transport tray material due vibrations moves towards the dosing system
- The material is in this phase equally distributed over transport tray
- Transport is carried out with two different speeds



Figure 4. System transport and distribution of material

4. Dosing system

Components:

- Output tray
- Dosing scale
- - Pneumatic cylinder for pouring material

Description:

- From the system for transportation and distribution material is poured into the output tray, until the dosing scale does not register the desired mass of material
- - Output tray due a pneumatic cylinder rotates and pours the material into the output funnel

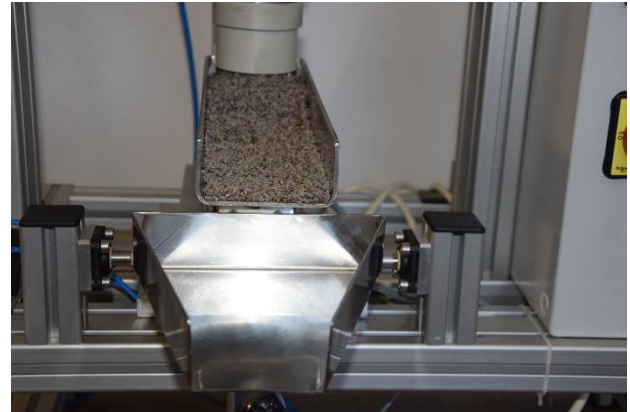


Figure 5. Output tray

5. The system for filling the packaging

Option A: Through a worm gear

Components:

- Output funnel
- Worm screw for transport and compression
- Electric motor

Description:

- Dosed quantity of material from output container is poured in the output funnel
- Worm screw transports and compresses material in adequate packaging

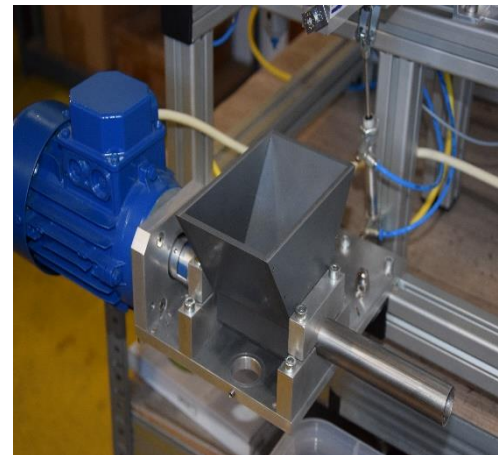


Figure 6. Output funnel

Option B: Through a cylindrical funnel

Components:

- Output cylindrical funnel

Description:

- Dosed quantity of material from output container is poured in the output cylindrical funnel

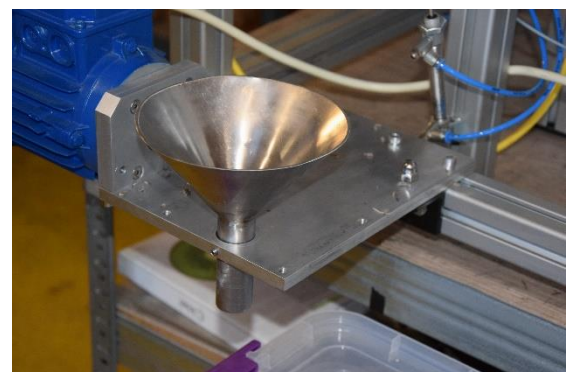


Figure 7. Output cylindrical funnel

6. Technical characteristics

machine name	DOZA L
Supply el. voltage	230VAC , 50 Hz
Supply el. force	0,4 kW
The main fuses	6 A
Type el. connection	L / N / PE
Protection against indirect el. contact	grounding
Mass	50 kg
Dimensions [W x H x D]	780 x 1080 x 710 mm
The accuracy of weighing	+/- 0.5 g
Max weight of weighing	0.5 kg
Capacity	50 l/h
Supply compressed air	4-7 bar
Consumption of compressed air	max 20 l/min

7. Delivery

Delivery includes:

- Machine with the technical documentation
- Operating instructions
- Training of users
- Electrical and pneumatic scheme
- One year warranty on the complete machine