



UNION HEHLBAR
PACKAGING MACHINES AND EQUIPMENT

WORKING MANUAL FOR AUGER FILLER ASD-01-SV SERVO

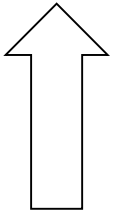


2020

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INSTALLATION



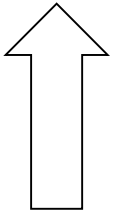
1. Requirements:

- ambient temperature 15 - 30°C
- humidity 35 – 85%
- power supply 220V±10%, 50Hz

2. The dosing/weighing device should be placed on a specially designed for the purpose metal platform. The platform should be positioned on horizontal, rigid and smooth place.

- the weigher should be placed on a place where its performance will be not affected from vibrations or other side effects, which could deteriorate its normal operation.
- there should be enough space around the machine so that to facilitate its cleaning and maintenance.

SAFETY WORK



SAFETY INSTRUCTION FOR WORKING WITH THE DOSING DEVICES

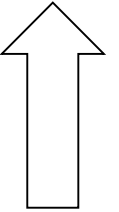
General safety conditions:

1. Working with an opened electrical panel is not allowed. All of the electrical maintenance is done **ONLY** by an authorized personnel.
2. Install the dosing device on a strong and stable frame. The frame should be installed on hard and flat surface. Level the frame, so that to avoid any shaking and eventual falling of the dosing device.
3. Only food products should be used when testing the dosing device. After finishing work, the dosing device should be emptied and cleaned.
4. The cleaning of the device is done with a cleaning mop and spirit. Cleaning with other chemicals is done only after the approval of the manufacturer.
5. When working with a weigher do not hit or apply strong pressure on the weighing hoppers, because you may damage the scales. If there is an additional agitator, installed in the hopper, any mechanical adjustments or cleaning procedures, are forbidden on working machine.

Specific safety conditions:

1. When working with a weigher do not hit or apply strong pressure on the scale, because you may damage the weighing sensor. If there is an additional agitator, installed in the hopper, any mechanical adjustments or cleaning procedures, are forbidden on working machine.
2. When working with an auger filler any mechanical adjustments or cleaning procedures, are forbidden on working machine. **DO NOT** put your hand or any other object in the screw tube when the machine is working. It may cause harm to both the machine and the operator.

STARTING THE DOSING DEVICE

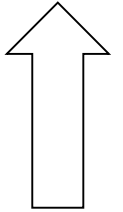


The auger filler starts automatically when you turn on the packaging machine. For the purpose, please ensure that the auger filler is connected to the packaging machine (see img.1):



img.1

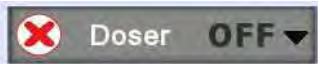

CONTROL PANEL



1. Setup of the dosing system:



The auger filler setup window is accessed from the VFFS machine main screen

 **Doser** button. After pressing the **black arrow** indication  a new window will open:



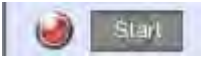
1.1. Work settings:

- **Target Pos**- This shows the target position of the servo motor. Therefore, tells the servo motor when to stop with the dosing process. The bigger the value, the more time the auger rotating.
- **Speed**- This value sets the required speed of the dosing auger.
- **Mixer Speed**- This value sets the speed of the agitator, installed inside the auger filler;
- **Current pos (R/O)**- This value shows the current position of the servo motor. This position is saved in the work program. In order to change it, you need to set the required value in the field

TARET POS and press  to change the **Current Pos** value.

1.2. Calculator

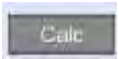
The calculator is used to recalculate the **Target Pos** according to the required weight. To use the calculator you must follow the sequence:

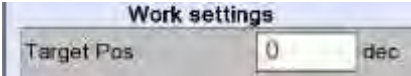
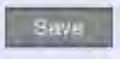
a) Press the  button, in order to discharge a dose manually in a jar or another suitable vessel;

b) Measure the discharged dose (for example 120g)

c) Enter the measured value in 

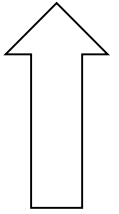
d) Enter the required dose in the field  (for example 200g)

e) Press the  button in order to calculate the value of the new position.

f) Enter the value of **New Pos (R/O)** into the field  and press 

g) Make this adjustment until reaching 10-12 sequential equal doses with acceptable weight. Have in mind that the constant product level in the dosing system is crucial for the accurate dosing.

CHOOSING AND INSTALLATION OF A DOSING SCREW AND A HOLDING GRID



The auger filler is used for all kinds of powder products, each with different characteristics. Due to this reason, in order to achieve the best balance between speed and accuracy of the dosing, you need to perform the following actions:

I. You need to choose a dosing screw with an adequate diameter:

- In order to achieve the optimal balance between speed and dosing accuracy, you can choose between dosing screws with different diameters. The required dosing range is specified by the customer in advance, which allows our specialists to choose the number of the dosing screws and the diameter of each of them, so that to cover the entire dosing range with optimal dosing speed and accuracy. The smaller is the dosing range, the smaller is the diameter of the dosing screw (see *Img. 3*).



img.3

II. You need to choose a holding grid, depending on the mealiness of the product- The different powders have different characteristics. One of the most important characteristics when dosing powders, is their mealiness. When the product is too mealy, some additional product falling occurs after the dosing process is finished. This additional product falling affects the dosing accuracy and leads to a difference in the final weight. In order to avoid the additional product falling, different holding grids are used (see *Img. 4*). The right holding grid is determined by testing

ATTENTION: If you use too fine holding grid with too dense product, it could lead to a screw overloading and eventual damage to the holding grid.



img.4

III. Dismounting of the dosing screw:

1. Be sure that the machine is fully stopped!!!
2. Loosen the safety screw and move the propeller up, so that to release the dosing screw (see img. 5)





Img.5

3. Lift the filler, using the reel mechanism shown on the picture (see img. 6). Keep lifting until the end of the tube is visible.



Img.6

4. Remove the tube along with the dosing screw following the procedure shown on the picture (see Img. 7)



Img.7

IV. Dismounting of the holding grid:

Loosen the fixing screws and eject the grid from the tube (see img.8)



Img.8