

AUTOMATED FILLING MACHINE FOR GRANULES AND/ OR LIQUID - WEIGHT CONTROL



Experimental capabilities

- **Production line control (format change, setting, configuration)**
- **Varied settings**
- **Change format**
- **Functional analysis**
- **Technical analysis**
- **Process capability study**
- **Management of anomalies of productions (scraps)**
- **Diagnosis and replacement of a capacitive detector HS, 1 distributor HS and 1 HS cylinder (all faulty equipment supplied)**
- **Conveyor speed setting**
- **Setting the worm screw speed for granule dosing option**
- **Degraded mode**

Operating principle

The dosing system / filling of liquid automated MLP 325 is integrated into a packaging line corresponding to the MLP range of DIDATEC

It allows to study the operation of a packaging station by weight-filling, and also perform maintenance on.

It can be used in on-line operation, in automatic autonomous position, or in degraded mode.

It also allows to study the configuration / control, the capability as well as mechanical settings associated with the adjustment of the dosage.

It can either be used as part of training for production line drivers as for learning of industrial electricity, automation, maintenance, and production control on automated systems

The robust design of this device makes it suitable for use in schools.

The equipment is set up on an Anodized aluminium frame on casters wheels. This gives it great strength and a flexibility of integration into your premises.

The manufacture of this equipment complies with the European standard for machinery manufacturing.

This equipment can be used alone or with other compatible equipment from our range (see last section of this document).

Technical details

Chassis:

A structure of aluminum profiles on swivel wheels with brake for a simplified assembly of the production line

1 full carterisation in polycarbonate

2 access doors on the front and rear of the machine (equipped with safety key contact)

1 conveyor belt

1 tank of 15L capacity approx integrating a level detector

Electrical box:

Integrated on the chassis of 325

Circuit breakers and differential

Module preventa

Main switch

1 variator for conveyor

1 variator for feed table MLP 205

1 Twido PLC with analog input card

Converter for strain gauge weighing sensors

1 touchscreen display magelis type XBTGT

Control pushbuttons and standardized indicators

Operative part:

A solenoid valve with control valve with of the upstream flow rate

A strain gauge weighing sensor

A belt conveyor with three-phase asynchronous motor powered by a variator

A system of ginning cylinders (double cylinder ensuring unitary supply of the containers to the post)

An automated system by a cylinder to control the weight sensor via a standard weight

With the transfer plate, the optical sensors of different technologies for detecting the presence of products at various stages of the process

1 capacitive sensor for empty tank level

Option MLP326, composition :

A support for hopper and screw worm overhanging of the conveyor

A 15L hopper equipped with a screw worm

A geared motor with its variator for the filling speed setting

A low level sensor of the hopper

An adjustable system for filling of jar or flask

Quick electrical connection via Harting type connector

MLP325



Services required

- Electrical supply : 230 Vac – 50 Hz
- Dimensions: (LxWxH mm): 2350 x 800 x 2000
- weight (Kg): 200

Note : if the equipment installation is operated by our staff, all supplies and exhaust connections required must stand at less than 2m from the machine

Documentation

- User's manual
- Pedagogical manual
- Technical documentation of the components
- Lab exercises
- Certificate of conformity CE

Recommended equipment

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| <ul style="list-style-type: none">• Upstream: Dynamic feed table• Upstream or downstream: Machine of volumetric liquid dosage• Downstream: jars or bottles capping machine• Supervision in Ethernet networkExemple : Module d'utilité | <ul style="list-style-type: none">• MLP 205• MLP 315• MLP 335• MLP 800 |
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