

## PELLET GRANULATOR MIXER

**REFERENCE : MP411-A**



*Non contractual photo*

**SERVICE : 3,5 KW - 380V THREE-PHASE**

**DIMENSIONS : 1000 X 1900 X 1000**

**WEIGHT : 200KG**

This device is versatile. It is a replica of an industrial technology on a pilot scale. It allows the study of mixing, granulation and drying of powders for the manufacture of pharmaceutical tablets. It is also used for the formulation of creams and emulsions in cosmetology or food industry :

- Study the unitary operation of mixing.
- Study the unit operation of wet granulation
- Study the unitary drying operation by conduction and under vacuum
- Study the influence of different binders on wet granulation.
- Study the influence of the parameters of the operation on this process (stirring speed, temperature, pressure)

Temperature, pressure, stirring speed, stirring torque.

### Technical specifications :

#### Tank :

- A bowl with a hemispherical bottom surmounted by a straight ring part and a conical upper bottom, made of 316 L stainless steel. It has a double stainless steel casing. Its capacity is 10 liters useful.
- The double jacket is insulated by a stone wool insulation with 316 stainless steel sealing.

#### The lid includes the following taps or accesses :

- A porthole with lighting.
- A tapped sleeve on tank for implantation of a Pt 100 temperature probe.
- Vacuum taking tubing.
- A threaded sleeve for manometer.
- Tubing for mounting a valve and vacuum valve.
- Tubing for filling powders and liquids.
- Tubing for mounting the filter

#### A fast disperser

**This disperser is fixed on the flange located at the upper part of the apparatus and comprises :**

- An electric motor
- A coupling sleeve

Turret support, stainless steel with bearings and dry mechanical seal

A three-way anchor

Anchor speed

**It is fixed in the central part of the lid and comprises :**

- a geared motor
- a support turret, made of stainless steel, with bearings and dry mechanical seal.

A steel table equipped with 4 wheels

A telescopic guide column

- security

Electrical safety on lid lifting by IV key

### **Accessories**

- 1 vacuum-breaking tap
- 1 manovacuometer
- 1 product temperature probe
- 1 porthole with lighting
- 1 stainless steel housing for the filter with polypropylene cartridge
- 1 safety valve in stainless steel
- 1 brass safety valve

### **Electrical equipment and control cabinet**

- 1 three-phase motor.
- 1 electronic speed variator, variable speed by potentiometer. Digital display of speed.
- 1 three-phase motor
- 1 pocket of programming allowing to follow also the parameters of agitation (in particular the absorbed powers)  
push button stop punch.
- 1 product temperature display.
- control of the lighting of the machine by switch on the window placed on the lid.

**This unit works with :**

- The heating group
- The vacuum plant