

MDP 300 volumetric doser ideal for any application

The MDP 300 volumetric dosing unit doses **simultaneously up to a maximum of 4 components** (virgin, regrind, additives, and masterbatch) by means of **pneumatic slide gates**. It reaches an overall throughput of **300 kg/h**.

Key features to increase productivity



The MDP 300 model summarises all the quality standards of Piovan dosers, in every single component. It combines volumetric functioning with the dosing system typical of gravimetric blenders, ensuring **efficiency** and **production flexibility**.

> The technology used ensures high precision, which can be compared with screw solutions and with the most sophisticated gravimetric blenders. The slide gates work within a time lower than 300 thousands of a second, constantly ensuring a correct material flow with no clogging. Therefore **high dosing repeatability** for perfect production.

> The execution speed of the whole dosing system allows for **minimised times for production job changes**. The start-up procedure is immediate and the calibration test is simple.

> The **operations for colour change and cleaning are quick**; the slide gates offer the advantage of being easy to clean and the mixer can be extracted quickly. The hoppers are equipped with an emptying device.

> The blend is immediately homogeneous for a **production with no waste** already from the first pieces; the unit is provided with a stainless steel mixing chamber with a special design to avoid material stagnation.

> The MDP 300 doser allows for **energy savings**: the slide gates require only compressed air for functioning.



Operator interface

The MDP 300 doser gives an **exhaustive** and **clear information output** to the user. The control keypad with a 3,5" display uses the most advanced generation of microprocessors. The operator can access the following functions:

- > entering of the recipe
- > selection of one of the 299 recipes which can be entered
- > selection of one of the 2 languages available (out of a variety of 10)
- > rapid emptying of the stations
- > alarm management
- > management of the access levels with password.

The unit can be used both in the simplified mode (directly inputting the percentage) and in the complete mode (with the memorisation of a product code).



Configurations

The Piovan MDP 300 doser is ideal both for application on an injection or blow moulding machine, and on an extruder. It can be installed directly on the processing machine or placed on the floor, with a dedicated frame equipped with a suction box. It is available in a **wide variety of configurations**, with two, three or four dosing stations, which can be added at any time. For regrind material a large station is available, and it is ideal for particularly bulky material. Regrind can be managed in a simple and optimal way thanks to the **Regrind Management function**. Utmost precision with reduced percentages is ensured by **screw** or **micro-cell** devices, suggested for micro-dosing.



Options

- Screw and micro-cell devices for masterbatch
- Minimum level sensor
- Reduction devices for slide gate stations
- Bridge breaking solution for the regrind station
- Alarm
- Frame, suction box and inferior slide gate for on-floor installation

DOSING RANGE		slide gate	screw	micro-cell
Dosing range - additives	%	1 ÷ 10	0.7 ÷ 2	0.2 ÷ 0.6
Dosing range - regrind	%	5 ÷ 60		
TECHNICAL DATA				
Max. throughput	kg/h	300		
Capacity of the regrind hopper	dm³	40		
Capacity of the masterbatch hopper	dm³	8 / 18		
Capacity of the mixer	dm³	6		
Voltage and frequency	V/Hz	230/50 - 220/60		
Power installed*	kW	< 0.2		
Max. dimensions	mm	808 x 787 x 891		
Max. weight	kg	100		

The dosing percentages refer to the virgin material, with a bulk density of 550 g/dm³ * Configuration with 4 slide gates