

Gravimetric blender MDW 90

high dosing precision and repeatability

The new Piovan model MDW 90 is a gravimetric dosing unit equipped with pneumatic slide gates and screws for the transferring in sequence of up to 6 materials in granules into the weighing hopper. With a nominal capacity of 90 kg/h, this blender finds its ideal application on injection moulding and blow moulding machines, and extruders with medium-reduced productions.

Distinctive advantages of gravimetric blenders

- > **Customised configuration.** The basic version includes two dosing stations, which can be increased up to 6, of different capacity and separate from one another. The stations can be equipped with slide gates or with screws, and fitted with a level sensor for activating the functions of regrind management. In the case of applications in the medical and food sector, the version with stainless steel hoppers is recommended.
- > **Homogeneous mixing of the batch.** The new mixer with semi-spherical shape, and thus with no stagnation point, and the particular design of the mixing shaft ensure uniform dosing, with no preferential flow. The surfaces in stainless steel and with no welding point eliminate the risk of electrostatic charges and of dust formation caused by friction. The mixer positioned on a high resolution load cell does not require any adjustment.



- > **Precise dosing and high process repeatability.** Thanks to the specific self-calibration algorithm, the control guarantees a precision of ± 0.3 over the set value.
- > **Precise dosing of low percentages with the slide gate device,** which can dose down to 0.7% and ensures uniformity in all batches. Moreover, the design of the dosing groups and the perfect coupling between the hopper and the slide gate avoid the risk of material jamming and contamination.
- > **User-friendly and immediate usage,** with no need to look at the guide. Both in the version with simplified keypad and in the one with touch screen panel, the control ensures facilitated access to the unit.
- > **Utmost usage flexibility.** The blender can be used for accurate dosing of any type of material, including critical components such as flakes. Thanks to the functioning of the high resolution load cell, the system is unaffected by the vibrations of the processing machine, and the control eliminates any possibility of dosing and weighing error.
- > **Effective cleaning of the dosing stations, to recover the materials completely.** It is possible to carry out material or colour changes without any problem, thanks to the handy inclined device for emptying the hoppers quickly.

Control of the latest generation

The **microprocessor electronic control** features high execution speed and simple setting of the unit. As operator interface, it is possible to select the simplified keypad or the more advanced version called **Premium**, complete with touch screen panel with bright 8.5" screen. A single screen summarizes all the main information on the blender's functioning, including the comparison between the set and the real dosing percentages as well as the data of the instantaneous production of the unit. Moreover, it is possible to access additional functions, such as access management and event/alarm management. Once the percentages of the formulas have been set, the blender starts dosing immediately and reaches the stabilisation of the dosed quantities after a few batches only.



The control makes it available a **special program** for an optimised management of the **regrind**, which keeps the features of the blend produced unaltered. Moreover, it is possible to activate the **Turbo function** which, without compromising the dosing precision, increases the unit's throughput switching to the volumetric functioning mode, with intervals of gravimetric cycles.



The standard configuration includes the **ethernet port** and the **USB interface** to permit the download and consultation of the functioning data off line for useful elaboration, and the communication with other systems, such as the supervisory **Piovan Win Factory** software. It is a standardised platform which allows managing all the auxiliaries from remote stations. With the Dosing module, Win Factory offers the function of consumption calculation of raw materials in order to optimise stock management and the possibility to manage production jobs with quality certification.

TECHNICAL DATA		MDW 90
Max. throughput	kg/h	90*
Dosing of masterbatch/additives - slide gate station	%	1.5 - 10
Dosing of masterbatch/additives - slide gate station with reduction	%	0.7 - 10
Dosing of masterbatch/additives - screw station	%	0.3 - 10
Dosing range - oversize slide gate station	%	10 - 100
Capacity of the dosing stations	dm ³	8 - 18 - 20 - 21
Capacity of the mixing chamber	dm ³	6
Batch volume	kg	1.5
Max. slide gate stations	nr.	4
Max. screw stations	nr.	2
Max. noise level	dB(A)	<70
Total power installed *	kW	0.25**/0.31***
Dimensions LxWxH (max)	mm	860x760x1065
Weight	kg	170

Voltage/Frequency 230/1/50-220/1/60

* Configuration with three slide gate stations, bulk density 0.55 kg/dm³. - - ** 50 Hz *** 60 Hz