

DOSING AND MIXING

GRAVICOLOR 110

Gravimetric batch dosing and mixing unit



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GRAVIMETRIC BATCH DOSING AND MIXING UNIT

Thanks to the vertical slide valve technology, the GRAVICOLOR 110 doses and mixes up to four different materials precisely and with the highest recipe accuracy. The modular design and excellent engineering guarantee optimum performance, flexibility, and reliability of the units. This gravimetric batch dosing and mixing unit can be used for injection moulding, blow moulding and extrusion processes.

The integrated and improved IntelliBlend analysis function records the recipe, material and operating environment and documents all process data. With the help of the software, the user achieves continuous self-optimisation of the system and consequently the best possible operating point with the highest recipe integrity and consistent, high product quality.

IntelliBlend

Independent of recipes, materials or the operational environment, IntelliBlend analyses all process data achieving the best possible operating point at any time through continuous self-optimisation. Recipe integrity gives you an excellent and consistent product quality. Any fluctuations in the amount dosed are automatically corrected by immediately adjusting the batch weight. The proportion of masterbatch dosed is automatically adjusted depending on the amount of regrind available. The weighing accuracy is not affected from vibrations caused by the processing machine, as these are filtered out by a special algorithm.

Innovative vertical slide valve dosing

All components are dosed with a specially developed vertical slide valve. This batch dosing and mixing unit guarantees the highest dosing accuracy.

The vertical slide valves are controlled by pneumatic cylinders to achieve the highest possible speed and therefore the highest possible accuracy. The hoppers can be fitted with two different cylinders, 50 mm stroke for high throughputs and 25 mm stroke for lower throughputs and more precise accuracy.

Vertical slide valve



GRAVICOLOR 110 with METRO G hopper loaders



Modular design

The basic unit of the GRAVICOLOR 110 is designed to offer high flexibility in the assignment and number of components. Up to four material hoppers with two different dosing sizes can be variably assigned on the unit.

Visual control of the process

The transparent front door and the vertical viewing panels in the material containers ensure a good view of the running process. variably assigned on the unit.

Fastest material changeovers and cleaning

Quick material changeovers and cleaning are improved by the optimised modular design. The large front door, removable weigh bin and easily accessible mixing chamber facilitate material changes.

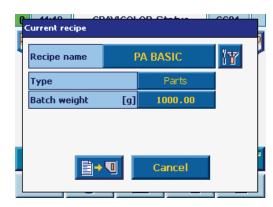
Removable material hoppers

The material hoppers have been designed to optimise material flow. In addition, all GRAVICOLOR 110 hoppers can be easily removed without tools and are easy to clean.

Permanently mounted material loaders

When removing the material hoppers, the hopper loaders remain attached to the base unit. This means that the discharge flaps of the hopper loaders can be easily cleaned or serviced without removing them.





Integrated conveying

By integrating conveying into the GRAVInet control you save money as no separate conveying system control is needed.

It can control up to five material loaders with a blower station and stand-by blower; i.e. material handling for a four component mixing station and a processing machine.

GRAVICOLOR 110 with removable material hoppers



GRAVInet GC E control

The GRAVInet GC-E control system features an open network architecture based on Ethernet. The full colour touch-screen display is intuitive and easy to use, making it fast and safe to operate. It has comprehensive tools for sequence and process control. A regrind management function prevents overdosing of other components. Event reporting is used for downstream analysis of parameter changes via the control.

- Powerful and accurate process control with IntelliBlend, continuous self-optimisation and sophisticated vibration management
- Detailed report and print functions via network interface
- CONTROLreport offers you reporting and documentation functionality for quality assurance and it delivers advanced service functions and graphical display of process data.
- Regrind management function prevents overdosing of other components
- Extensive aids for recipe and process management



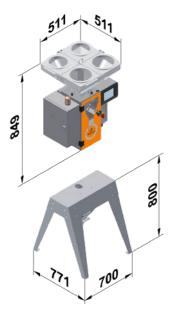
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TECHNICAL DATA

Technical data	
Dosing and mixing unit	110
Typ GRAVICOLOR	
Number of dosing modules	2-4
Dosing ratio per vertical dosing %	2 - 100
Volume of supply hopper with vertical dosing (I)	6.5
Power supply (V/Hz)	1/N/PE 230/50 1/N/PE 120/60
Connected load (W)	300
Weight without support frame approx. (kg)	78
Colour RAL (orange/grey)	2011/7040

All dimensions in mm.

Subject to technical changes.



GRAVICOLOR 110

YOUR BENEFITS

Cost savings through

- guaranteeing recipe integrity and lowest possible additive consumption using IntelliBlend
- high productivity and consistent product quality
- small space requirement
- fast and easy cleaning
- fast and easy material change
- regrind management, preventing an overdose of other components
- flexible operation (central mixing unit or machine mounted unit)
- integrated conveying control (option)

Production reliability through

- documented production process
- simple operation
- continuous self-optimisation by set/actual comparison
- regrind management
- integrated network connection (Ethernet) as standard
- maximum repeatability and extraordinary recipe accuracy through IntelliBlend



