# BlendingLine



## **GRAVICOLOR** Gravimetric mixing and dosing units

Motan's GRAVICOLOR units mix and blend up to six materials precisely and with maximum accuracy of blend. These modular gravimetric blenders are designed for injection, blow moulding and extrusion and provide throughputs up to 2200 kg/h.

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 results in an excellent and consistent product quality.

The GRAVICOLOR series forms part of the total Motan range of products and systems for all stages of the management, conditioning and preparation of plastic granules. Build quality plus the engineering and service standards which Motan applies to all parts of its operation ensure high performance and reliable operation.





## Material storage bin

The stainless steel storage bins are of modular design and available in several different sizes. Some can be removed and all are easily accessible for cleaning. The design features provide optimum flexibility for processing different materials.

## Conveying

All GRAVICOLOR units can optionally be equipped with an integrated conveying control which allows the control of up to seven hopper loaders with a blower station; i.e. material handling for a 6-component mixing station with processing machine can, for example, be controlled and operated directly via the GRAVICOLOR.

For the installation of complex systems there is the possibility of networking several GRAVICOLOR units with each other or with other Motan controls of the CONTROLnet family. This guarantees a high degree of flexibility and scalability in system solutions.

## Installation

GRAVICOLOR units can either be mounted on the processing machine or operated as a central mixing station. In the latter case, an optional support frame with hopper and suction box are available

## Monitoring

Large sight glasses in the storage bins and the front door of the units allow visual control of the entire dosing and mixing process.

## **GRAVIreport** (optional)

With this PC program process data of up to 252 GRAVICOLOR units can be captured and evaluated via Ethernet.

## Mixing chamber

The specially developed mixing chamber guarantees total homogenisation of the batches.





## GRAVICOLOR

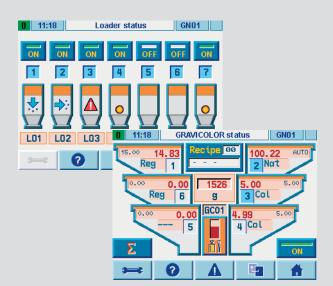


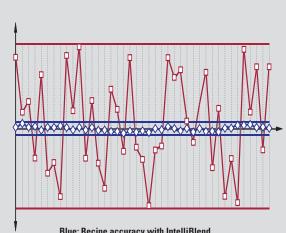
**Cleaning and material changes** 

Fast material changes require easy access to all parts in contact with the material, to ensure efficient cleaning. Hinged lids and large, removable sight glasses or demountable storage bins enable complete and thorough cleaning of the bins.

Material changes are facilitated and simplified by the large front door, the removable weigh bin and the easily accessible mixing chamber.

All GRAVICOLOR parts in contact with material are made of stainless steel, preventing contamination of the granulate.





Blue: Recipe accuracy with IntelliBlend Red: Recipe accuracy without IntelliBlend

## **GRAVInet control**

The operating unit can either be mounted on the GRAVICOLOR or operated remotely. In addition, integrated Ethernet technology enables operation via a Motan WEBpanel or a PC from any location. Further characteristics are:

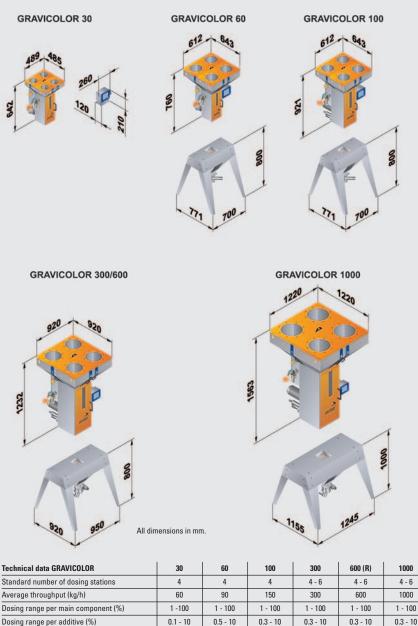
- colour graphics display with touch panel operation,
- simple intuitive handling via standardised user interface,
- powerful and accurate process control with IntelliBlend, continuous self-optimisation and sophisticated vibration management,
- detailed report and print functions via network or serial interfaces,
- integrated network interface (Ethernet) as well as Internet technology,
- integrated conveying control (optional),
- recipe management,
- possibility to set up coupled line systems (optional),
- LINKnet interface for visualisation (optional).

## Recipe accuracy through IntelliBlend

Except for the additive micro-dosing on the GRAVICOLOR 30, all component materials are metered by the unique Motan cone-dosing system. This dosing system ensures a high total material throughput, even when metering large quantities of additives. Since each component is weighed individually and using IntelliBlend, an extraordinary recipe accuracy is achieved.

The GRAVICOLOR 30 has a patented and highly accurate micro-dosing unit for additives or masterbatch.





#### Dosing range per main component (%) Dosing range per additive (%) Volume of hopper for main component (I) 18 60 18 Volume of hopper for additive (I) 18 60 (30) 60 7 18 Power supply 1/N/PE (V/Hz) 230/50 230/50 230/50 230/50 230/50 Connected load (W) 100 100 250 300 300 Protection class IP 54/42 IP 54/42 IP 54/42 IP 54/42 IP 54/42 Compressed air supply (bar) 6 - 8 6 - 8 6 - 8 6 - 8 6 - 8 70 80 Weight without support frame (approx. kg) 60 180 180

#### Subject to technical changes

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60

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GRAVICOLOR

## 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
- versatile operation (central mixing unit or machine mounted unit)
- integrated conveying control (option)

### **Production reliability through**

- documented production process (report and print function via Ethernet or serial interface)
- simple operation no programming necessary
- continuous self-optimisation by set/ actual comparison
- regrind management
- integrated network connection (Ethernet) as standard
- maximum repeatability and extraordinary recipe accuracy through IntelliBlend





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