

# ColorSave 1000<sup>®</sup>

Meter the masterbatch, control the costs



**Innovation**  
*In Every Dose*

## Highly advanced and cost-effective single component masterbatch gravimetric feeder for injection molding, extrusion and blow molding machines

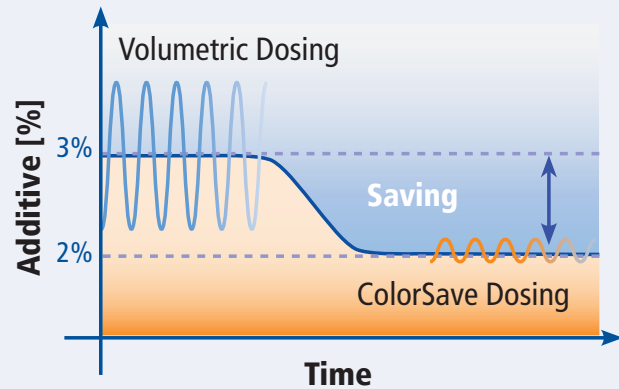
Patent-based ColorSave 1000 has an inner weighing hopper which ensures excellent resistance to mechanical shocks and vibrations. Innovative design and algorithms ensure homogenous dosing, regardless of material density changes or other dynamic parameters.

## ColorSave 1000 advantages:

- PLC & HMI color touch screen all-in-one unit
- Venturi emptying device included
- Rotating venturi loader system(Optional)
- Extreme accuracy and repeatability allows precise dosing and prevents overdosing of materials
- Loss-in-weight controlling function allows optimum adjustment of operating point
- Improved final product quality
- Reduced number of rejects
- Very simple operation with automatic calibration (zero setup time) ensures maximal efficiency
- Suited to any injection molding, extrusion and blow molding machines with one controller machines

### Significant savings compared to volumetric feeders and batch blenders:

- Up to 50% savings masterbatch consumption compared to volumetric feeder
- Up to 35% savings masterbatch consumption compared to remote batch blender
- Up to 15% savings masterbatch consumption compared to batch blender on machine throat



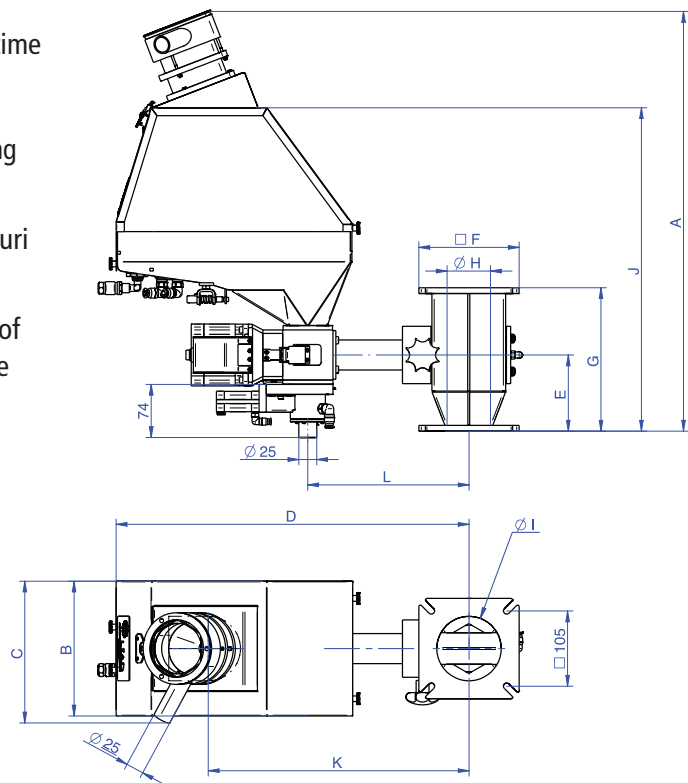
## ColorSave 1000 Applications:

App. Version	Injection Molding	Extrusion	Extrusion Blow Molding
<b>Operation Principle</b>	Batch operation. On-line metering and control of masterbatch batches	Continuous operation. On-line metering and control of masterbatch flow rate (kg/h)	Continuous operation. On-line metering and control of masterbatch flow rate (kg/h)
<b>Set Point</b>	Setting of desired masterbatch percentage and shot weight	Setting of desired masterbatch flow rate (kg/h) or desired percentage from extruder throughput	Setting of desired masterbatch percentage and product weight
<b>Input Signal</b>	Dry contact input for synchronization with plasticization cycle (and optional with injection cycle)	Dry contact input for synchronization with extruder on/off operation and analog input 0-10v or 24v digital tachometer	Dry contact input for synchronization with extruder on/off operation and dry contact input from blowing machine for synchronization with blow cycle
<b>Data Recording</b>	Accumulated number of injection cycles and masterbatch weight	Accumulated data (total masterbatch consumed in kg)	Accumulated total masterbatch consumed in kg and number of cycles

## ColorSave 1000 features:

- Stores up to 1000 recipes, shortened setup time
- Easy replacement of feeding screw
- Easy maintenance and cleaning when switching colors and materials
- Optional integrated rotating automatic Venturi vacuum loader for masterbatch
- Real-time data collection and management of material consumption using control software

Wym (mm)	Vol. 3 Lt	Vol. 5 Lt	Vol. 10 Lt
A	586	636	665
B	186	210	250
C	277	290	340
D	490	490	500
E	105	105	95
F	140	140	210
G	200	200	200
H (min-max)	45-65	45-65	70-128
I	90	90	90
J	450	500	530
K	360	380	446
L	225	225	247



## ColorSave 1000 Specifications:

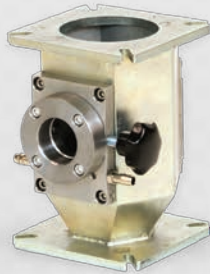
Feature	Specification
<b>Hopper</b>	3/5/10 Liter
<b>Output range</b>	0.2-100 kg/h (in volumetric mode 0.02-550 kg/h)
<b>Motor</b>	Powerful step motor
<b>Display</b>	4.3" color touch screen
<b>Input signals - Injection molding</b>	Dry contact for synchronization with plasticization cycle, optional dry contact for synchronization with injection cycle
<b>Input signals - Extrusion</b>	Dry contact for synchronization with extruder on/off operation, synchronization using analog input 0-10V or 24V digital tachometer
<b>Input signals - Blow molding</b>	Dry contact for synchronization with extruder on/off operation, dry contact for synchronization with mold cycle
<b>Recipes</b>	1000
<b>Communication</b>	Modbus TCP/IP
<b>Load cell</b>	15 kg for 3 or 5 liter volume, 30 kg for 10 liter volume. Temperature compensated
<b>Loader</b>	Optional automatic integral Venturi vacuum loader
<b>Mounting and feeding</b>	By neckpiece adapter, directly into the machine throat
<b>Alarm output</b>	N/O or N/C dry contact 0V, optional 24V/30mA max.
<b>Weight</b>	3 liter: 16 kg, 5 liter: 18 kg, 10 liter: 34 kg, Controller: 5 kg
<b>Power</b>	100-240v, 200W, 50/60hz

## Neckpiece

**ColorSave 1000** includes a standard neckpiece as per volume of hopper.  
Other types of neckpieces are available on request:



**Hexagonal  
Neckpiece**



**Cooled  
Neckpiece**



**Triple  
Neckpiece**

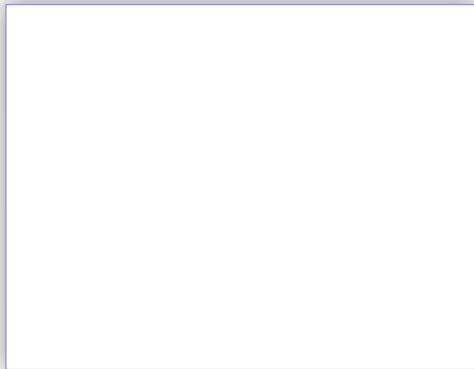


**Round  
Neckpiece**



## Venturi Emptying

An Innovative and unique solution which is located at the base of the feeder, extracting the colorant without the need to have physical access to the feeder. It includes a piston that opens during the emptying process, and at the same time air pressure draws out the colorant. The feeder's screw turns backwards to release grains of colorant from the screw area, while an air nozzle releases a jet of air directed towards the feeder's screw for more efficient cleaning.



## LIAD-View

A monitoring program for the ColorSave 1000 range of feeders You can utilize LIAD-View to:

- View in one screen the working status of all the ColorSave feeders
- View historic graphs of each feeder, including actual percentage and motor speed
- See all the parameters of each feeder, such as total weight, shot weight, etc.
- Generate historic reports, such as total weight, actual percentage, etc.



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