

ColorSave® 1000

Meter the masterbatch,
control the costs



LIAD

Weighing and Control Systems Ltd.

Innovation
In Every Dose

Highly advanced and cost-effective single component masterbatch (MB)/ additive gravimetric feeder for injection molding, extrusion and blow molding machines

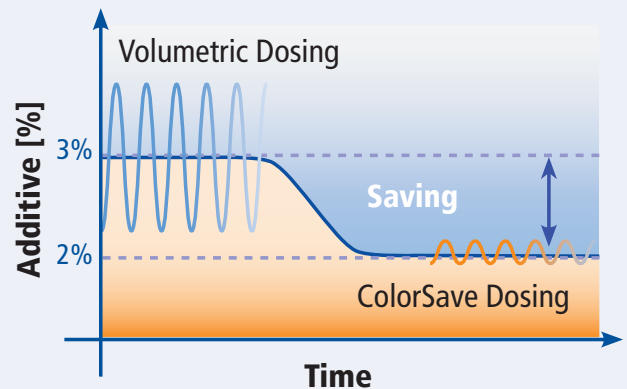
Patent-based ColorSave 1000 has an inner weighing hopper which ensures excellent resistance to mechanical shocks and vibrations. Innovative design and algorithms ensure homogenous dosing, regardless of material density changes or other dynamic parameters.

ColorSave 1000 advantages:

- 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

Significant savings compared to volumetric feeders and batch blenders:

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



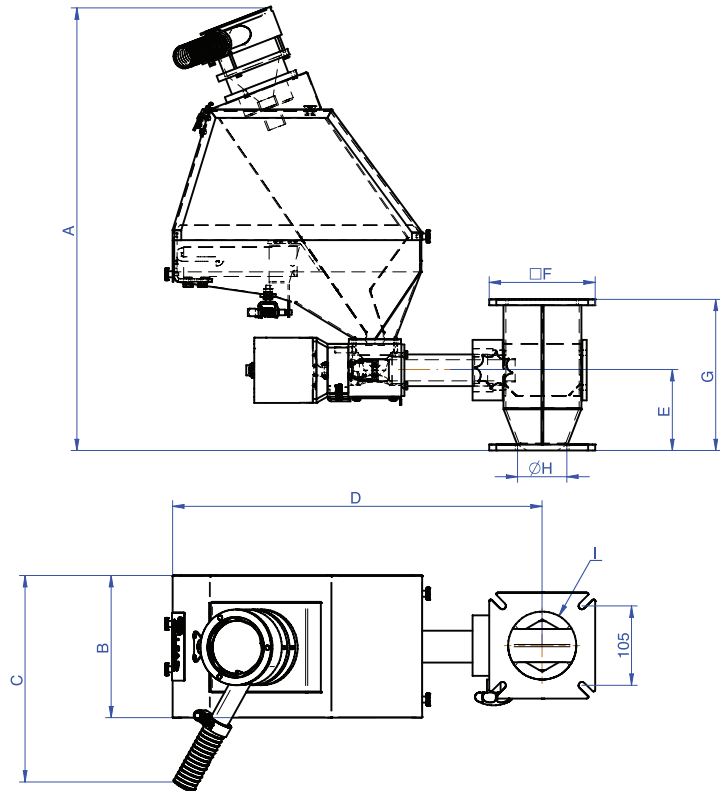
ColorSave 1000 Applications:

App. Version	Injection Molding	Extrusion	Extrusion Blow Molding
Operation Principle	Batch operation. On-line metering and control of MB/additive batches	Continuous operation. On-line metering and control of MB/additive flow rate (kg/h)	Continuous operation. On-line metering and control of MB/additive flow rate (kg/h)
Set Point	Setting of desired MB/additive percentage and shot weight	Setting of desired MB/additive flow rate (kg/h) or desired percentage from extruder throughput	Setting of desired MB/additive percentage and product weight
Input Signal	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 digital input relative to extruder's speed (rpm)	Dry contact input for synchronization with extruder on/off operation and dry contact input from blowing machine for synchronization with blow cycle
Data Recording	Accumulated number of injection cycles and MB/additive weight as well as average percentage	Accumulated data (total MB/additive consumed in kg)	Accumulated total MB/additive consumed in kg and number of cycles
Communication	TCP/IP	Optional TCP/IP	TCP/IP

ColorSave 1000 features:

- Stores up to 999 recipes, shortened setup time
- Easy replacement of feeding screw
- Easy maintenance and cleaning when switching colors and materials
- Integrated automatic Venturi vacuum loader for masterbatch
- Real-time data collection and management of material consumption using control software

Dim (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	105
F	140	140	140
G	200	200	200
H	62	62	62
I	90	90	90



ColorSave 1000 Specifications:

Feature	Specification
Hopper	3/5/10 Liter
Output range	0.02-80 kg/h
Motor	Powerful step motor
Controller	Sophisticated powerful control unit, with alphanumeric display
Display	4.3" color touch screen
Load cell	15 kg max., temp. compensated
Loader	Automatic integral Venturi vacuum loader
Mounting and feeding	By neckpiece adapter, directly into the machine throat
Alarm output	N/O dry contact, 24V/30mA max. Activated at: failure in filling, material no-fill, or overdose
Weight	16 kg (feeder) / 5 kg (controller)
Power	100-240v, 200W, 50/60hz

ColorSave 1000 includes a standard hexagonal neckpiece. Also available on request:

- Cooled neckpiece, useful when the main material is dried PET 200°C
- Neckpiece with mixer, for maximum mixing capabilities



Hexagonal Neckpiece



Cooled Neckpiece

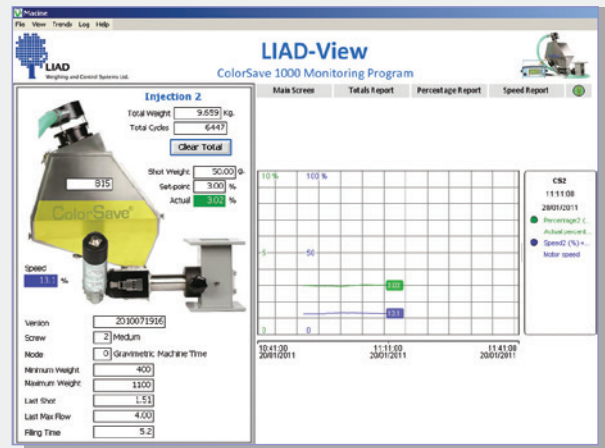
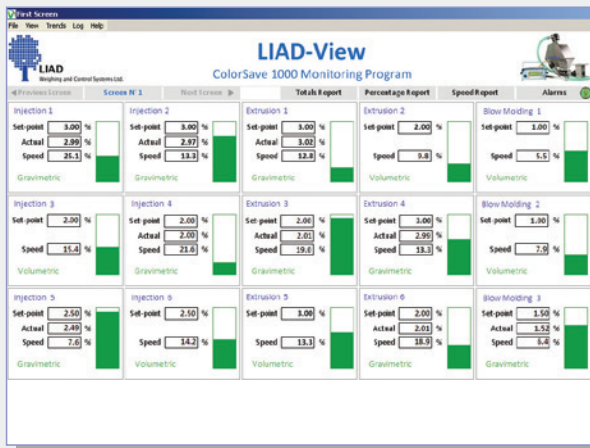


Neckpiece with Mixer

LIAD-View

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

- See in one single screen the working statuses 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.
- Update the working parameters directly to the feeders
- Generate historic reports, such as total weight, actual percentage, etc.



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