

ColorSave-Micro[™] Feeder Precise Gravimetric Dosing for Micro Molding and Extrusion



Since installing the ColorSave-Micro[®] on our small product line, we have not had a single reject due to color."

TAVMedical, Contract Manufacturer of Medical Device Components



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ColorSave-Micro is the only gravimetric feeder that provides consistent accuracy for small doses, while eliminating many of the tasks associated with calibration and maintenance.



First Gravimetric Feeder for Micro Molding and Extrusion Applications

The patented ColorSave-Micro uses a single vibrational, protected inner channel to eliminate exterior vibration and consistently deliver an accurate dose. Whether it's for more efficient production of small parts or to reduce material costs for extruded parts, ColorSave-Micro can accurately dispense materials with LDRs as low as 0.1% to 0.3%. Gravimetric weighing ensures consistent accuracy when compared to today's volumetric micro feeders. ColorSave-Micro comes standard with an air ionizer to neutralize static electricity in the plastic resin additive or color masterbatch to ensure a more accurate and consistent feed.

Easy Calibration & Less Maintenance

Calibration and maintenance time is reduced as the single channel is used for nearly all additives, handles wide range of feed rates and is easily cleaned between jobs.

Nearly all types of additives

ColorSave-Micro supports nearly all additives– flowable, non-dusty powders, granules, micro pellets. Eliminate manual mixing, difficult calibration, product rejects and over-consumption of masterbatch.

Applications

Any injection molding, extrusion, extrusion blow molding application that requires precise delivery of low doses of additives or color, including:

- Medical
- Electronics
- Research, testing and prototyping

ColorSave-Micro can be integrated with Spectro 4.0[™] probes

- Measure and correct color in-line
- Predict, correct color inconsistencies in real-time

Reference



Product

ColorSave-Micro Specifications

Feature	Specification	
Hopper	20.4 fl oz (640 cc)	
Output Range	0.03 oz/min (.83 g/min) up to 2.8 oz/min (80 g/min)	
Dosing Technique	Vibration system	
Controller	Separate unit with touchscreen display	
Communication	Modbus TCP/IP	
Weight Resolution	0.0003 oz (0.01 g)	
Loader	Optional integrated Venturi loader	
Mounting & Feeding	Via neckpiece adapter, directly into machine throat	
Alarm Output	N/O dry contact	
Weight	17.2 lb (7.8 kg)-feeder / 11.0 lb (5 kg)-controller	
Power	100-240V, 50/60 Hz, 20 V/A	

ColorSave-Micro Applications

Application Version	Injection Molding	Extrusion	Extrusion Blow Molding
Operation Principle	Batch operation. Online metering and control of additive batches	Continuous operation. Online metering and control of additive flow rate (g/h)	Continuous operation. Online metering and control of additive flow rate (g/h)
Set Point	Setting of desired additive percentage and shot weight	Setting of desired additive flow rate (g/h) or desired percentage from extruder throughput	Setting of desired additive percentage and product weight
Input Signal	Dry contact input for synchronization with plasticizing 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 additive weight	Accumulated data (total additive consumed)	Accumulated total additive consumed in g and number of cycles



About CISystems

CISystems Color Integration is a new business unit created by Ampacet to help customers improve production efficiencies, reduce waste and achieve sustainability goals. CISystems offers patented technology developed by recently-acquired LIAD Weighing and Control Systems Ltd. LIAD has been

a pioneer in plastic manufacturing technologies for over 40 years and is today the leading developer of innovative feeders, blenders and quality control equipment.





The LIADSmart label assures that CISystems' patented innovations are driven by LIAD intelligence for the highest accuracy in measurement software and design technologies.

For more information and to schedule a free demo, email LIADSmart@ampacet.com

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