

MDS Volumetric Feeder

Volumetric dosing done right

The new standard in volumetric dosing. A cost-effective feeder to optimize material handling and increase operator efficiency.

The Movacolor modular blending, dosing and measuring concept

Our mission is to support plastics producers in achieving their sustainability goals. We do this through our unique modular blending, dosing and measuring concept. This concept ensures plastics manufacturers can easily reduce waste, process recycled material and save costs.

Our solutions have an intuitive design and are made from robust stainless steel, making them endure throughout the years. Our solutions effortlessly integrate with Industry 4.0 technologies, allowing you to make your entire production line work together.

Our modular design allows flexibility in evolving needs by providing configuration possibilities, which helps us tailor our solutions to align with diverse plastics production processes.

Why Movacolor

- 35+ years of experience and knowledge in plastics blending, dosing and measuring
- 5 year warranty
- In-house engineering department
- Short delivery times
- Global product support
- Designed and assembled in the Netherlands

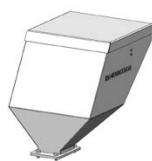
GET IN TOUCH TODAY

We solve the most technically advanced plastics automation problems across all industries.



MDS Volumetric Feeder

The MDS Volumetric Feeder is the benchmark for volumetric feeding, offering a high-value unit at a cost-effective price. This dosing unit comes with a range of options and features to efficiently feed materials into your plastics production process. Its versatility makes it well-suited for e.g. injection molding, blow molding and extrusion processes, ensuring optimal performance across various applications.



Stainless-steel hopper

For checking material level, maximum durability and minimum contamination of your material.

High-end stepper motors

Strong and removable motors for consistent feeding, minimum downtime, easy cleaning and quick dosing tool change.



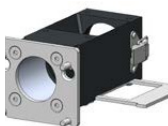
Unique neckpiece and insert

Static mixing and inline dosing for optimal material flow and blend homogeneity.



Dosing house

Enabling optimal material flow, easy material change and quick installation.



Balance-series dosing tools

Unique range of dosing cylinders and augers guaranteeing highest accuracy for each material and throughput.



VoluTouch

Intuitive 4.3" capacitive touchscreen with modern functionalities, able to control 2 feeders.

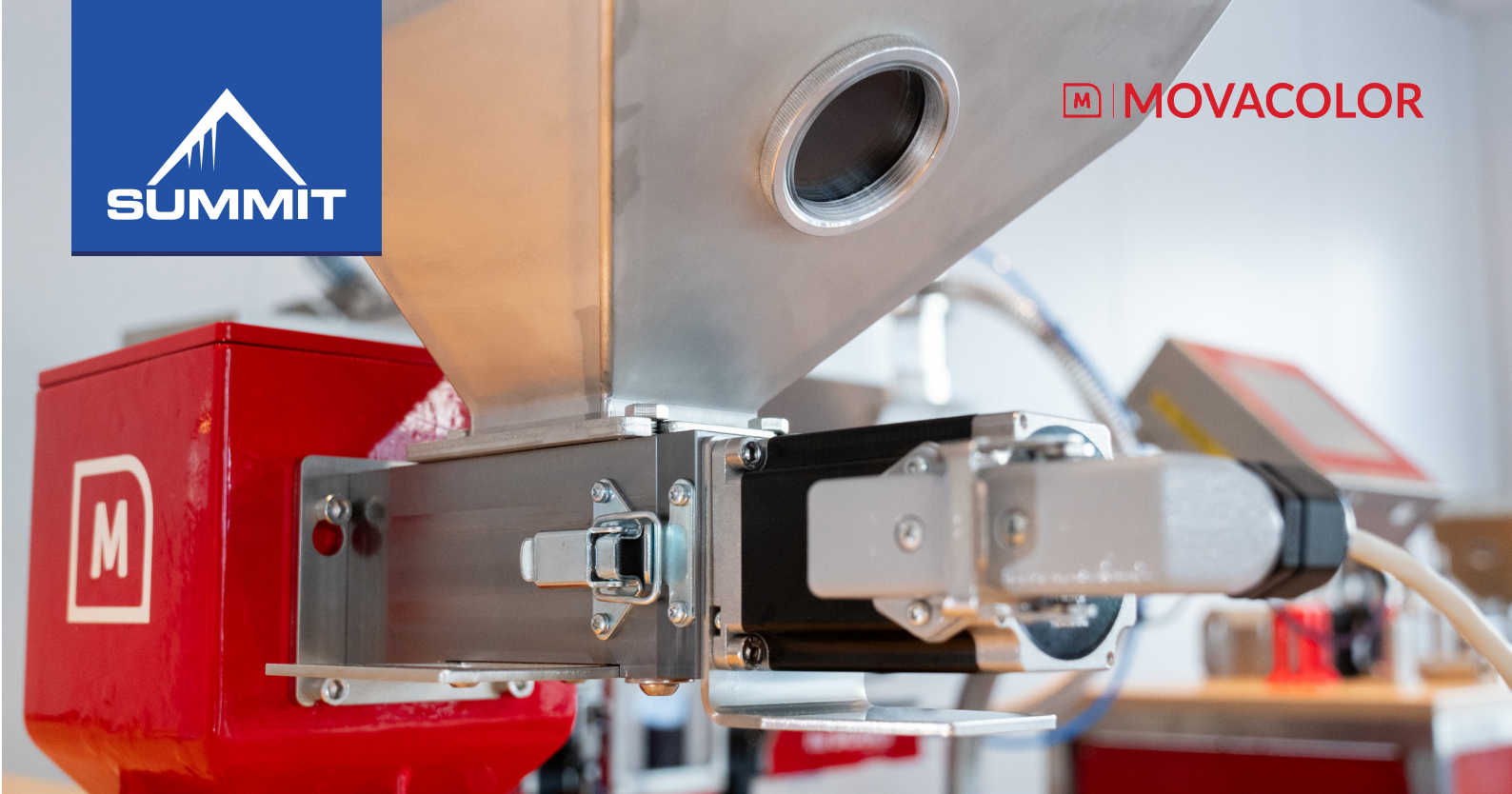




Specifications

Feeding capacity	0.04 - 180kg/h*
Max capacity of neckpiece	1.600 kg/h
Max percentage of additive	40%
Motor	LV: 0-200 rpm / HT: 0-350 rpm
Power supply	95-264 VAC, 47/63 Hz – by integrated automatic voltage selector 200W maximum
Hopper capacity	6 or 12 liter
Controller	VoluTouch 4.3" capacitive color touchscreen
Processes	Injection molding, blow molding, extrusion
Materials	Granular, free-flowing powder, regrind
Max material temperature	70° Celsius
Mounting and feeding	Neckpiece directly mounted on machine throat
Max units on neckpiece	2
Output signals	Hopper loader control (2x), 24VDC 0.5A max Alarm, 24 VDC 0.5A max Run, 24 VDC 0.5A max
Input signals	Injection molding: Timer mode: start dosing: 24 VDC or potential free Relay: start/stop dosing Extrusion: Tacho synchronization: 0-30 VDC Relay: start/stop dosing Hopper level sensor (2x) 24 VDC
Semi-automatic calibration	Pre-calibration to dose percentage rates through intuitive wizard
Dosing tools	Multiple augers and dosing cylinders
Recipes storage function	Max 100
Alarm function	Alarming for production settings- and motor errors
Log function	Log file for operator- and production event monitoring (via wireless export)
Connectivity	Wireless import and export of recipe- and log files (web interface)
Weight	12 kg (feeder) / 0,7 kg (controller)
Max weight on hopper	30 kg

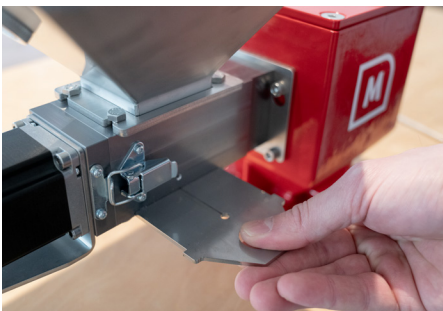
* The maximum throughputs mentioned in our product leaflets and on our website are based on granular material with a bulk density of 0.8 kg/l and the most ideal materials, conditions, settings, and mix percentages.



MDS Volumetric Feeder benefits

- **Intuitive control:** VoluTouch 4.3" capacitive color touchscreen with modern functionalities. Special neckpiece can have two volumetric units that can be controlled from one intuitive touchscreen.
- **Modular system:** Tailor your feeder to your specific needs by building multi-component setups and choice from a wide range of accessories.
- **Durability and material integrity:** Stainless-steel material hopper for checking material level, durability and minimum contamination of your material.
- **Efficient maintenance:** Designed to be easily removed from neckpiece and equipped with accessible components for efficient maintenance.
- **Balance-series dosing tools:** Strong stepper motor and unique range of dosing cylinders and augers providing the highest accuracy in terms of dosing. Capable of handling granules, free-flowing powders and regrinds.
- **Minimise downtime:** Robustly engineered and thoroughly tested dosing unit, supported by a reputable brand offering a 5 year warranty and short delivery times.
- **Accuracy and material homogeneity:** Material is dosed inline in the center of the main material and directly into the machine throat, ensuring blend uniformity. Neckpiece serves as a static mixer.
- **60 second cleaning and material change:** Discharge valve for easy draining contents of the hopper and dosing house. Fast dosing tool change by simple motor release.

60 second cleaning and material change



Easy drainage

Discharge valve for quick draining of hopper and dosing house contents.



Simple motor removal

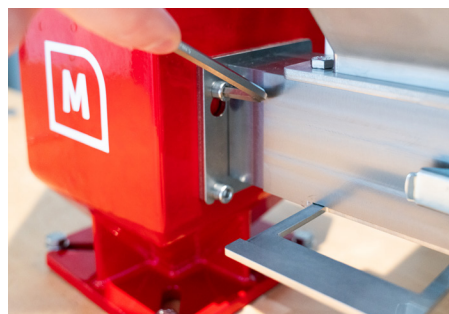
Open the two latches to release the motor and easily clean the dosing house.



Fast dosing tool change

Quick change and clean the dosing tool

Efficient maintenance and calibration



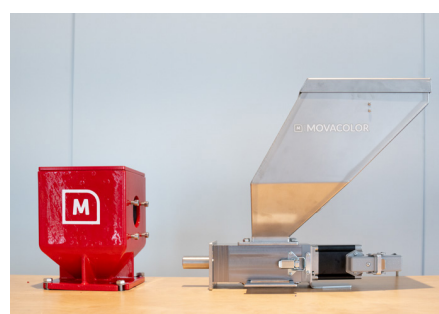
Quick disassembly

Remove feeder from neckpiece by gently loosening the four Allen screws by a quarter turn. Optional quick-release allows tool-free removal.



Neckpiece cleanout

Neckpiece can be accessed and insert can be removed for optimal cleaning.






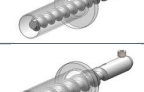





Convenient maintenance

Feeder can be positioned upright for convenient maintenance, cleaning and calibration.

The perfect dosing tool for your production process

Movacolor's range of dosing cylinders and augers provides the highest dosing accuracy in the market. Regular feeding screws require up to 10-20% overdosing and often need an additional mixer to avoid segregation. Movacolor's unique dosing tools offer pulse-free, unparalleled dosing accuracy of a wide range of materials and throughput capacities. For maximum control over your material flow.

		Dosing capacity (gram/sec.)	Dosing capacity (kg/hour)	Accuracy	Material
	GLX dosing cylinder	0,02 to 1,6*	0,07 to 5,8*	5/5	Granules
	GX dosing cylinder	0,2 to 5,0*	0,72 to 18,0*	4/5	Granules
	HX dosing cylinder	0,01 to 1,6**	0,04 to 5,8**	5/5	Free-flowing powders
	A8 auger	0,02 to 1,0*	0,07 to 3,6*	4/5	Free-flowing powders and granules
	A10D auger	0,05 to 3,3*	0,18 to 11,9*	4/5	Free-flowing powders and granules
	A15 auger	0,2 to 5,0*	0,72 to 18,0*	3/5	Free-flowing powders and granules
	A20 auger	0,5 to 20*	1,8 to 72*	3/5	Free-flowing powders and granules
	A20HT auger***	0,5 to 20*	1,8 to 72*	3/5	Free-flowing powders, granules and regrind
	A30HT auger***	2 to 50*	7,2 to 180*	3/5	Free-flowing powders, granules and regrind

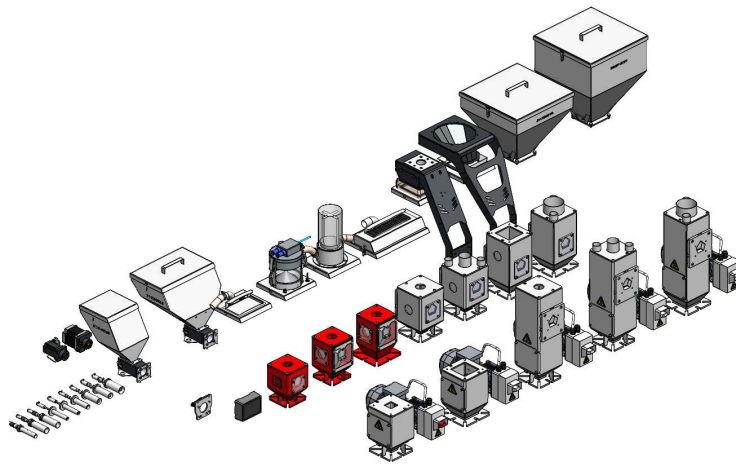
*measured with normal granular masterbatch 0,8 kg/l





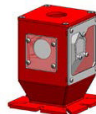





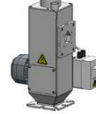






**measured with free-flowing powder 0,65 kg/l

***Only available with high-torque stepper motor

MDS Volumetric Feeder modular options

Our modular system provides the possibility to tailor a feeder to your specific needs. We offer different material hoppers, neckpieces, mixers, hopper loaders and a variety of dosing tools. All can be specified to any customer's processing technique and material.



Motor		LV stepper motor 0-200 rpm		HT stepper motor 0-350 rpm		
Neckpiece		NBST40 Basic 45mm		NST40 Standard 45mm		NST90 Standard 90mm
		NBH PET 45mm		NBHA PET 45mm de-airing		NPH PET 90mm
		MIXBH PET mixer 45mm		MIXBHA PET mixer 45mm de-airing		MIXPHA PET mixer 90mm de-airing
Additive hopper		VF6L 6L additive hopper		VF12L 12L additive hopper		
Main hopper		MAINH20 20L main material hopper		MAINH40 40L main material hopper		
Mixer		MIX50 Multipurpose 45mm		MIX100 Multipurpose 90mm		

Modular and future ready - Intuitive control software technology for all Movacolor gravimetric solutions

VoluTouch



4.3" capacitive color touchscreen controller with modern functionalities for all plastics production processes.



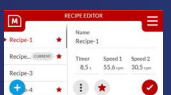
Capable of managing up to two MDS Volumetric Feeders from one control screen.



Pre-calibration to dose at percentage rates and prime function integrated in intuitive wizard.



Configuration wizard for quick start-up and intuitive GUI with self explanatory visuals.



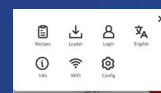
Easy entering of recipes and memory to store up to 100 recipes.



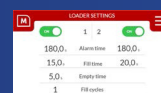
Log function for operator- and production event monitoring (rpm and warnings).



Wireless web interface for software updates and import and export of recipe- and log files (WiFi pairing).



Different user-levels: supervisor and operator access for usability for every skill-level.



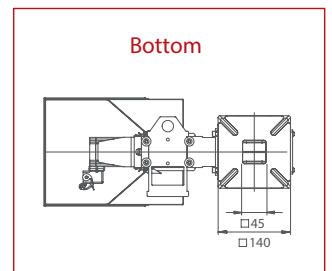
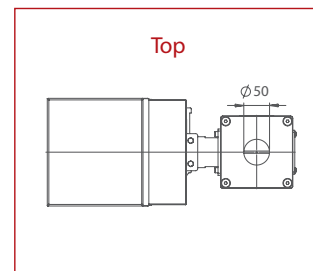
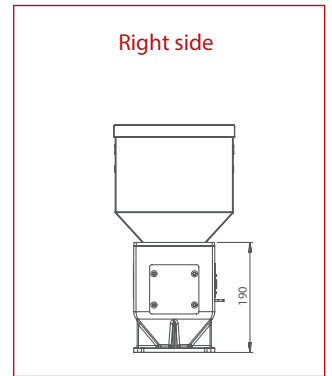
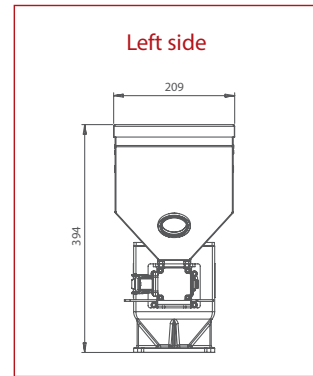
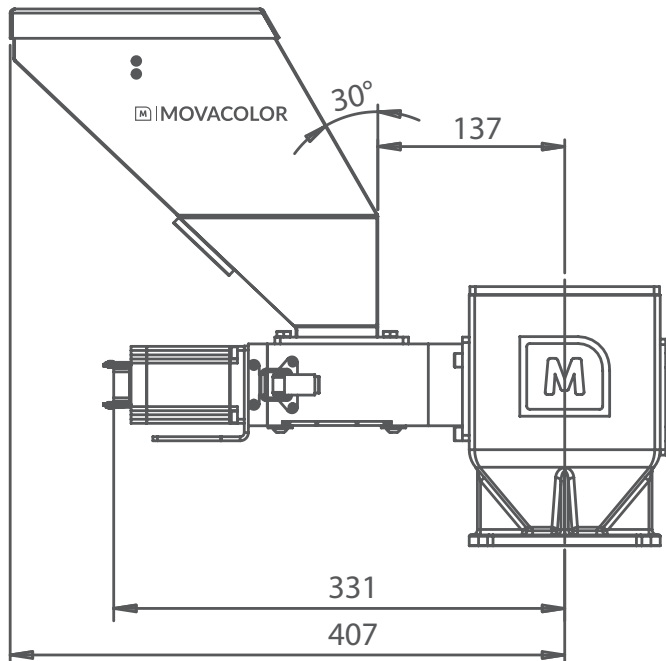
Integrated hopper loading control synchronized with the dosing system.

Also included in the VoluTouch

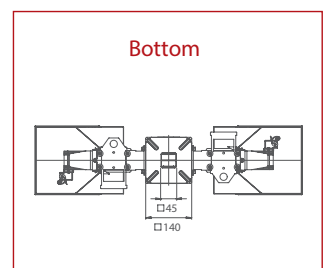
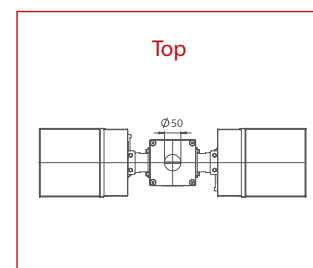
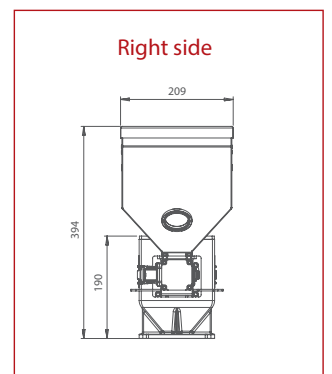
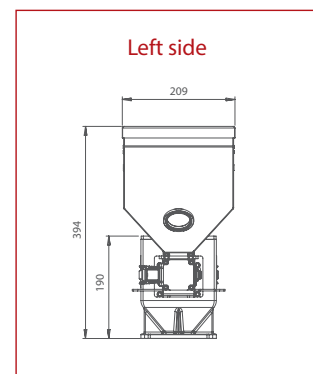
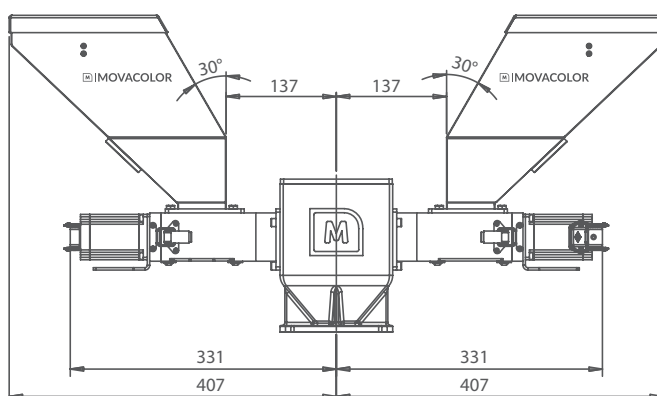
- Buzzer to signal alarms
- Multilingual
- Large range of mounting options

MDS Volumetric Feeder hopper configurations and dimensions

MDS Volumetric Feeder: single station



MDS Volumetric Feeder: double station



* all dimensions are specified in millimetres (mm)

MDS Volumetric Feeder accessories and hopper loaders

Alight



Alarm flashlight for alarm indication (24 VDC), complete with cable.

Asens



Sensor for hopper alarm. Capacitive triple shielded, to work under static conditions, complete with cable and sight glass with hole for use in hopper.

Asounderbeacon/S



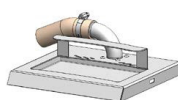
Alarm sounder beacon for alarm indication (24 VDC) Combination of LED flashlight and electronic sounder up to 106dB, complete with cable.

Recommended spare parts package



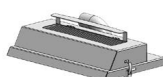
Bundle of spare parts for versatile repair and maintenance needs. Consisting of: ball bearing, rubber coupling, power adapter, motor seal and discharge valve.

ME25V



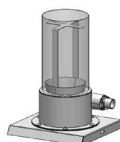
Movacolor Ejector (ME) compressed air hopper loader for granules (relatively dust free), max. cap. from 40 to 125 kg/h. (mat. dep.), the unit comes complete with hopper lid with filter, compressed air solenoid valve and 3 m. 25 mm. transport hose and Asens level sensor.

ME38VR



Movacolor Ejector (ME) compressed air hopper loader for dusty granules or regrind, max. cap. from 55 to 150 kg/h. (mat. dep.), the unit comes complete with hopper lid with filter, compressed air solenoid valve and 3 m. 38 mm. transport hose and Asens level sensor.

MEC25V



ME Cyclone hopper loader for volumetric unit, for granules (relatively dust free), max. cap. 40 to 125 kg/h, with cyclone hopper lid and filter, solenoid valve, 3 m transport hose and Asens level sensor.

MEC38V



ME Cyclone hopper loader for volumetric unit, for regrind and granules (relatively dust free), max. cap. 45 to 125 kg/h, with cyclone hopper lid and filter, solenoid valve, 3 m transport hose and Asens level sensor.

MV16V



Movacolor Vacuum (MV) hopper loader for free flowing powders with bulk density >1 kg/l., and/or granules, max. cap. from 50 to 100 kg/h. (mat. dep.), the unit comes complete with hopper lid, vacuum chamber with filter, compressed air solenoid valve and 3 m. 16 mm. transport hose with stainless steel suction pipe and Asens level sensor.

MV25V



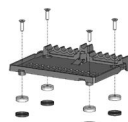
Movacolor Vacuum (MV) hopper loader for free flowing powders with bulk density < 1 kg/l., and/or granules, max. cap. from 35 to 70 kg/h. (mat. dep.), the unit comes complete with hopper lid, vacuum chamber with filter, compressed air solenoid valve and 3 m. 25 mm. transport hose with stainless steel suction pipe and Asens level sensor.

SFS/V



Support frame for external hopper loader, max. load 50 kg. Also available as dustfree version for dusty materials.

VoluTouch magnet set



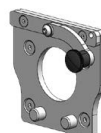
Set of magnets for VoluTouch controller consisting of 4 magnets, 4 rubbers and 4 screws.

Cable management kit



Kit for neatly organizing cables consisting of 2,5 metres spiral-band + 1x tool guide for cable tray, 0,5 metres cable tray, 6x sticky cable clip + tie wraps.

Quick-release tool



Tool-free mounting of dosing house onto the neckpiece.

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