

MDS Volumetric Feeder

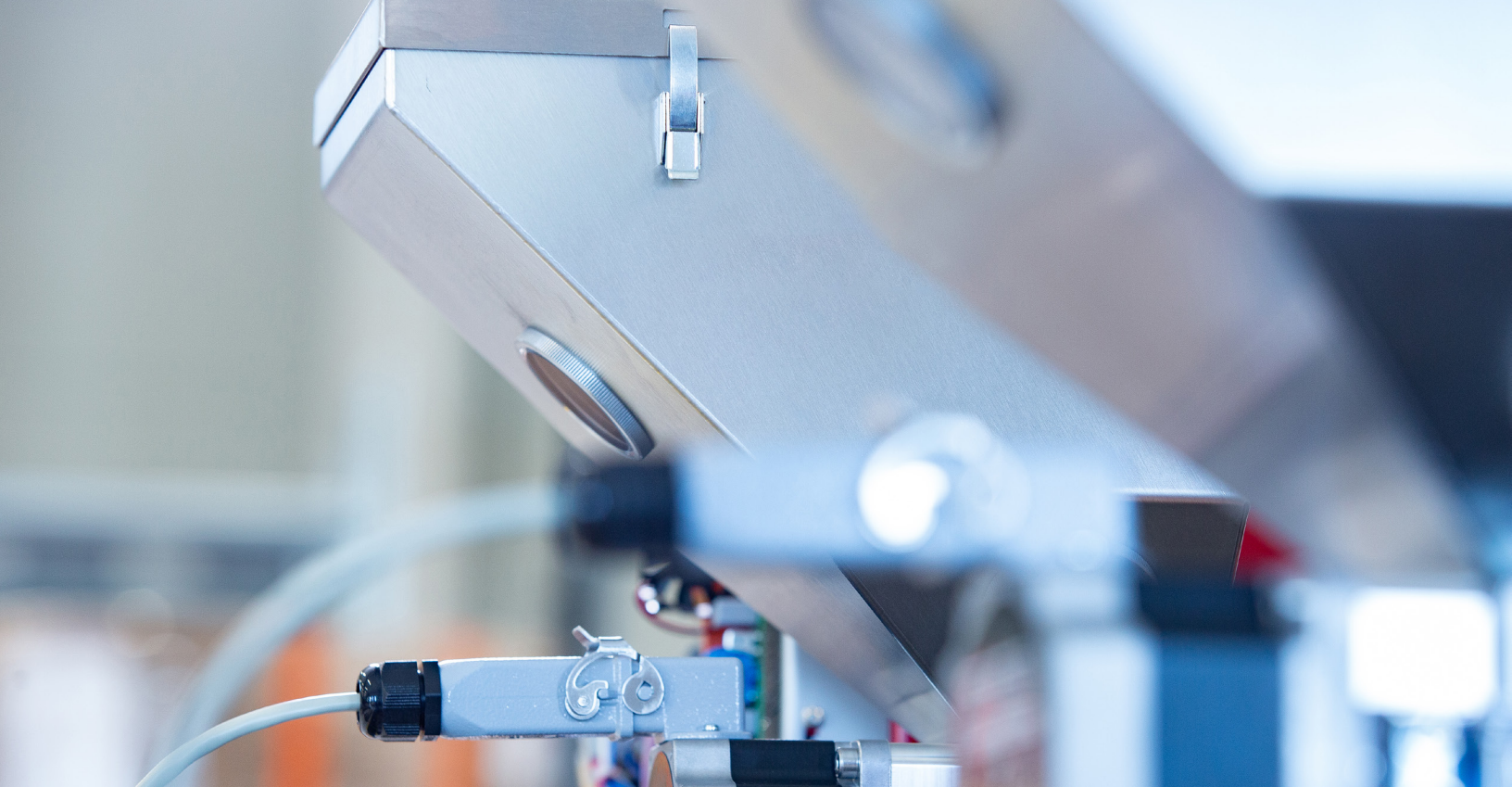
Volumetric
dosing
done right



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



M | MOVACOLOR
modular dosing solutions



The Movacolor modular dosing, blending and measuring concept

Our mission is to support plastics producers in achieving their sustainability goals. We do this through our unique modular dosing, blending 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.

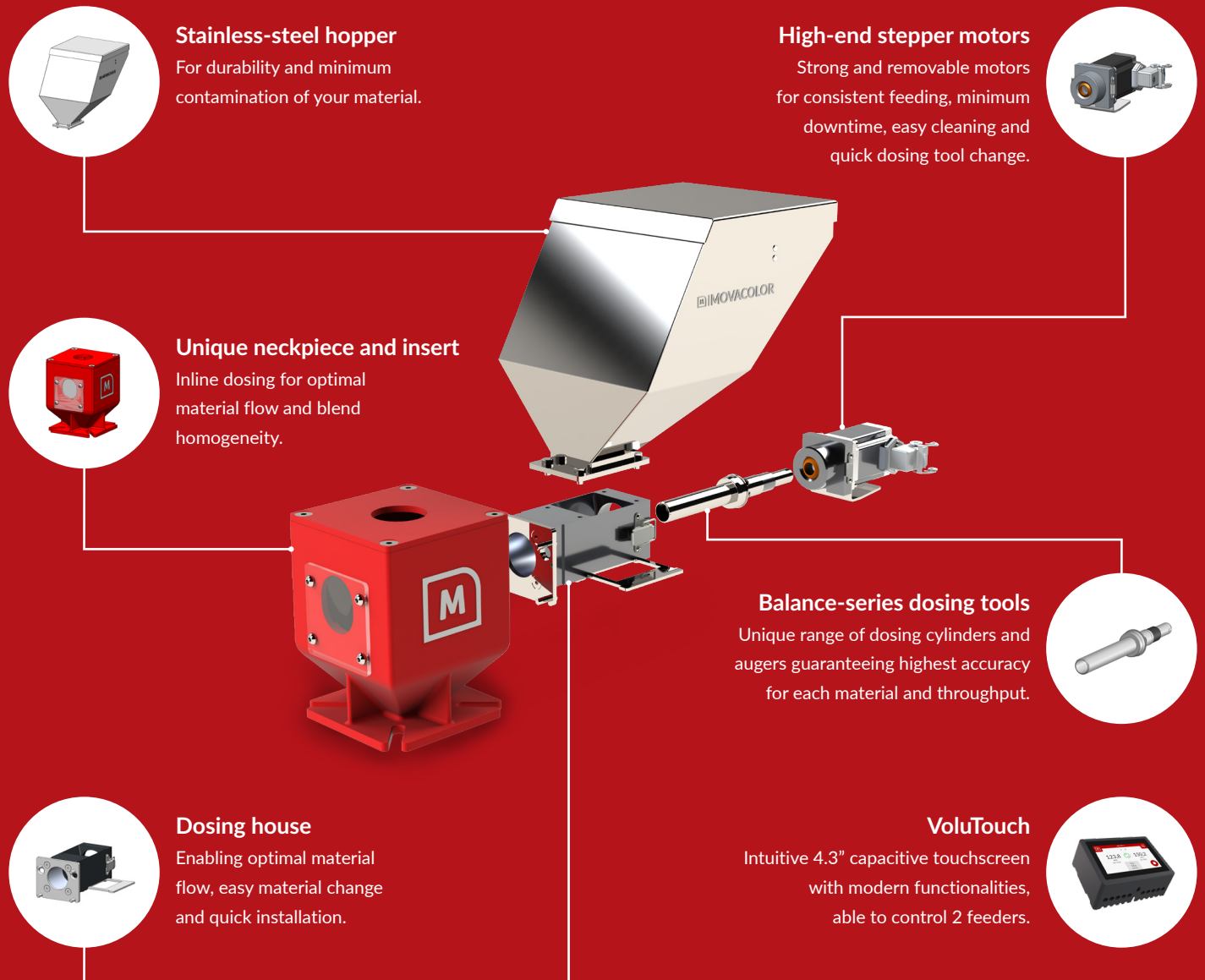
Our modular design allows flexibility in evolving needs by providing configuration possibilities, which helps us tailor our solutions to align with diverse plastic production processes.

Why Movacolor

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

The MDS Volumetric Feeder

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



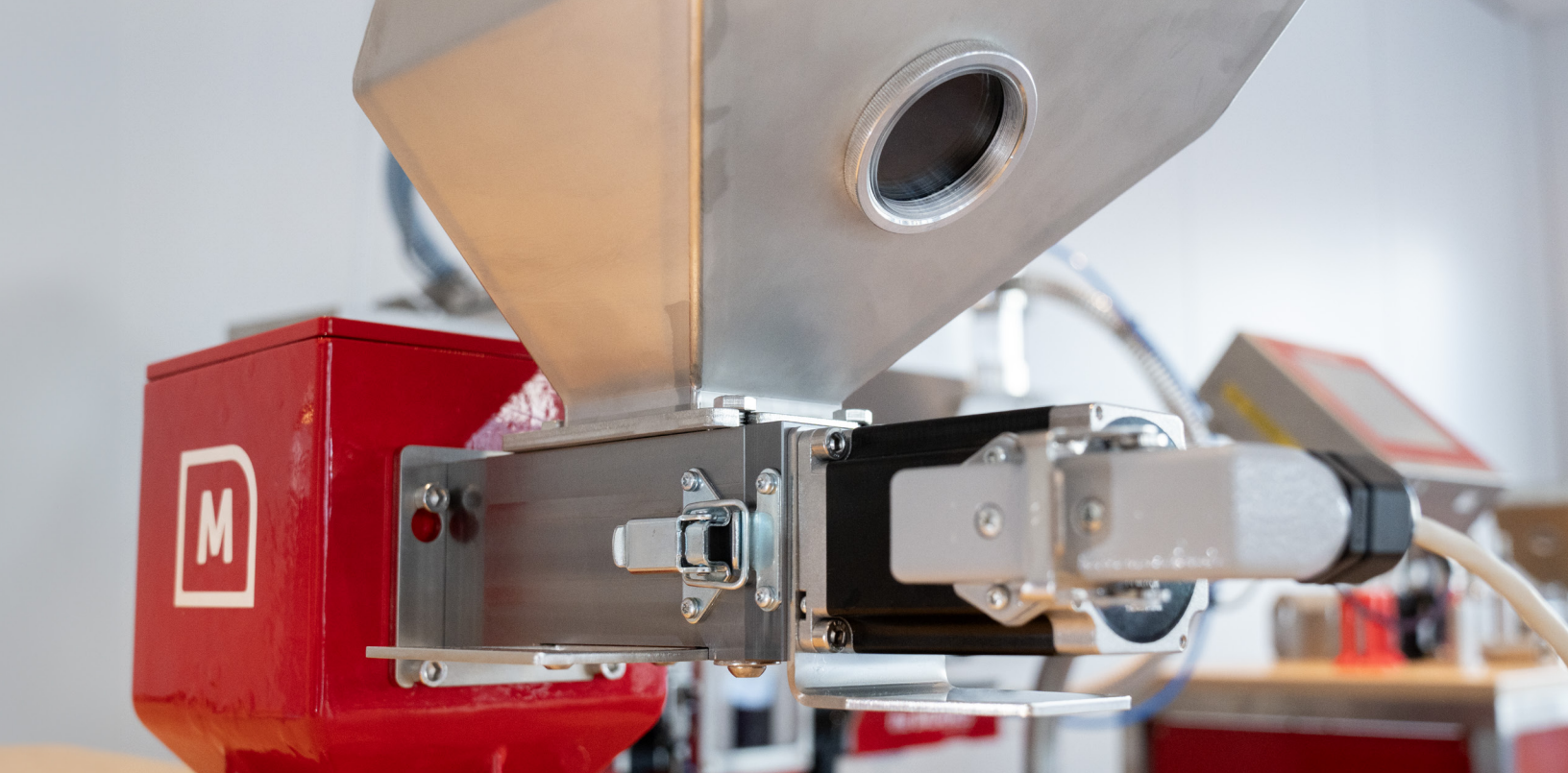
Scan the QR code to find out more!



Specifications

Feeding capacity	0,09 - 400 lb/h*
Max capacity of neckpiece	3500 lb/h
Max percentage of additive	40%
Motor	LV: 0-200 / HT 0-350 rpm
Power supply	95-264 VAC, 47-63 Hz, 200W max
Hopper capacity	6 or 12 liter
Controller	VoluTouch 4.3" capacitive color touchscreen
Processes	Injection moulding, blow moulding, extrusion
Materials	Granular, free-flowing powder, regrind
Max material temperature	160 degrees Fahrenheit
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 moulding Timer mode: start feeding: 24 VDC or potential free Relay: start/stop feeding Extrusion Tacho synchronization: 0-30 VDC Relay: start/stop feeding 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	26 lb (feeder) / 1,5 lb (controller)
Max weight on hopper	66 lb

*The maximum throughputs mentioned in our product leaflets and on our website are based on granular material with a bulk density of 50 lb/ft³ and the most ideal materials, conditions, settings, and mix percentages.



MDS Volumetric Feeder benefits



VoluTouch

4.3" capacitive color touchscreen with modern functionalities. Special neckpiece can have two volumetric units that can be controlled from one intuitive touchscreen.



Balance-series dosing tools

Strong stepper motor and unique range of dosing cylinders and augers providing the highest accuracy in terms of feeding. Capable of handling granules, free-flowing powders and regrinds.



Modular system

Tailor your feeder to your specific needs by building multi-component setups and choice from a wide range of accessories.



Minimize downtime

Robustly engineered and thoroughly tested feeder, supported by a reputable brand offering a 5 year warranty and short delivery times.



Stainless-steel material hopper

For durability and minimum contamination of your material.



Accuracy and material homogeneity

Material is dosed inline in the center of the main material and directly into the machine throat, ensuring blend uniformity.



Efficient maintenance

Designed to be easily removed from neckpiece and equipped with accessible components for efficient maintenance.












60 second cleaning and material change

Discharge valve for easy draining contents of the hopper and dosing house. Quick dosing tool change by simple motor release.

The perfect dosing tool for your production process

Movacolor's range of dosing cylinders and augers provide the highest accuracy in terms of dosing. 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 accurate feeding of a wide range of capacities and materials. For maximum control over your material flow.

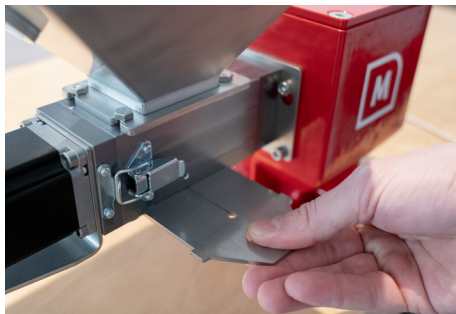
		Dosing capacity (oz/sec.)	Dosing capacity (lb/hour)	Accuracy	Material
	GLX dosing cylinder	0,0007 - 0,0564*	1,54 - 12,8*	● ● ● ● ●	Granules
	GX dosing cylinder	0,0070 - 0,1764*	1,59 - 40*	● ● ● ● ○	Granules
	HX dosing cylinder	0,0004 - 0,0564**	0,09 - 12,8**	● ● ● ● ●	Free-flowing powders
	A8 auger	0,0007 - 0,0353*	1,54 - 7,9*	● ● ● ● ○	Free-flowing powders and granules
	A10D auger	0,0018 - 0,1164*	0,4 - 26,2*	● ● ● ● ○	Free-flowing powders and granules
	A15 auger	0,0070 - 0,1764*	1,59 - 40*	● ● ● ○ ○	Free-flowing powders and granules
	A20 auger	0,0176 - 0,7055*	0,4 - 160*	● ● ● ○ ○	Free-flowing powders and granules
	A20HT auger***	0,0176 - 0,7055*	0,4 - 160*	● ● ● ○ ○	Free-flowing powders, granules and regrind
	A30HT auger***	0,0706 - 1,7637*	16 - 395*	● ● ● ○ ○	Free-flowing powders, granules and regrind

*measured with normal granular masterbatch 50 lb/ft³

**measured with free-flowing powder 40 lb/ft³

***Only available with high-torque stepper motor

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

Quickly change and clean the dosing tool.



Scan the QR code to see the process!

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 inserted can be removed for optimal cleaning.



Convenient maintenance

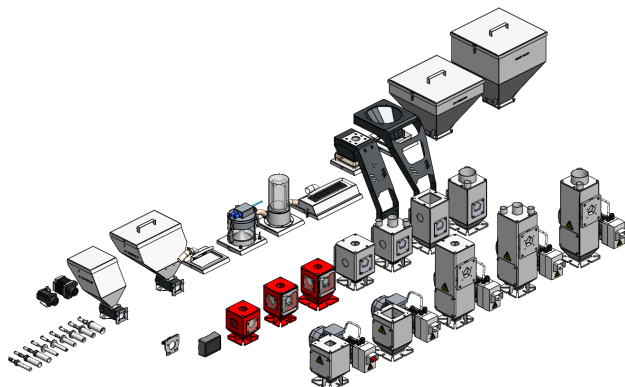
Feeder can be positioned upright for convenient maintenance, cleaning and calibration.



Scan the QR code to see the process!

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
Multi purpose
45mm



MIX100
Multi purpose
90mm

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

VoluTouch



4.3" capacitive color touchscreen controller with modern functionalities for injection moulding, blow moulding and extrusion processes.



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



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



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



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



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



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



Easy entering and memory to store up to 100 recipes.



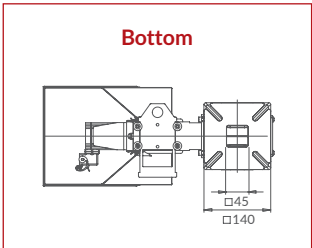
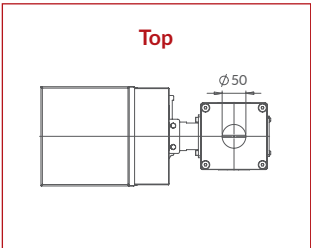
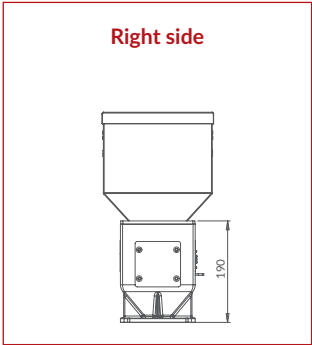
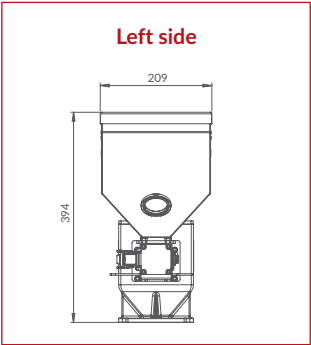
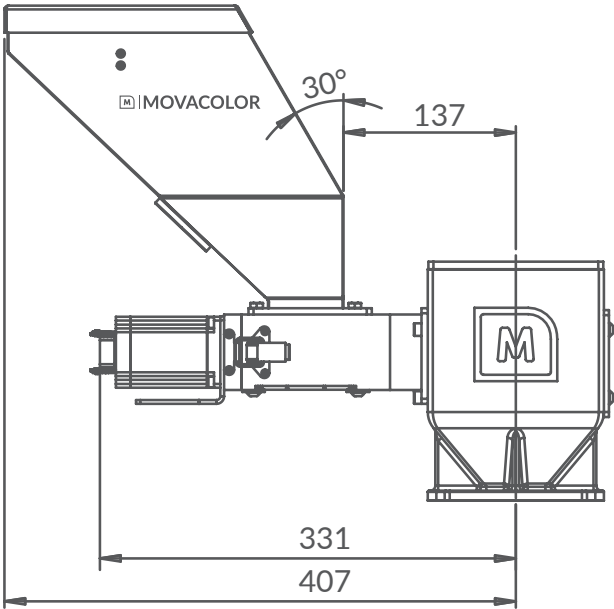
Integrated hopper loading control synchronized with the feeding system.

Also included in the VoluTouch

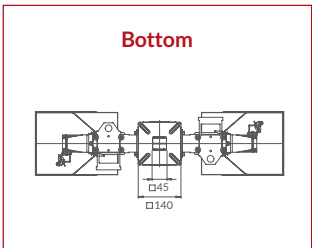
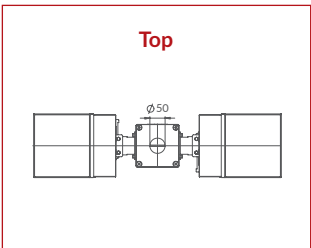
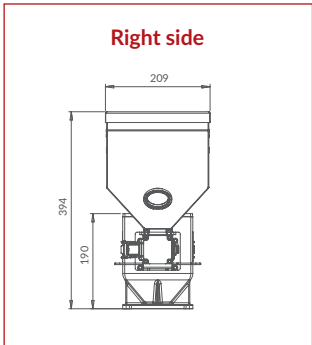
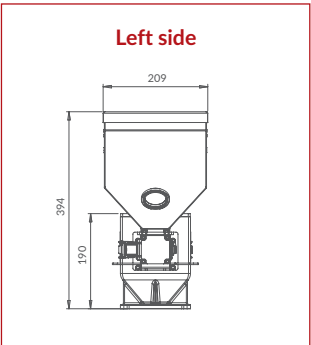
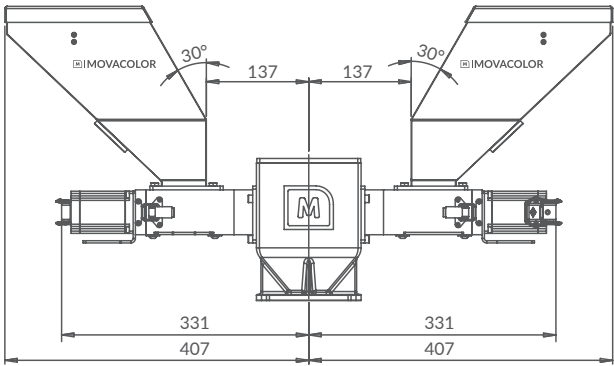
- ✓ Buzzer to signal alarms
- ✓ Multilingual
- ✓ Large range of mounting options

MDS Volumetric Feeder hopper configurations and dimensions

MDS Volumetric Feeder: single-station



MDS Volumetric Feeder: double-station



MDS Volumetric Feeder accessories and hopper loaders

Alight



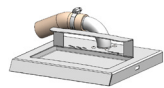
Alarm flashlight for alarm indication (24 VDC), complete with cable.

Asounderbeacon/S



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

ME25V



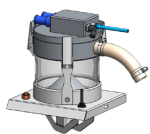
Movacolor Ejector (ME) compressed air hopper loader for granules (relatively dust free), max. cap. from 88 to 275 lb/h. (mat. dep.), the unit comes complete with hopper lid with filter, compressed air solenoid valve and 3 m. 25 mm. transport hose and Asens level sensor.

MEC25V



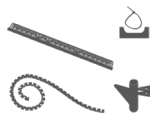
ME Cyclone hopper loader for vol. unit, for granules (relatively dust free), max. cap. 88 to 275 lb/h, with cyclone hopper lid and filter, solenoid valve, 3 m transport hose and Asens level sensor.

MV16V



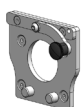
Movacolor Vacuum (MV) hopper loader for free flowing powders with bulk density > 1 kg/l., and/or granules, max. cap. from 110 to 220 lb/h. (mat. dep.), the unit comes complete with hopper lid, vacuum chamber with filter, compressed air solenoid valve and 3 m. 16 mm. transport hose with stainless steel suction pipe and Asens level sensor.

Cable management kit



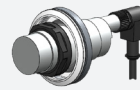
Kit for neatly organizing cables consisting of 2,5 metres spiral-band + 1x tool guide for cable tray, 0,5 metres cable tray, 6x sticky cable clip + tie wraps.

Quick-release tool



Tool-free mounting of dosing house onto the neckpiece.

Asens



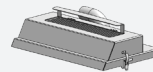
Sensor for hopper alarm. Capacitive triple shielded, to work under static conditions, complete with cable and sight glass with hole for use in hopper.

Recommended spare parts package



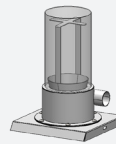
Bundle of spare parts for versatile repair and maintenance needs. Consisting of: ball bearing, rubber coupling, power adapter, motor seal and discharge valve.

ME38VR



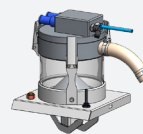
Movacolor Ejector (ME) compressed air hopper loader for dusty granules or regrind, max. cap. from 120 to 330 lb/h. (mat. dep.), the unit comes complete with hopper lid with filter, compressed air solenoid valve and 3 m. 38 mm. transport hose and Asens level sensor.

MEC38V



ME Cyclone hopper loader for vol. unit, for regrind and granules (relatively dust free), max. cap. 100 to 275 lb/h, with cyclone hopper lid and filter, solenoid valve, 3 m transport hose 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 77 to 155 lb/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.

VoluTouch magnet set



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



5 year warranty

Movacolor products are designed and manufactured to the highest standards and deliver high-quality performance. In the unlikely event of a product failure, Movacolor will, subject to conditions*, ensure your product is serviced and repaired free of charge.



Global Support

Need help with (the installation of) your Movacolor product?

Our global support team will be happy to assist you.

**Tailored dosing,
blending or measuring
systems, suited to
your plastics
production process.**

Visit movacolor.com to find out more about our modular dosing concept and how you can configure your own dosing solution!

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