

Volumetric Doser

SCM Single Color Doser

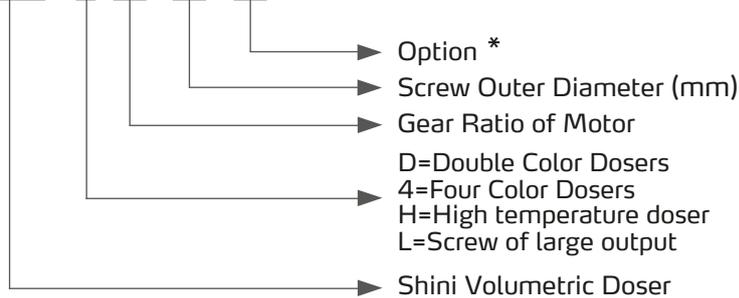


Refer carefully to this manual before operation.

SCM Series

■ Coding Principle

SCM - x- xx - xx - xx



Notes: *

MS=Equipped with Mixer

CE=CE Conformity

■ Features

Standard configuration

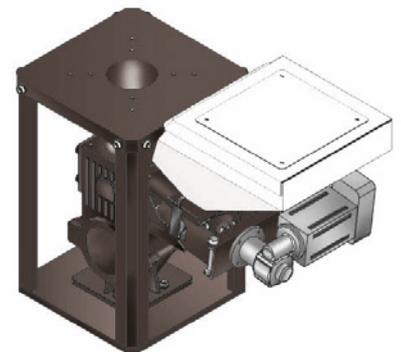
- Dosing screws are chrome plated for durability.
- Unit is comprised of standard modules for ease of cleaning, disassembly and interchangeability.
- Hopper magnets are equipped in standard base to avoid molding machine screw damage.
- External signals can be directly input to control box.
- The current mode can be recorded without interrupted by power failure.
- Compulsory material cleaning makes it easier to replace masterbatch.
- Applicable on extrusion machines, just need to make a few wire replacements.
- Rotating speed can be automatically adjusted according to extruder processing speed, which maintains the fixed proportion of masterbatch.
- 50 recipes are available for permanent recording of material discharging time and finished products weight (for extruder, it is max. throughput per minute).
- Use brushless DC motor and free from maintenance.
- Both masterbatch blockage and overload can be detected, then machine will halt and sound an alarm.
- Based on customers demand, mold cycles can be set to add additives periodically so that micro-metering can be achieved.
- SCM-4 is standard equipped with a main hopper and a blender.



SCM-4



SCM-D Double-color Doser



Heavy Base (optional)

Accessory option

- For collocating with SHD-100~200 or SHD-160U~300U dryers, heavy base should be selected.
- SCM-4 is capable of adding four kinds of masterbatch at most.
- High temperature doser SCM-H is optional for applying to PET high temperature situation; the water runs in its cooling part must be room temperature water.
- Blender is an option for customers to make materials evenly mixed.
- Main material hopper is optional equipment for customers to feed main material.
- Low level sensor can be opted to give an alarm when masterbatch is insufficient.
- Screws with diameter of 30mm can meet customers' requirements of large output.
- Optional 100Kg base to satisfy maximum discharge volume(without mixing function).
- Simplified control cabinet is optional. Compared with standard control cabinet, the simplified one is much easier to operate. It features adjustable motor rotation speed and plasticizing time, high and low potential starts can be selected for IMM connecting signal.



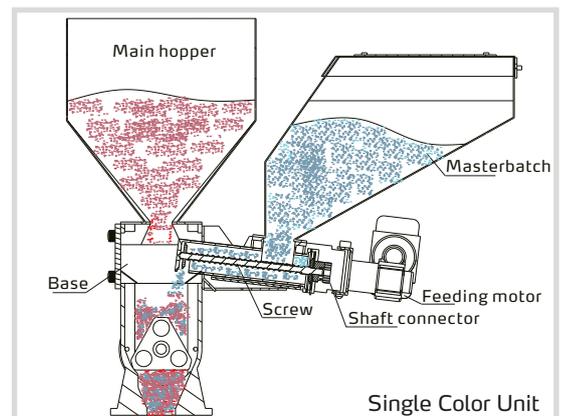
SCM-H

■ Application

SCM series volumetric dosers are suitable for auto-proportional mixing of virgin materials, regrinds, master batch or additives. A gear motor with gear ratio of 38:1 is coupled to a dosing screw of 12, 16, 20 or 30mm in diameter to give a total of four models with output ranging from 0.1kg/hr to 110kg/hr. Double-color dosers is available for collocating with any two of single color dosers if required. Five components automatic mixing can be realized if customers adopt four-color dosers.

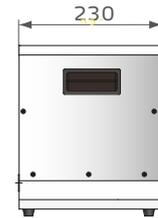
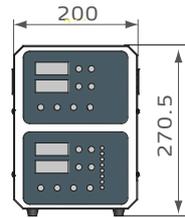
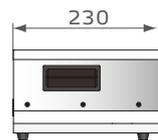
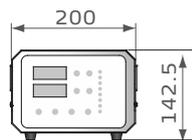
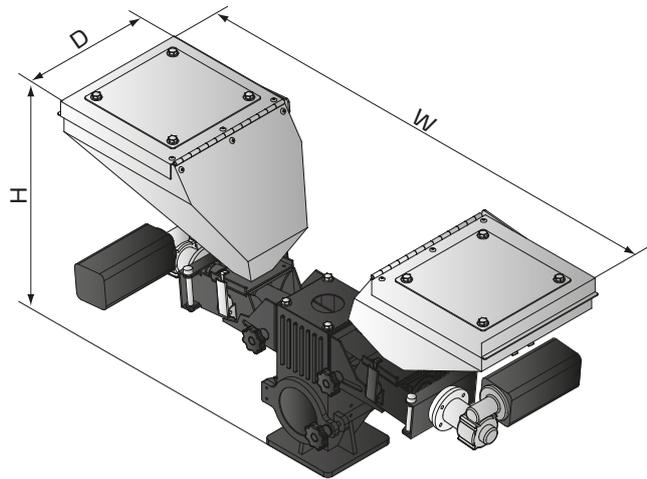
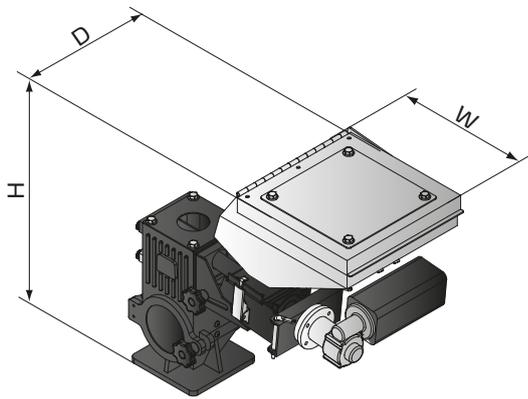
■ Working Principle

Signals from control cabinet are sent to motor, and then motor begins to work. The rotary force is transferred to the dosing screw through shaft connector. Color additives in hopper fall into the groove of conveying screw, then are taken to hopper base by rotating action of the screw.



SCM Series

Outline Drawings



Single Color Doser

Double-color Doser

Specifications

Model	Single Color Unit				Double Color Unit
	SCM-12	SCM-16	SCM-20	SCM-30	SCM-D
Motor Power (kW) (50/60Hz)	0.06	0.06	0.06	0.06	0.06 × 2
Output Power of Mixer (kW, 50 / 60Hz)	0.09	0.09	0.09	0.09	0.09
Screw External Dia. (mm)	12	16	20	30	**
Output Capacity (kg/hr)	0.1~10	0.5~30	3~60	8~110	*
Storage Hopper (L)	10	10	10	10	10
Gear Ratio	38:1	38:1	38:1	38:1	38:1 / 38:1
Main Material Hopper (L)	Optional(15)	Optional(15)	Optional(15)	Optional(15)	Optional(15)
Mixer	Optional	Optional	Optional	Optional	Optional
Base	Optional	Optional	Optional	Optional	Optional
Dimensions					
H(mm)	520	520	520	520	615
W(mm)	610	610	610	610	1045
D(mm)	335	335	335	335	410
Weight (kg)	29	29	29	29	50

- Notes: 1) "*" stands for the output capacity depends on model selected, data of the single color doser can be a reference. For example: SCM-D-12 / 16, output capacity 0.6~40kg/hr.
 2) "**" stands for external dia. of screw is up to model selected.
 3) For additional mixer, add "MS" at the end of model code.
 4) When selecting screws with diameter of 30mm, the machine model should be followed by "L" to distinguish it from other three kinds of interchangeable screws.
 5) All output capacities of above models are base on data from bulk density 1.2kg/L, dia. 2-3mm masterbatch in a test criteria of continuous running.
 6) Main power for single color unit is 1Φ, 115 / 230V, 50 / 60Hz, but it will be 3Φ, 230 / 400 / 460 / 575VAC, 50 / 60Hz when being equipped with mixer.

We reserve the right to change specifications without prior notice.