

# Volumetric Doser

SCM Single Color Doser

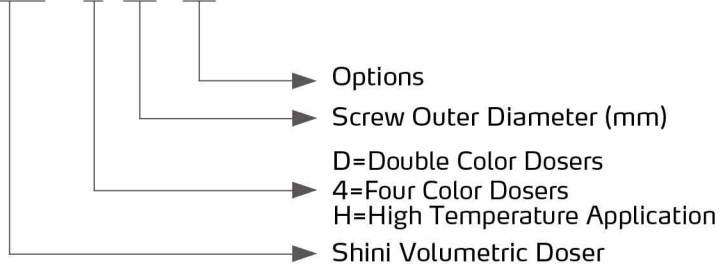


Refer carefully to this manual before operation.

# SCM Series

## ■ Coding Principle

SCM - x- xx - xx



## ■ Features

- Chrome coating dosing screw for long durability.
- Maintenance-free DC brushless motor from Germany.
- Modular design for easy color change and maintenance.
- Standard neckpiece with hopper magnets for better processing machine protection.
- Input available for both extrusion and injection mode.
- Uninterrupted production recovery in case of power failure.
- Synchronize of masterbatch dosing ratio with extruder speed.
- Masterbatch blockage alarm via motor overload.
- Support micro-dosing mode. Masterbatch will dose once per X cycle.
- Modbus RTU data communication via RS485.



SCM-4



SCM-D



Control Panel



RS485 interface

## Options

- Heavy base option for mounting large drying hopper of SHD-100~300 or SHD-160U~450U. Add "HB" at the end of the model code.
- Optional mixer at neckpiece. Add "MS" at the end of the model code.
- Optional main material hopper. Add "MH" at the end of the model code.
- Optional masterbatch low-level sensor. Add "LS" at the end of the model code.
- Optional 100kg base (no mixer) with 90mm opening for high throughput application. Add "LB" at the end of the model code.



SCM-H



Heavy Base (optional)

## Application

SCM series volumetric doser is suitable for even feeding of masterbatch, additive, and virgin material to the plastic process machine. The unit has a selection of four dosing screw sizes for different throughput needs. The unit can support up to four sets of dosing screws for various material receipt.

In SCM-D with three components application, two materials are dosed via a screw unit and free flow of main material through neckpiece.

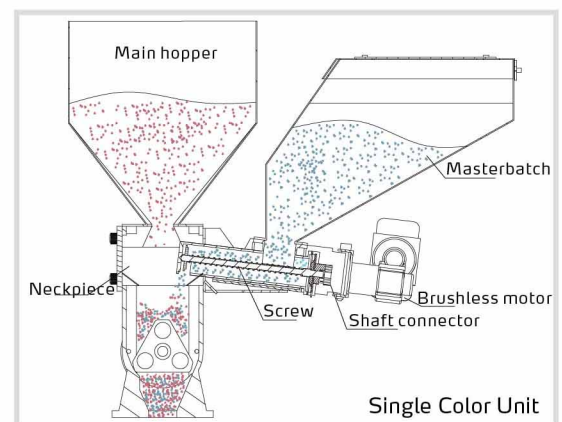
In SCM-4 with five components application, four materials can be dosed via a screw unit and free flow of main material through neckpiece.

SCM in high drying temperature application, such as PET preform production. Water cooling kit should be added to prevent masterbatch from sticking in the screw. Add "H" at the end of the model code.

SCM synchronizes dosing speed in extruder mode via analog 0~10V input from the extruder.

Combination of Shini VL venturi loader realizes auto conveying of material to SCM at all time.

## Working Principle



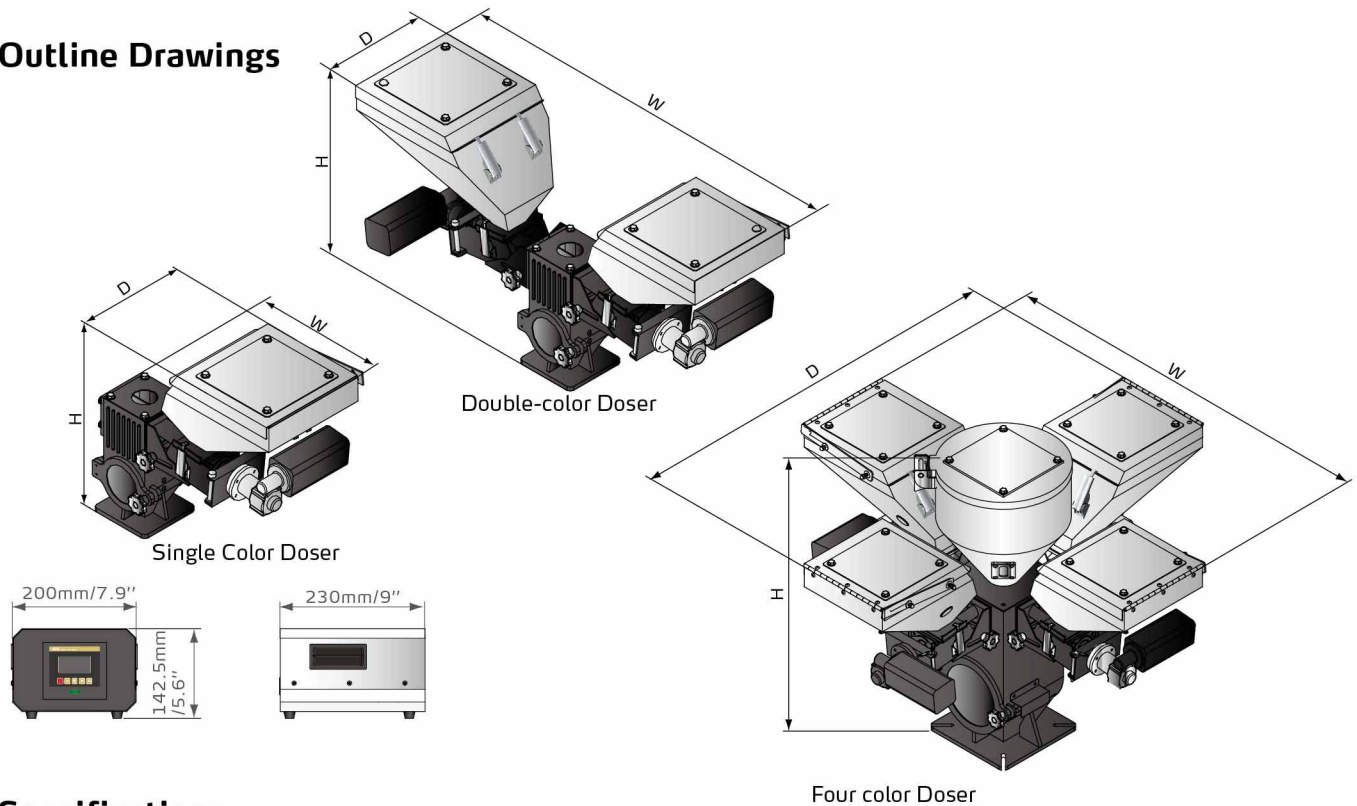
3D animation  
(Tencent)



3D animation  
(Youtube)

# SCM Series

## Outline Drawings



## Specifications

Model	SCM-12	SCM-16	SCM-20	SCM-30	SCM-D	SCM-4	
Motor Power (kW, 50/60Hz)	0.06	0.06	0.06	0.06	0.06 × 2	0.06 × 2	
Output Power of Mixer (kW, 50/60Hz)	0.09	0.09	0.09	0.09	0.09	0.09	
Screw External Dia.	12mm/0.47"	16mm/0.63"	20mm/0.79"	30mm/1.18"	**	**	
Output Capacity	0.1~8	0.5~17	3~35	8~102	*	*	
Hopper (L)	Standard	10	10	10	10	10	
	Option heavy-duty base	15	15	15	15	-	
Gear Ratio	38:1	38:1	38:1	38:1	38:1 / 38:1	38:1	
Main Material Hopper(L)	○(15)	○(15)	○(15)	○(15)	○(15)	●(15)	
Mixer	○	○	○	○	○	●	
Heavy-duty Base	○	○	○	○	○	-	
Dimensions	H	mm	520	520	520	520	736
		inch	20.5	20.5	20.5	20.5	29
	W	mm	610	610	610	610	1045
		inch	24	24	24	24	41
	D	mm	335	335	335	335	410
		inch	13	13	13	13	16
Weight	kg	22	22	22	22	34	
	lb	48.5	48.5	48.5	48.5	75	

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(1.3~88lb/hr).

2) "\*\*" stands for external dia. of screw is up to model selected.

3) The outputs of above models are measured under the conditions of 0.8kg/L bulk density and, masterbatch particles in diameter of 2-3mm by continuous operation. Actual output capacity depends on actual material's characteristics, the actual material, such as bulk density, flow ability, particle size, which is also depended on the setting recipe.

4) "●" stands for standard, "○" stands for options, "-" stands for none.

5) Power supply: 1Φ, 115/230V, 50/60Hz.