



Gravimetric Dosers

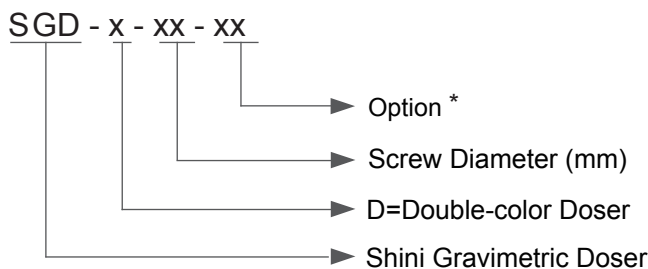
SGD-12



Refer carefully to this manual before operation.

SGD Series

Coding Principle



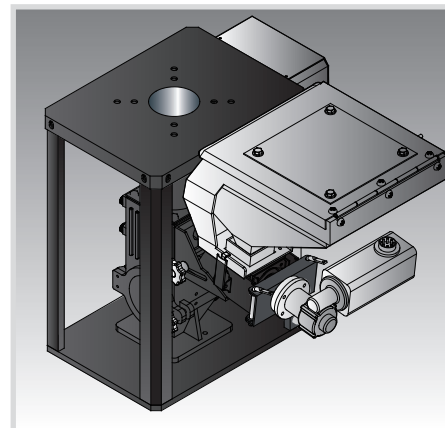
Notes: *

MS=Equipped with Mixer

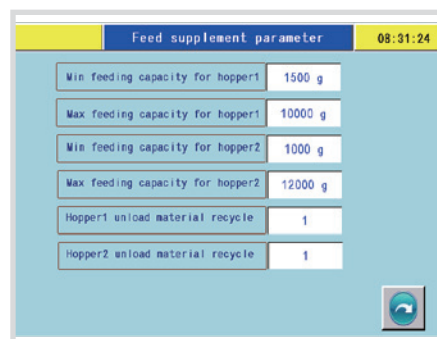
Features

Standard configuration

- Dosing screws are chrome plated for durability.
- Unit is comprised of standard modules for ease of cleaning, disassembly and interchangeability.
- Three-tube hopper magnet is equipped at the base to absorb metal impurities so to prevent screw of molding machine from damage.
- Mixer is standard equipment for double color doser to make the material evenly mixed, while also an option for single color doser.
- Main material hopper is standard equipment for double color doser. It is optional for single color doser.
- External signals can be directly interfaced with control box.
- The current operation mode can be recorded, unaffected by power failure so operation would be returned to normal when power is on.
- Forced material cleaning is convenient to replace masterbatch.
- SGD is able to automatically monitor the addition of masterbatch and additives. Also it can fulfill automatic calibration when bulk density of material varies.
- Ethernet communication is available to transmit data, record and store the dosage of regrinds and masterbatch for future use.
- The function of aberration compensation is able to adjust the proportion of masterbatch or additives based on regrinds amount.
- Manipulate dosing process via loss-in-weight technology, satisfying the high requirement of production precision.
- Up to 100 groups of recipes can be saved.
- Suitable for extrusion or injection molding modes.
- It is able to detect the blockage and overload of masterbatch and stop machine and sound alarms accordingly.
- Machine halts and sounds alarm when motor faults.



Heavy Base (Optional)



Calculation Mode

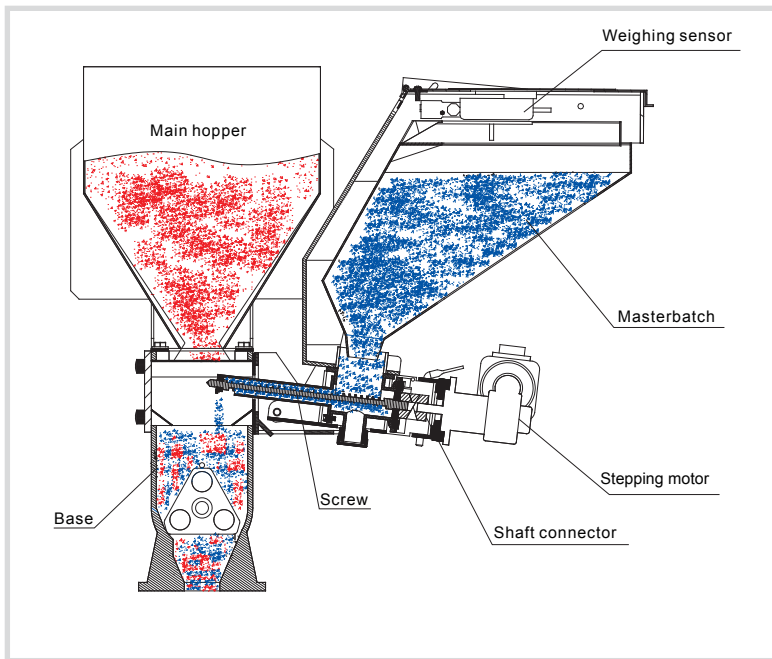


Recipe Edit Menu

Accessory option

- Venturi Loaders are optional.
- For working with SHD-100 or SHD-160U and models above, heavy base should be selected.

■ Working Principle



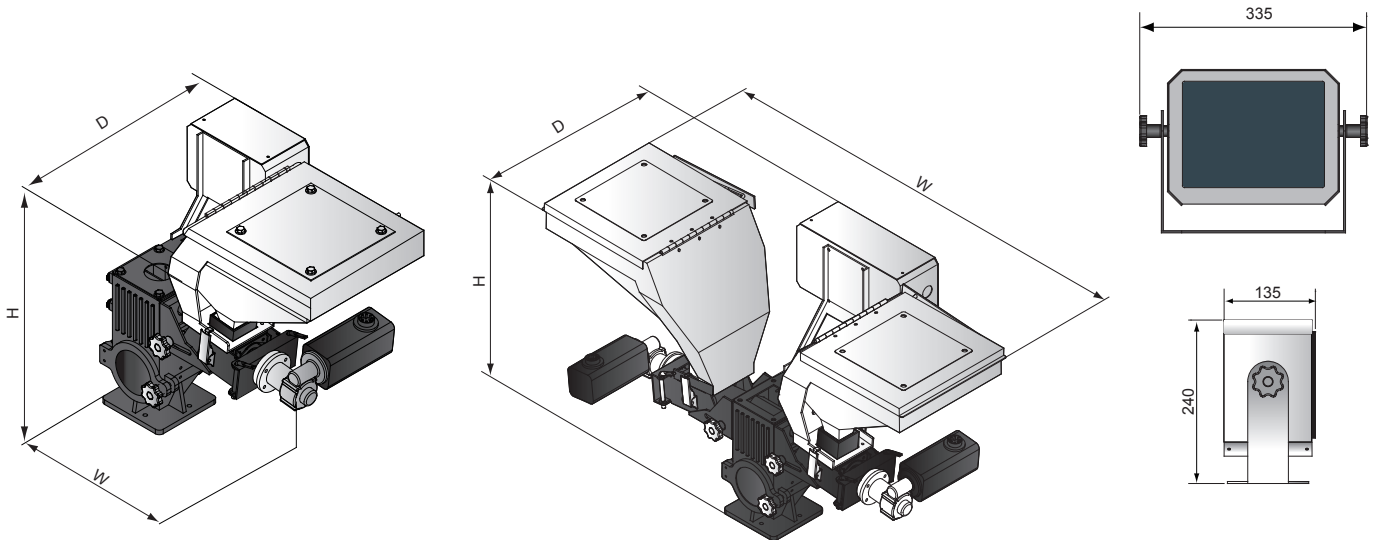
Signals from control cabinet are sent to motor, then motor begins to work, the rotary force is transferred to dosing screw through shaft connector. Masterbatch in hopper falls into the groove of conveying screw, and then be taken to hopper base by rotating action of the screw. Weighing sensor is adopted to precisely control masterbatch output to fulfill proportional adding.

■ Application

SGD series dosers are suitable for auto-proportional mixing of virgin material, regrinds, masterbatch or additives. The motor with gear ratio of 38:1 is coupled to a dosing screw of 12, 14 or 16mm in diameter to give a total of three models with the output ranging from 0.04~32kg/hr. Double color dosers can be assembled from two single color dosers according to customers' requirements.

SGD Series

Outline Drawings



Specifications

Model	Single Color Unit			Double Color Unit
	SGD-12	SGD-14	SGD-16	SGD-D
Motor Power (kW) (50/60Hz)	0.06	0.06	0.06	0.06×2
Output Power of Mixer (kW, 50 / 60Hz)	0.09	0.09	0.09	0.09
Screw External Dia. (mm)	12	14	16	**
Output Capacity (kg/hr)	0.04~3.6	0.6~20	1.1~32	*
Storage Hopper (L)	10	10	10	10
Gear Ratio	38:1	38:1	38:1	38:1/38:1
Main Material Hopper (L)	Optional (15)	Optional (15)	Optional (15)	Optional (15)
Mixer	Optional	Optional	Optional	Standard
Heavy Base	Optional	Optional	Optional	Optional
Dimensions				
H(mm)	580	580	580	624
W(mm)	600	600	600	1060
D(mm)	430	430	430	430
Weight (kg)	40	40	40	60

Notes: 1) "*" stands for the output capacity depends on model selected, data of the single color doser can be a reference. For example: SGD-D-12/14, output: capacity 0.64~23.6kg/hr.

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

3) For additionally mount mixer on single color doser, add "MS" at the end of the model code.

4) All output capacities from above models are based on data from bulk density 1.2kg/L, dia. 2~3mm masterbatch in a test criteria of continuous running.

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

We reserve the right to change specifications without prior notice.