



## Metal Detecting Separator

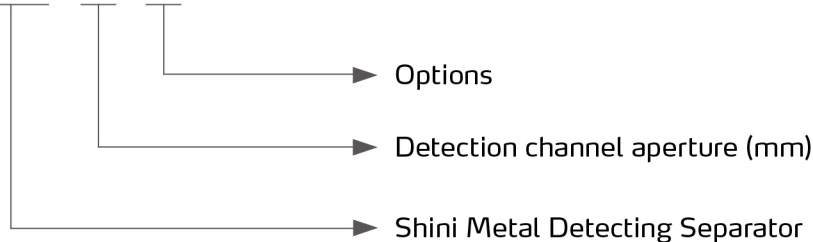
SMS



Refer carefully to this manual before operation.

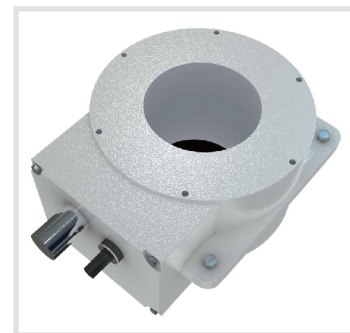
## ■ Coding Principle

SMS - xx - xx



## ■ Features

- Fast separating all the metals from the material.
- The minimum detectable diameter of the metals can be as short as 0.5mm.
- Compact design, easy to install and simple to operate.
- Standard equipped with a 12L/3.2gal hopper.
- Germany metal detector.



Metal Detecting Separator

## ■ Options

- For models optional with the floor stand, and add "F" at the end of the model code.

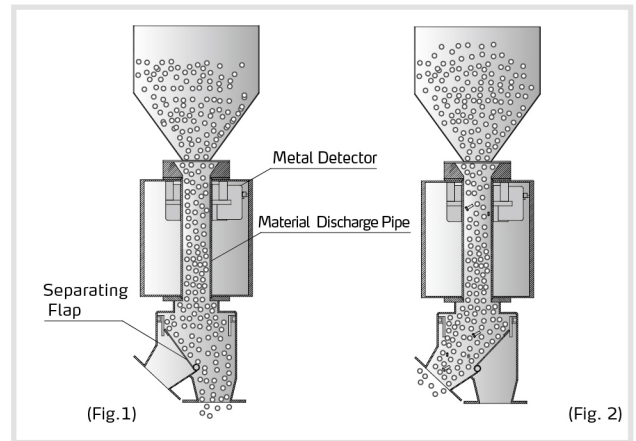
## ■ Application

SMS series metal detecting separators are highly sensitive and accurate in detecting and separating metal grains, such as steel, iron, copper, aluminum, lead, tin, etc. Its principle is when metal impurities passing through it, electrical detector can send a signal to control board to open the valve to discharge the impurity materials. Pneumatic discharging system takes little space and ensures good performance. It can be installed directly on injection molding machine or (extruders) hoppers to protect the screw of machine from the damage caused by hard metals. When it installed on the injection molding machine or on hopper of the extruder, material level sensor should be mounted on the hopper to prevent material blockage which affects machine testing. Its processing capacity is ranging from 600L/hr(158.5gal/hr)~3,000L/hr (792.5gal/hr) to meet any specific requirement, which can only screen materials with a few of metals.

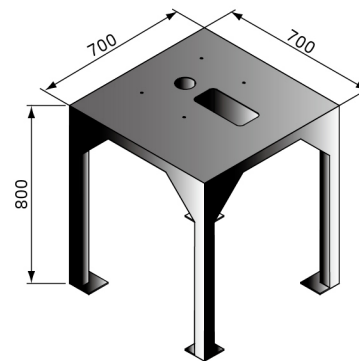
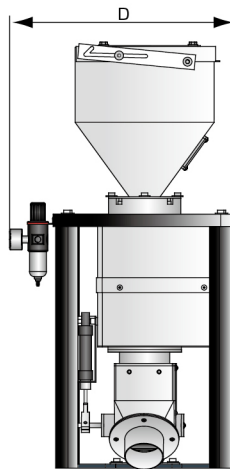
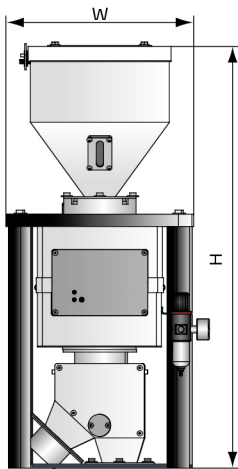
## Working Principle

Material discharge pipe has a ring-type metal detector sleeved on and when material with no metal impurities passing through it, no signal will be sent out from the detector to activate the separating flap from its standby position. Thus material will flow out via the passage showed in Fig. 1.

However when material with metal impurities passing through it, signal will be sent out from the detector to move the separating flap to the other position. Thus material will flow out via the passage showed in Fig. 2.



## Outline Drawings



Floor Stand Dimensions

## Specifications

| Model                         |        | SMS-35             | SMS-50             | SMS-70             |
|-------------------------------|--------|--------------------|--------------------|--------------------|
| Maximum Throughput            | L/hr   | 600                | 1,500              | 3,000              |
|                               | gal/hr | 159                | 396                | 793                |
| Minimum Detectable Diameter   | mm     | 0.5                | 0.6                | 1.0                |
|                               | inch   | 0.02               | 0.02               | 0.04               |
| Material outlet pipe diameter | mm     | 35                 | 50                 | 70                 |
|                               | inch   | 1.38               | 1.97               | 2.76               |
| Dimensions<br>H x W x D       | mm     | 860 x 405 x 368    | 860 x 405 x 368    | 860 x 405 x 368    |
|                               | inch   | 33.9 x 15.9 x 14.5 | 33.9 x 15.9 x 14.5 | 33.9 x 15.9 x 14.5 |
| Weight                        | kg     | 50                 | 50                 | 50                 |
|                               | lb     | 110                | 110                | 110                |

Notes: 1) Testing result of maximum throughput is based on particles of 0.8kg/L(6.7lb/gal) in bulk density and 2-3mm/0.12-0.2" in size.

2) The minimum metal diameter is detected based on carbon steel testing standard.

3) Power supply: 1Φ, 115/230VAC, 50/60Hz.

We reserve the right to change specifications without prior notice.