



## Gravimetric Blender



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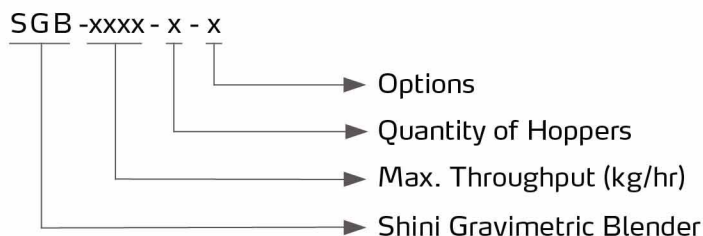
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SGB-200-4



Refer carefully to the manual before operation.

## ■ Coding Principle



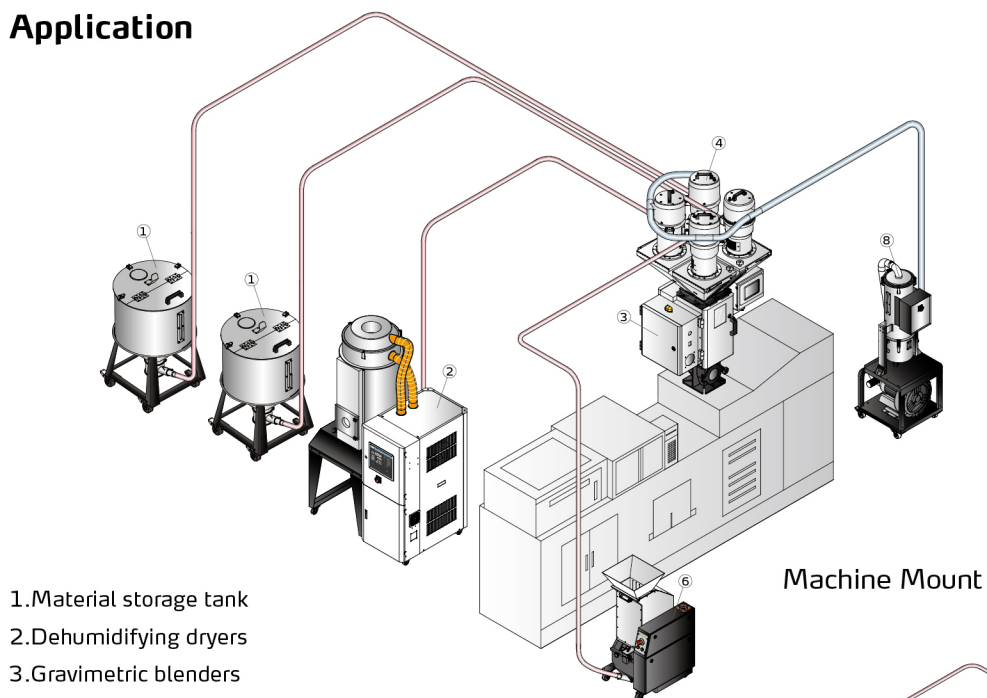
## ■ Features

- The gravimetric technology ensures the overall precision of  $\pm 0.1\%$  while using micro-dosing with free-flowing material.
- The load cell allow the unit to measure each batch and correct the next batch to realize constant dosing precision.
- Mixing tank provide even mix of materials and large easy maintenance door.
- Standard floor stand for SGB-1200 and above model. Which includes floor stand, material storage tank, and pneumatic discharge slide gate.
- Modbus TCP data communication via ethernet.
- Integrate material conveying control for the optional SVG vacuum unit and SHR-U-ST hopper receiver.

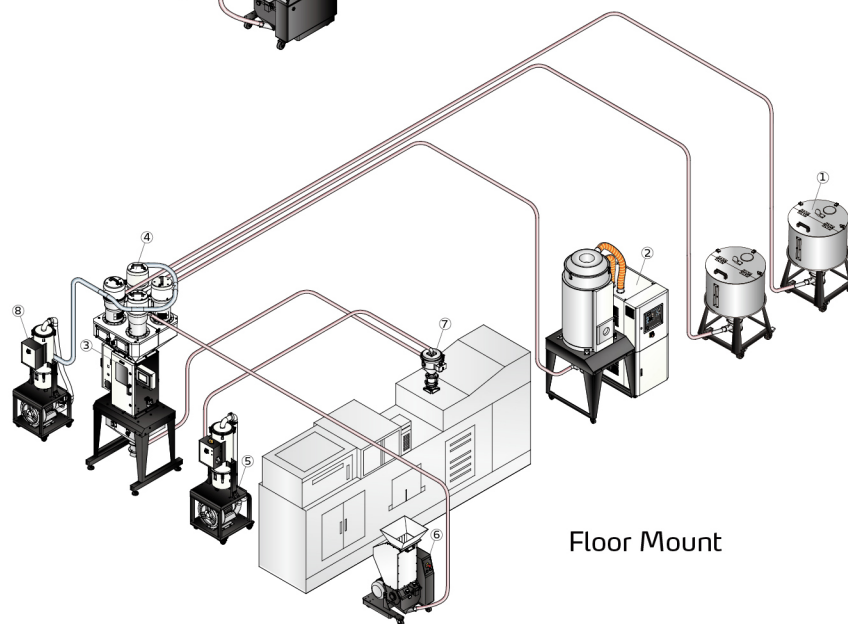
## ■ Options

- Optional low-level sensor for storage hopper. Recommend for those hoppers without hopper receiver. Add "LS" at the end of the model code.
- Optional floor stand for SGB-600 and below model. Which includes floor stand, material storage tank, pneumatic discharge slide gate, and suction box. Add "GS" at the end of the model code.
- Micro-scale pulse valve is optional for SGB-40 to meter materials with proportion of 0.2%-0.5%, and add "MF" at the end of the model code.
- Optional micro-dosing of 0.2~0.5% with screw feeder for SGB-200/600. Add "SF" at the end of the model code.
- Optional special metering valve for SGB-200 and above. It is for flake or irregular material while the diameter is less than 12\*12\*12mm/0.47\*0.47\*0.47inch. Add "FF" at the end of the model code.
- Function of recycled material auto-compensation is optional (recycling hopper should option with low level sensor). Aberration compensation can be automatically calculated according to the discharging amount of recycled materials, and add "AC" at the end of the model code.

## Application



1. Material storage tank
2. Dehumidifying dryers
3. Gravimetric blenders
4. Vacuum receiver
5. Main vacuum unit
6. Low-speed granulators
7. Photosensor hopper receiver
8. Main vacuum unit (SVG)



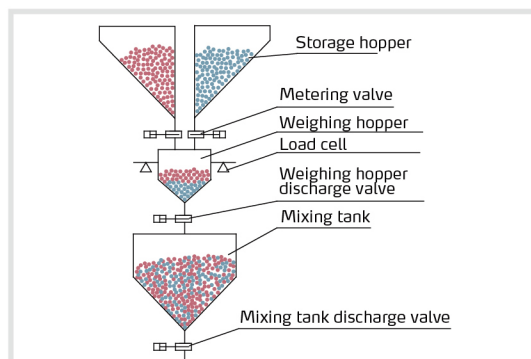
## Working Principle



3D animation  
(Tencent)



3D animation  
(Youtube)



## Accessories

### SRM remote monitoring software

- The software is compatible with Windows system.
- Ethernet Modbus-TCP communication protocol ready.
- Enable real-time data in the form of the spreadsheet of equipment, such as batch precision etc.
- Functions of remote monitoring, debugging, receipt setting and data saving for several SGB equipments.

SRM remote monitoring software interface showing a table of hopper data. The table includes columns for Hopper (1-8), Weight (kg), Temperature (°C), and Production rate (kg/hr). The interface also includes buttons for 'Return to main', 'Send to file', and 'Exit the'.

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## SVG Vacuum Generator

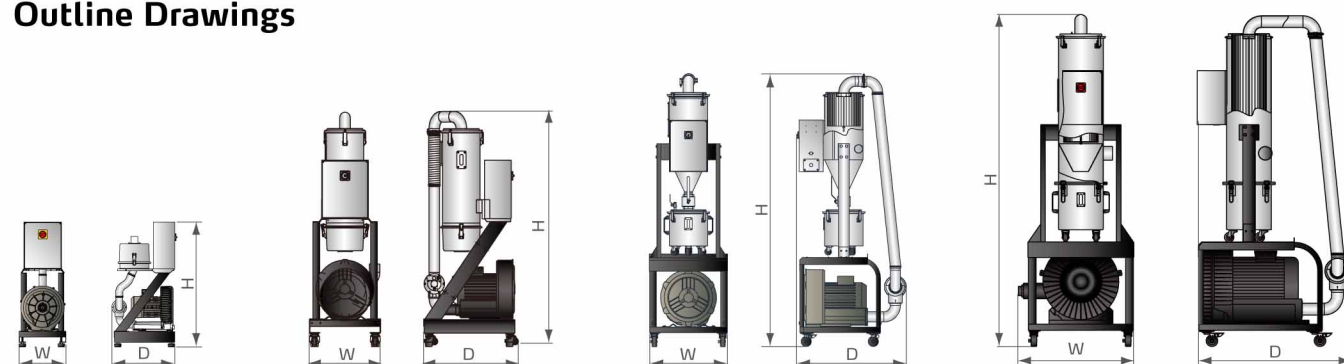
SVG can work with SGB and SHR-U-ST vacuum hopper directly to convey materials into the storage hopper of the SGB. The controller of SVG is integrated into the SGB, so it can control all the functions of SVG through the touch panel to make it more useful. The T-shape design of SHR-U-ST's suction pipe that worked with the SVG makes it easy to connect the vacuum hoppers, which only needs one suction pipe that can connect the SVG and the vacuum hoppers as to give well organized pipe layout.



| Model    |    | Vacuum unit | Power (kW) | Central hopper receiver | Hopper capacity |      | Material (inch) | Vacuum pipe (inch) | Dimension H×W×D(mm) |
|----------|----|-------------|------------|-------------------------|-----------------|------|-----------------|--------------------|---------------------|
|          |    |             |            |                         | L               | gal  |                 |                    |                     |
| SGB-40   | -4 | SVG-1HP     | 0.75       | 4×SHR-3U-ST             | 3               | 0.79 | 1.5             | 2                  | 933×350×450         |
| SGB-200  | -4 | SVG-2HP     | 1.5        | 4×SHR-6U-ST             | 6               | 1.59 | 1.5             | 2                  |                     |
| SGB-600  | -6 | SVG-3HP     | 1.85       | 6×SHR-12U-ST            | 12              | 3.17 | 1.5             | 2                  | 1300×426×593        |
|          | -4 | SVG-5HP     | 3.75       | 4×SHR-12U-ST            | 12              | 3.17 | 1.5             | 2                  |                     |
| SGB-1200 | -6 | SVG-5HP-D   | 3.0        | 6×SHR-12U-ST            | 12              | 3.17 | 1.5             | 2                  | 1360×595×660        |
|          | -4 | SVG-10HP    | 7.5        | 4×SHR-36U-ST            | 36              | 9.5  | 2               | 2.5                |                     |
| SGB-2000 | -8 | SVG-10HP    | 7.5        | 8×SHR-36U-ST            | 36              | 9.5  | 2               | 2.5                | 2031×580×818        |
|          | -6 | SVG-10HP    | 7.5        | 6×SHR-36U-ST            | 36              | 9.5  | 2               | 2.5                |                     |
|          | -4 | SVG-10HP-D  | 7.5        | 4×SHR-36U-ST            | 36              | 9.5  | 2               | 2.5                | 2031×750×818        |
| SGB-3000 | -8 | SVG-10HP-D  | 7.5        | 8×SHR-36U-ST            | 36              | 9.5  | 2               | 2.5                |                     |
|          | -6 | SVG-20HP-D  | 13         | 6×SHR-48U-ST            | 48              | 12.7 | 2.5             | 3                  | 2200×745×1000       |
|          | -4 | SVG-20HP-D  | 13         | 4×SHR-48U-ST            | 48              | 12.7 | 2.5             | 3                  |                     |

Notes: 1) "T" means the material suction pipe is T joint.  
 2) Optional cooler is available for SVG-5HP and above models to feed the high temp. drying hopper with working temp. above 160°C, and add "C" at the end of the model code.  
 3) Power: 3Φ, 400VAC, 50Hz.

## Outline Drawings

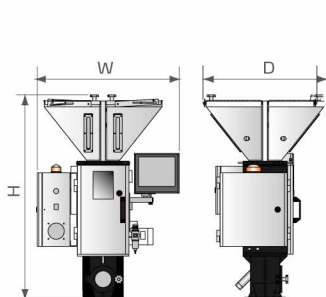


SVG-1HP/2HP/3HP

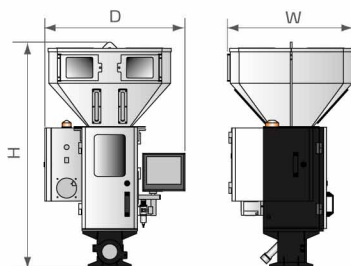
SVG-5HP(-D)

SVG-10HP(-D)

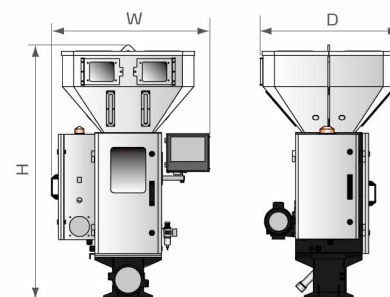
SVG-20HP-D



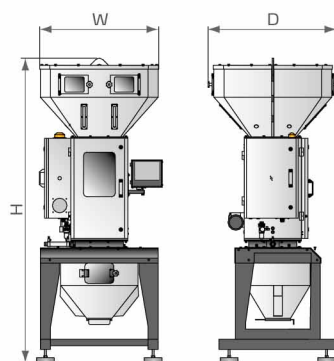
SGB-40



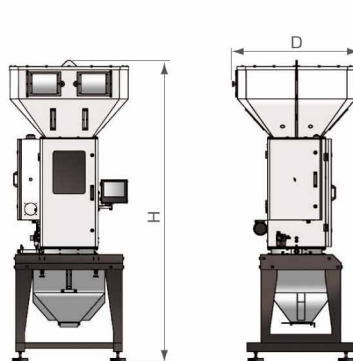
SGB-200



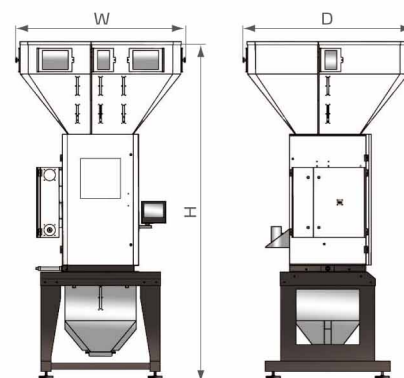
SGB-600



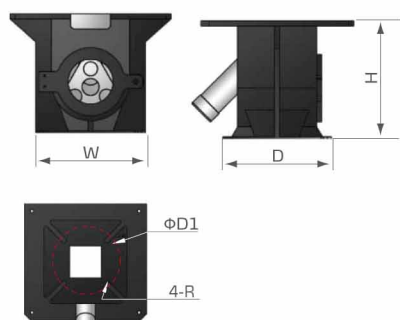
SGB-1200



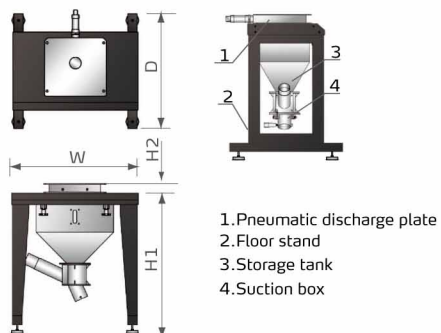
SGB-2000



SGB-3000



Magnetic Base(For SGB-600 or below)



Floor Stand(For SGB-600 or below)

# SGB Series

## Dimension

| Model                          |      | SGB-40               | SGB-200              | SGB-600            | SGB-1200           | SGB-2000           | SGB-3000           |
|--------------------------------|------|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|
| H×W×D                          | mm   | 1110×770×675         | 1300×810×735         | 1445×905×785       | 2398×940×1023      | 2800×1110×1180     | 3375×1695×1695     |
|                                | inch | 43.7×30.3×26.6       | 51.1×31.9×28.9       | 56.8×35.6×30.9     | 94.4×37×40.3       | 110.2×43.7×46.5    | 132.9×66.7×66.7    |
| Magnetic Base<br>(W×D×H×ΦD1×R) | mm   | 220×220×244×160×6.5  | 250×250×213×200×6    | 280×280×250×220×6  | -                  | -                  | -                  |
|                                | inch | 8.7×8.7×9.6×6.3×0.26 | 9.8×9.8×8.4×7.7×0.24 | 11×11×9.8×8.7×0.24 | -                  | -                  | -                  |
| Floor Stand<br>(H1×H2×W×D)     | mm   | 713×50×654×600       | 880×50×724×800       | 885×60×814×800     | 900×60×930×930     | 1000×65×1060×1000  | 1075×70×1240×1240  |
|                                | inch | 28×2×25.7×23.6       | 34.6×2×28.5×31.5     | 34.8×2.4×32×31.5   | 35.4×2.4×36.6×36.6 | 39.4×2.6×41.7×39.4 | 42.3×2.8×48.8×48.8 |
| Weight<br>(Direct Mount)       | kg   | 115                  | 135                  | 160                | -                  | -                  | -                  |
|                                | lb   | 254                  | 298                  | 353                | -                  | -                  | -                  |
| Weight<br>(Inc. Floor Mount)   | kg   | 135                  | 170                  | 220                | 400                | 500                | 850                |
|                                | lb   | 298                  | 375                  | 485                | 882                | 1102               | 1874               |

## Specifications

| Model     |   | Components | Main Metering Valve | Secondary Metering Valve | Max. Batch |      | Mixing Motor Power (kW) | Max. Throughput |       |
|-----------|---|------------|---------------------|--------------------------|------------|------|-------------------------|-----------------|-------|
|           |   |            |                     |                          | kg         | lb   |                         | kg/hr           | lb/hr |
| SGB-40-   | 4 | 4          | 3                   | 1                        | 1.0        | 2.2  | 0.25                    | 40              | 88    |
| SGB-200-  | 4 | 4          | 3                   | 1                        | 3.0        | 6.6  | 0.25                    | 200             | 441   |
| SGB-600-  | 6 | 6          | 4                   | 2                        | 8          | 17.5 | 0.55                    | 400             | 882   |
|           | 4 | 4          | 3                   | 1                        |            |      |                         | 600             | 1323  |
| SGB-1200- | 6 | 6          | 4                   | 2                        | 12         | 26.5 | 0.55                    | 900             | 1984  |
|           | 4 | 4          | 3                   | 1                        |            |      |                         | 1200            | 2646  |
| SGB-2000- | 8 | 8          | 5                   | 3                        | 18         | 39.5 | 0.55                    | 1200            | 2646  |
|           | 6 | 6          | 4                   | 2                        |            |      |                         | 1600            | 3527  |
|           | 4 | 4          | 3                   | 1                        |            |      |                         | 2000            | 4409  |
| SGB-3000- | 8 | 8          | 5                   | 3                        | 40         | 88   | 0.75                    | 2000            | 4409  |
|           | 6 | 6          | 4                   | 2                        |            |      |                         | 2500            | 5512  |
|           | 4 | 4          | 3                   | 1                        |            |      |                         | 3000            | 6614  |

Notes: 1) The above data is based on continuous running of even material whose bulk densities are 0.8kg/L(6.68lb/gal) and diameters are 3~4mm/0.12~0.16inch. The values varies along material features. Please contact Shini if the material is not sure.

- 2) The main metering valve is suitable for proportion not lower than 5% and raw material of even particles or recycled materials of even particles whose diameters are within 6\*6\*6mm/0.24\*0.24\*0.24inch.
- 3) The secondary metering valve is suitable for proportion of 0.5%~5% and master batch of even particles or additives whose diameters are within 4\*4\*4mm/0.16\*0.16\*0.16inch.
- 4) Come with a set of secondary metering valves for use when replacing recipe.
- 5) Three-phase supply is adopted in the blending motor.