



## Sound-proof Central Granulator

SG-4390

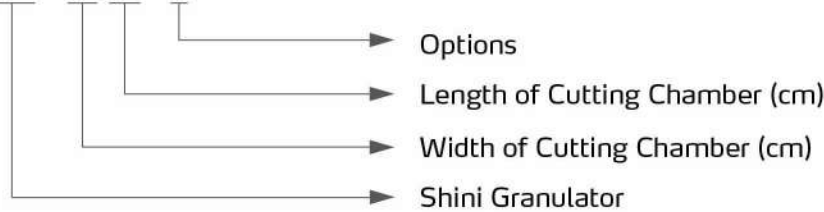


Refer carefully to this manual before operation.

# SG-43/50/70 Series

## ■ Coding Principle

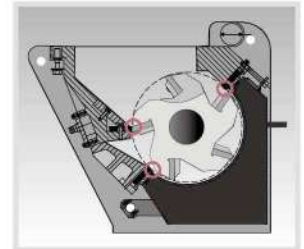
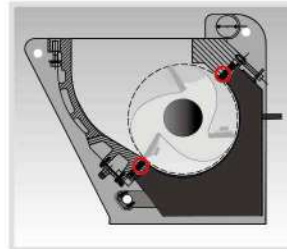
SG - xx xx - x



## ■ Features

### ● Fine finishing cutting chamber and cutting tools that need no adjustment

Components in the cutting chamber have been finely finished by CNC lathe, enjoying high accuracy; staggered cutters and structure can effectively disperse impact load and improve cutting efficiency; blade rest needing no adjustment makes it more convenient to change blades.



### ● Automatic conveying device

The machine is equipped with automatic conveying device of regrind materials, which is able to increase the conveying efficiency; materials are conveyed by blowers, which promote airflow and achieve air cooling of the cutting chamber to some extent. Thus, the room temperature of the cutting chamber can be reduced.



- **High-efficiency cutting motor**

The machine adopts IE3 high-efficiency motor, which has stable performance as well as safe operation and helps energy consumption.



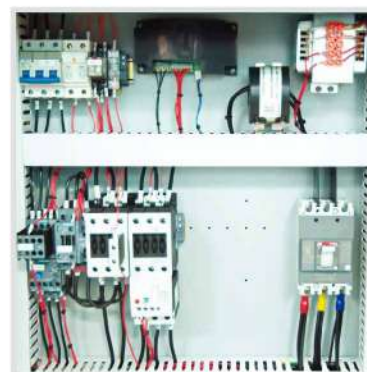
- **Sound-proofing machine**

The machine adopts enclosed soundproof box, and in the positions that may make noises, there are sound-absorbing cotton, which can efficiently reduce the noises made in the cutting process.



- **Multiple safety protection of control**

Control circuit meets CE standard, and it has multiple protections including protection of motor overload, short circuit, phase default and phase order detection, ensuring safe operation of the machine.

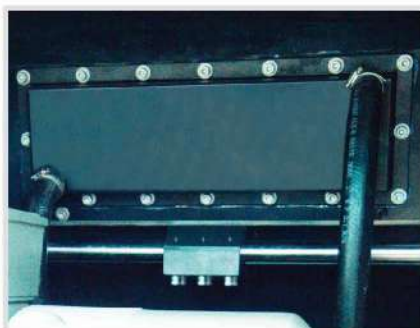


- **Cooling device of cutting chamber**

Cooling water device on the rear plate of cutting chamber can reduce the room temperature of cutting chamber and avoid the melt of regrind materials.



Inlet and outlet



Cooling water Tank

- **Presetting Knife Jig**

The presetting knife jig, which enables to reshape of the blades and installation without too much cost and time.



## ■ Application

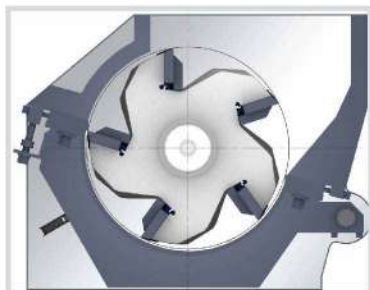
SG-43/50/70 series is suitable for centralized recycling of waste and rejected parts from injection, blowing molding and extrusion lines. This series features compact design, easy operation and quick blade replacement. Gradually inclined cutting and integrated power design offers a better cutting effect and a lower noise level, ensures low energy consumption.



# SG-43/50/70 Series

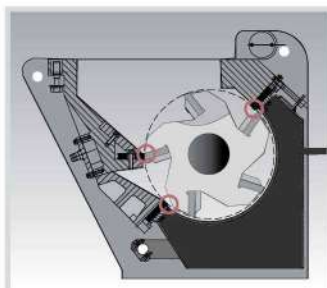
## Options

### Two Fixed plus Five Rotating Blades



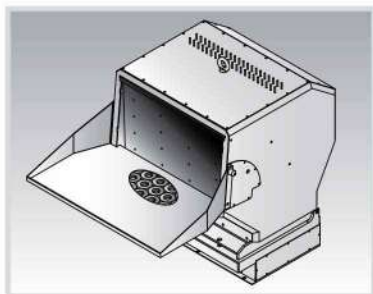
Two fixed plus five rotating blades are optional with a small feed port of cutting chamber, suitable for granulating block and solid, thick sheet material. Suitable for SG-43.

### Three Fixed plus Five Rotating Blades



High cutting point fixed blades model has small inlet space and initially high cutting point. Thus its cutting force is not so strong, which enhances the reliability of cutting solid material. This design is suitable for granulating big solid material with thick wall and sheet.- Suitable for SG-50/70.

### Feed Hopper with Magnet



Feed hopper with magnet is used to take out metal craps and impurities in the material. Add "FHM" at the end of the model code.

### Special Screens



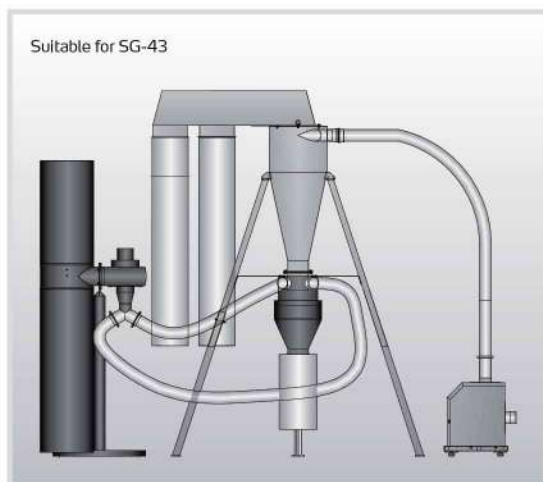
Φ8, Φ10, Φ17, Φ25(mm) are optional for SG-43B;

Φ8, Φ10, Φ14, Φ17, Φ25 (mm) are optional for SG-50B;

Φ10, Φ14, (mm) are optional for SG-70B.

Add "SS + screen diameter" at the end of the model code, e.g.: Φ8mm , add "SS08".

### Dust-separating system(SG-43)



Suitable for SG-43

### Dust-separating system+storage tank(SG-50/70)



Suitable for SG-50/70

Optional dust-separating system to remove the dusts in the material. Add "DS" at the end of the model code.



### Material Side Feed Pipe

The design of feeding hopper of traditional granulators is not suitable for longer pipes and section bars. We have designed material side feed pipe for convenient feeding of long materials.

Add "SF" at the end of the model code.



### Feeding Hopper for Conveyor

Material feeding for traditional large granulators is quite a difficult matter. They are generally installed at a lower place or a platform must be built for material feeding. Shini has particularly designed the belt conveyor to easily convey the material into the cutting chamber of SG-43 series.

Add "BCF" at the end of the model code.

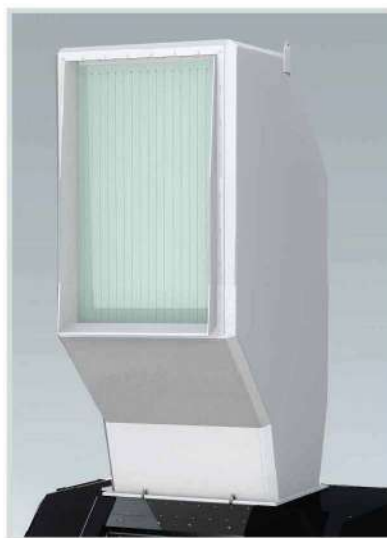
### Full-receiver Alarm Device



Full-receive alarm device helps to achieve unmanned operation and no materials will be wasted. Whenever the regrind level reaches the motor position, the machine will be forced to stop and be cut off via it is sensor, thus stop the granulator and warn the user by sounding an alarm.

Add "FAD" at the end of the model code.

### Height-increasing storage bin

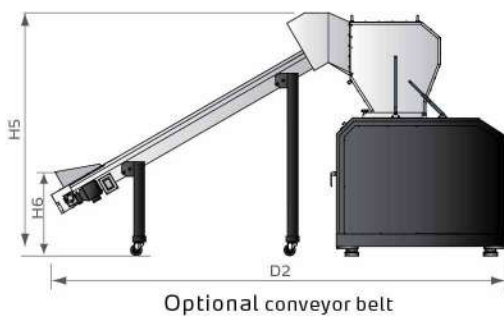
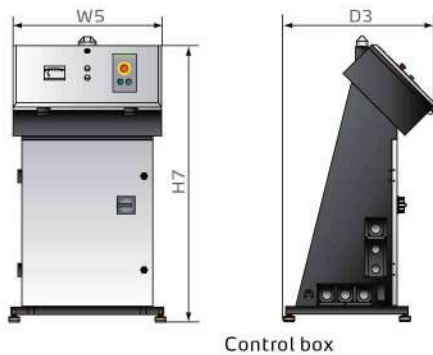
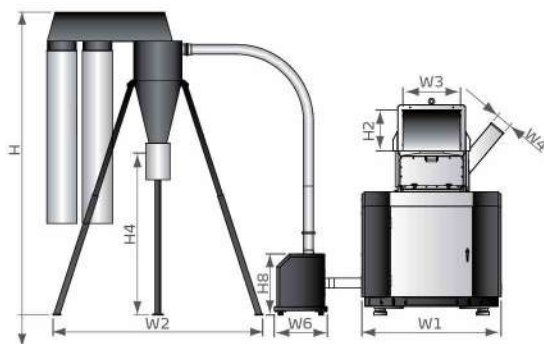
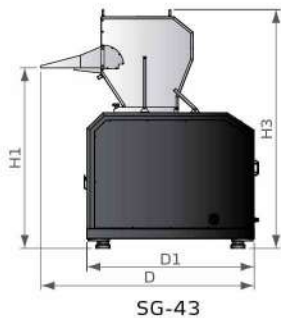


In order to meet the needs of customers to Crush longer materials, such as car bumpers, optional Height-increasing storage bin (only suitable for SG-50/70). Add "FH" at the end of the model code.

- The function of fiber reinforced material granulating is optional. Adopt surface-hardening treatment on the material contacting component. And blade material is V-4E joint with S50C. Add "F" at the end of the model code.
- Full-receive alarm device helps to realize unmanned operation and no materials will be wasted, Add " FAD " at the end of the model code.
- For stainless steel made feed hopper cover plate and storage tank, Add " R " at the end of the model code.
- Higher-power blower is optional, add "EC" at the end of the model code.
- Higher-power motor is optional, add "H" at the end of the model code.

# SG-43/50/70 Series

## Outline Drawings (SG-43)



## Specifications(SG-43)

| Model                                 |         | SG-4360(H)      | SG-4390(H)      |
|---------------------------------------|---------|-----------------|-----------------|
| Motor Power (kW, 50/60Hz)             |         | 30/34 (37/41.5) | 37/41.5 (45/51) |
| Conveying Blower (kW, 50/60Hz)        |         | 2.2/2.55        | 2.2             |
| Rotating Speed (rpm, 50/60Hz)         |         | 525/630         | 525/630         |
| Quantity of Fixed Blades              |         | 2 x 1           | 2 x 2           |
| Quantity of Rotating Blades(Optional) |         | 3 x 1 (5 x 1)   | 3 x 2 (5 x 2)   |
| Cutting Chamber                       | mm      | 430 x 600       | 430 x 900       |
|                                       | inch    | 16.9 x 23.6     | 16.9 x 35.4     |
| Max. Output                           | kg/hr   | 800             | 1000            |
|                                       | lb/hr   | 1764            | 2205            |
| Noise Level dB(A)                     |         | 105-110         | 105-110         |
| Material of Blades                    |         | SKD11           | SKD11           |
| Screen                                |         | φ12 mm/0.47"    | φ12 mm/0.47"    |
| Higher-power blower (kW)              |         | ○(7.5)          | ○(7.5)          |
| Dimensions                            | H (mm)  | mm              | 2710-3155       |
|                                       |         | inch            | 106.7-124.2     |
|                                       | H1 (mm) | mm              | 1708            |
|                                       |         | inch            | 67.2            |
|                                       | H2 (mm) | mm              | 430             |
|                                       |         | inch            | 16.9            |
|                                       | H3 (mm) | mm              | 2260            |
|                                       |         | inch            | 89              |
|                                       | H4 (mm) | mm              | 1240-1690       |
|                                       |         | inch            | 48.8-66.5       |
|                                       | H5 (mm) | mm              | 2277            |
|                                       |         | inch            | 89.6            |
|                                       | H6 (mm) | mm              | 750             |
|                                       |         | inch            | 29.5            |
|                                       | H7 (mm) | mm              | 1268            |
|                                       |         | inch            | 50              |
|                                       | H8 (mm) | mm              | 636(970)        |
|                                       |         | inch            | 25(38.2)        |
|                                       | W1 (mm) | mm              | 1450            |
|                                       |         | inch            | 57              |
|                                       | W2 (mm) | mm              | 1900-2310       |
|                                       |         | inch            | 74.8-90.9       |
|                                       | W3 (mm) | mm              | 600             |
|                                       |         | inch            | 23.6            |
|                                       | W4 (mm) | mm              | 166x 166        |
|                                       |         | inch            | 6.5 x 6.5       |
|                                       | W5 (mm) | mm              | 720             |
|                                       |         | inch            | 28.3            |
|                                       | W6 (mm) | mm              | 552(630)        |
|                                       |         | inch            | 21.7(24.8)      |
|                                       | D (mm)  | mm              | 1978            |
|                                       |         | inch            | 77.9            |
|                                       | D1 (mm) | mm              | 1553            |
|                                       |         | inch            | 61              |
|                                       | D2 (mm) | mm              | 4300            |
|                                       |         | inch            | 165.4           |
|                                       | D3 (mm) | mm              | 690             |
|                                       |         | inch            | 27.2            |
| Weight                                | kg      | 2350 (2430)     | 2730 (2780)     |
|                                       | lb      | 5181 (5357)     | 6019 (6129)     |

Notes: 1) "○" stands for optional.

2) SKD11 is steel grade of Japanese JIS standard.

3) Max. capacity of the machine is subject to diameter of screen mesh and composition of the material.

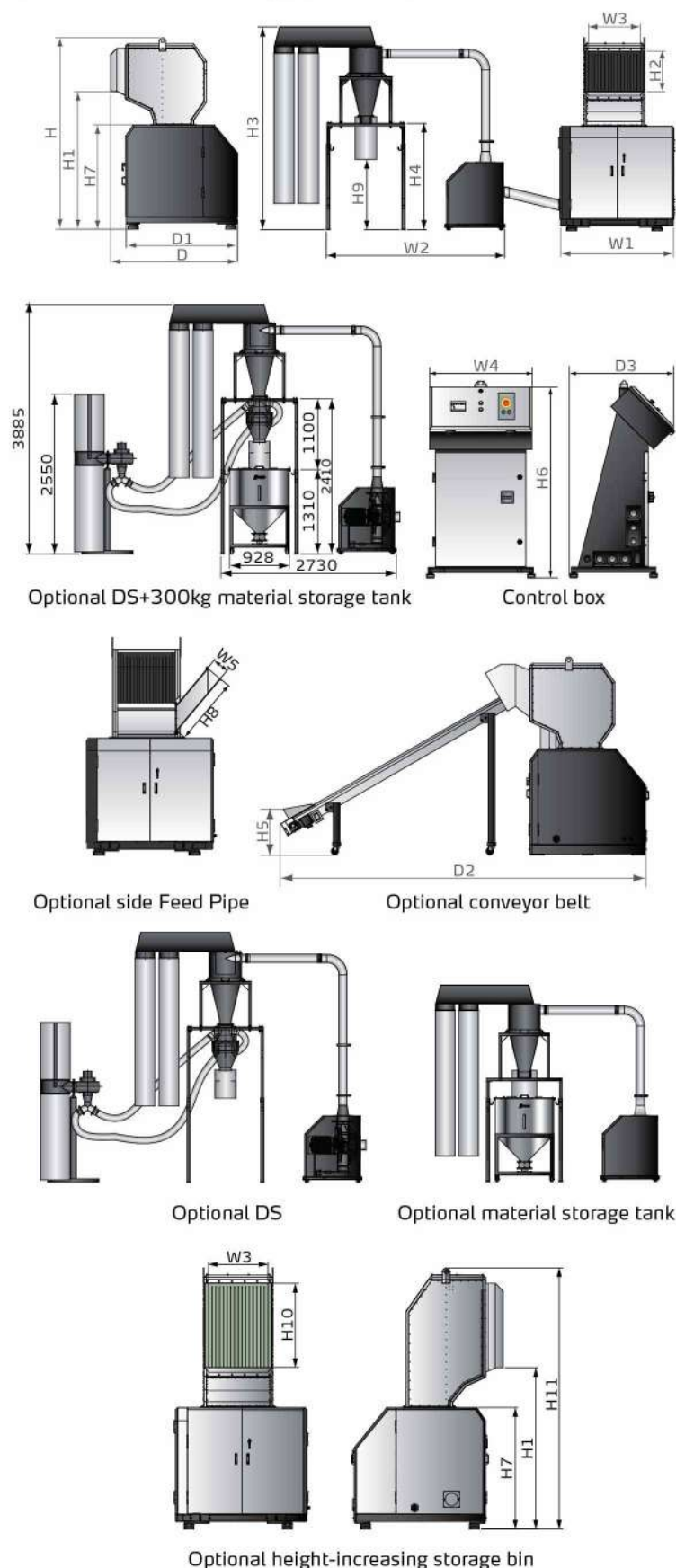
4) Noise level varies with different materials and motor types.

5) Noise level is tested under conditions of 1m around the machine and 1.6m from the ground.

6) Power supply : 3Φ, 230/400/460/575VAC, 50/60Hz.



## Outline Drawings(SG-50)



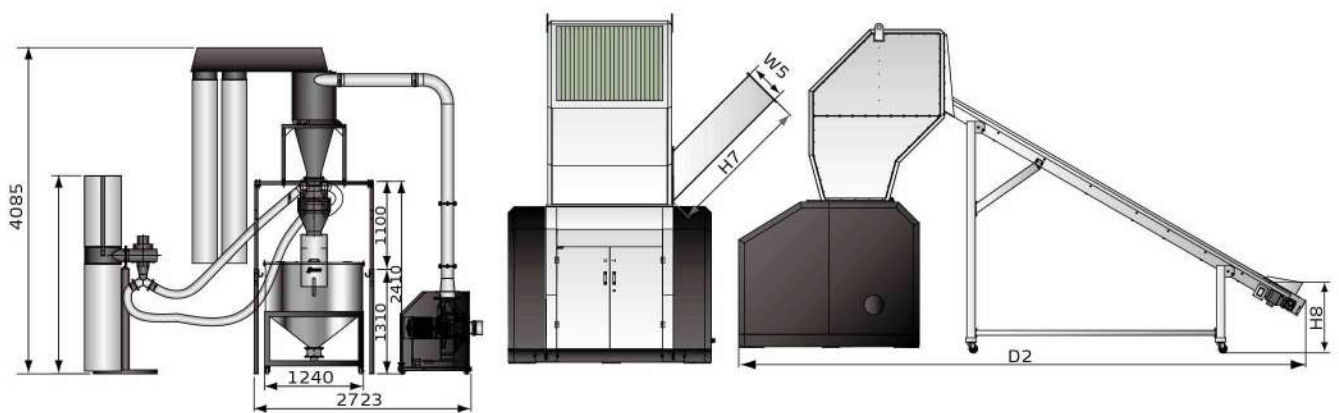
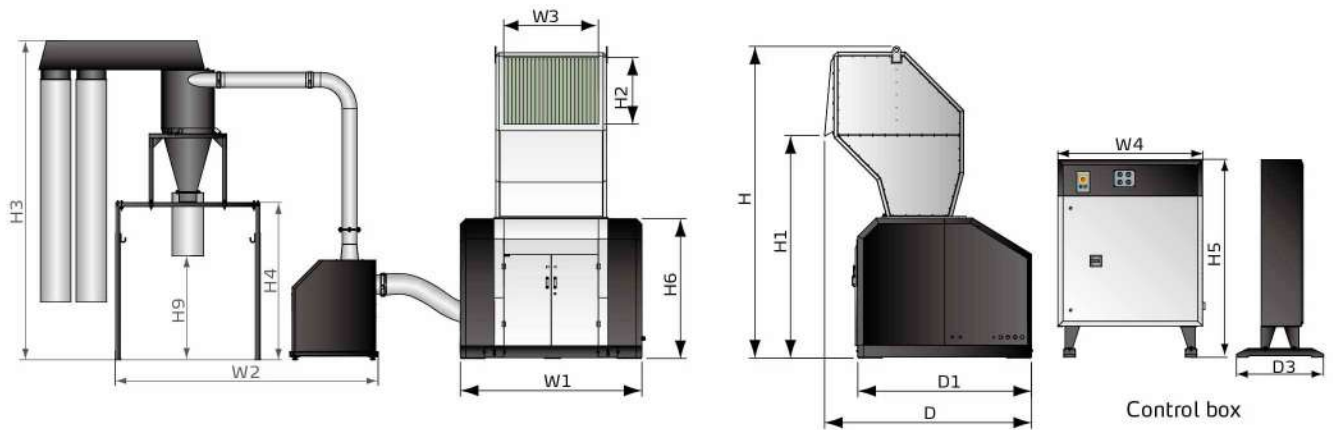
## Specifications(SG-50)

| Model                               |     | SG-5060     | SG-5080   | SG-5090 | SG-50110  |       |
|-------------------------------------|-----|-------------|-----------|---------|-----------|-------|
| Motor Power (kW, 50/60Hz)           |     | 37          |           | 45      |           |       |
| Rotating Speed (rpm, 50/60Hz)       |     | 525         |           |         |           |       |
| Conveying Blower (kW, 50/60Hz)      |     | 7.5         |           |         |           |       |
| Handspike Motor Power (kW, 50/60Hz) |     | 0.25        |           |         |           |       |
| Material of Blades                  |     | SKD11       |           |         |           |       |
| Quantity Fixed Blades (optional)    |     | 2×1         | 2×2 (3×2) | 2×2     | 2×2 (3×2) |       |
| Quantity of Rotating Blades         |     | 3×1         | 3×2 (5×2) | 3×2     | 3×2 (5×2) |       |
| Cutting Chamber                     |     | 500x600     | 500x800   | 500x900 | 500x1100  |       |
| Max. Output                         |     | 800         | 1100      | 1200    | 1500      |       |
| Noise Level dB(A)                   |     | 105-110     |           |         |           |       |
| Screen                              |     | Φ12mm/0.47" |           |         |           |       |
| Dimension                           | H   | mm          | 2850      | 2980    | 2850      | 2980  |
|                                     |     | inch        | 112.2     | 117.3   | 112.2     | 117.3 |
|                                     | H1  | mm          | 2115      | 2170    | 2115      | 2170  |
|                                     |     | inch        | 83.3      | 85.1    | 83.3      | 85.1  |
|                                     | H2  | mm          | 620       |         |           |       |
|                                     |     | inch        | 24.4      |         |           |       |
|                                     | H3  | mm          | 3100      |         |           |       |
|                                     |     | inch        | 122       |         |           |       |
|                                     | H4  | mm          | 1625      |         |           |       |
|                                     |     | inch        | 64        |         |           |       |
|                                     | H5  | mm          | 700       |         |           |       |
|                                     |     | inch        | 27.6      |         |           |       |
|                                     | H6  | mm          | -         | 1260    | -         | 1260  |
|                                     |     | inch        | -         | 49.6    | -         | 49.6  |
|                                     | H7  | mm          | 1630      |         |           |       |
|                                     |     | inch        | 64.2      |         |           |       |
|                                     | H8  | mm          | 394       |         |           |       |
|                                     |     | inch        | 15.5      |         |           |       |
|                                     | H9  | mm          | 1077      |         |           |       |
|                                     |     | inch        | 42.4      |         |           |       |
|                                     | H10 | mm          | 1120      |         |           |       |
|                                     |     | inch        | 44.1      |         |           |       |
|                                     | H11 | mm          | 3480      |         |           |       |
|                                     |     | inch        | 137       |         |           |       |
|                                     | D   | mm          | 2000      |         |           |       |
|                                     |     | inch        | 78.7      |         |           |       |
|                                     | D1  | mm          | 1740      |         |           |       |
|                                     |     | inch        | 68.5      |         |           |       |
|                                     | D2  | mm          | 5470      |         |           |       |
|                                     |     | inch        | 215.4     |         |           |       |
|                                     | D3  | mm          | -         | 690     | -         | 690   |
|                                     |     | inch        | -         | 27.2    | -         | 27.2  |
|                                     | W1  | mm          | 2300      | 1740    | 2600      | 2040  |
|                                     |     | inch        |           | 68.5    |           | 80.3  |
|                                     | W2  | mm          | 2730      |         |           |       |
|                                     |     | inch        | 107.5     |         |           |       |
|                                     | W3  | mm          | 600       | 800     | 900       | 1100  |
|                                     |     | inch        | 23.6      | 31.5    | 35.4      | 43.3  |
|                                     | W4  | mm          | -         | 700     | -         | 700   |
|                                     |     | inch        | -         | 27.6    | -         | 27.6  |
|                                     | W5  | mm          | 215x215   |         |           |       |
|                                     |     | inch        | 8.5x8.5   |         |           |       |
| Weight                              | kg  | 3600        | 3280      | 3690    | 3820      |       |
|                                     | lb  | 7920        | 7,231     | 8118    | 8422      |       |

- Notes:
- 1) SKD11 is steel grade of Japanese JIS standard.
  - 2) Maximum throughput of granulator is subject to the diameter and material of screen mesh. For granulating frame and shell materials, maximum throughput will be reduced about half.
  - 3) Noise level varies with different materials and motor types.
  - 4) Noise level is tested under conditions of 1m around the machine and 1.6m from the ground.
  - 5) To avoid plastic form sticking to the blades, all materials should be crushed at normal temperature.
  - 6) Power supply : 3Φ, 230/400/460/575VAC, 50/60Hz.

# SG-43/50/70 Series

## ■ Outline Drawings(SG-70)



Optional DS+500kg material storage tank

Optional side Feed Pipe

Optional conveyor belt



Optional DS

Optional material storage tank

Optional height-increasing storage bin



## Specifications(SG-70)

| Model                                  |          |      | SG-7090     | SG-70120    |
|----------------------------------------|----------|------|-------------|-------------|
| Motor Power (kW, 50/60Hz)              |          |      | 75          | 90          |
| Rotating Speed (rpm, 50/60Hz)          |          |      | 525         | 525         |
| Conveying Blower (kW, 50/60Hz)         |          |      | 7.5/8.6     | 7.5/8.6     |
| Handspike Motor Power (kW, 50/60Hz)    |          |      | 1.5         | 1.5         |
| Material of Blades                     |          |      | SKD11       | SKD11       |
| Quantity of Fixed Blades (Optional)    |          |      | 2×2 (3×2)   | 2×2 (3×2)   |
| Quantity of Rotating Blades (Optional) |          |      | 3×2 (5×2)   | 3×2 (5×2)   |
| Cutting Chamber                        | mm       |      | 700 × 900   | 700 × 1200  |
|                                        | inch     |      | 27.6 × 35.4 | 27.6 × 47.2 |
| Max. Output                            | kg/hr    |      | 1300        | 1800        |
|                                        | lb/hr    |      | 2866        | 3968        |
| Noise Level dB(A)                      |          |      | 115         | 115         |
| Dimension                              | H (mm)   | mm   | 3950        | 3950        |
|                                        |          | inch | 155.5       | 155.5       |
|                                        | H1 (mm)  | mm   | 2815        | 2815        |
|                                        |          | inch | 110.8       | 110.8       |
|                                        | H2 (mm)  | mm   | 840         | 840         |
|                                        |          | inch | 33          | 33          |
|                                        | H3 (mm)  | mm   | 3100        | 3100        |
|                                        |          | inch | 122         | 122         |
|                                        | H4 (mm)  | mm   | 1625        | 1625        |
|                                        |          | inch | 64          | 64          |
|                                        | H5 (mm)  | mm   | 1370        | 1370        |
|                                        |          | inch | 53.9        | 53.9        |
|                                        | H6 (mm)  | mm   | 1770        | 1770        |
|                                        |          | inch | 69.7        | 69.7        |
|                                        | H7 (mm)  | mm   | 1419        | 1419        |
|                                        |          | inch | 55.9        | 55.9        |
|                                        | H8 (mm)  | mm   | 846         | 846         |
|                                        |          | inch | 33.3        | 33.3        |
|                                        | H9 (mm)  | mm   | 1077        | 1077        |
|                                        |          | inch | 42.4        | 42.4        |
|                                        | H10 (mm) | mm   | 1340        | 1340        |
|                                        |          | inch | 52.8        | 52.8        |
|                                        | H11 (mm) | mm   | 4450        | 4450        |
|                                        |          | inch | 175.2       | 175.2       |
|                                        | W1 (mm)  | mm   | 2000        | 2300        |
|                                        |          | inch | 78.7        | 90.6        |
|                                        | W2 (mm)  | mm   | 2730        | 2730        |
|                                        |          | inch | 107.5       | 107.5       |
|                                        | W3 (mm)  | mm   | 900         | 1200        |
|                                        |          | inch | 35.4        | 47.2        |
|                                        | W4 (mm)  | mm   | 1000        | 1000        |
|                                        |          | inch | 39.3        | 39.3        |
|                                        | W5 (mm)  | mm   | 350×350     | 350×350     |
|                                        |          | inch | 13.8×13.8   | 13.8×13.8   |
|                                        | D (mm)   | mm   | 2630        | 2630        |
|                                        |          | inch | 103.5       | 103.5       |
|                                        | D1 (mm)  | mm   | 2200        | 2200        |
|                                        |          | inch | 86.6        | 86.6        |
|                                        | D2 (mm)  | mm   | 6840        | 6840        |
|                                        |          | inch | 269.3       | 269.3       |
|                                        | D3 (mm)  | mm   | 600         | 600         |
|                                        |          | inch | 23.6        | 23.6        |
| Weight (kg)                            | kg       |      | 4500        | 5000        |
|                                        | lb       |      | 9,921       | 11,023      |

Notes: 1) SKD11 is steel grade of Japanese JIS standard.

2) Maximum output is subject to the diameter and material of screen mesh. For granulating frame and shell material, maximum output will be reduced about 50%.

3) Noise level varies with different materials and motor type.

4) Noise level is tested under conditions of 1m/39.9' around the machine and 1.6m/63' from the ground.

5) To avoid plastics from sticking to the blades, all materials should be crushed at normal temperature.

6) Power supply: 3Φ, 230/400/460/575VAC, 50/60Hz.