

## Sound-proof Central Granulator

SG-5090

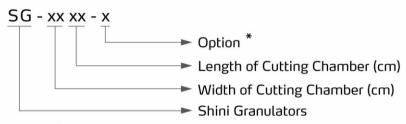


Refer carefully to this manual before operation.

## SG-50 Series

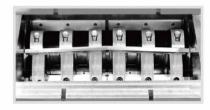


#### Coding Principle



Notes: \*

FAD=Full-receiver Alarm Device
R=For Stainless Steel Made Feed Port and Storage Tank
F=Fiber Reinforced Plastics CE=CE Conformity



SG-5090 Cutting Chamber



Presetting Knife Jig

#### Features

#### Standard configuration

- Rotating cutters adopt newly developed V-type cutting technology which can send the feeding
  material into the center of rotating cutters so to prevent the material from adhering onto the inner
  side of the cutting chamber while enhancing its wearability.
- The cutters are made of imported high quality steel featuring wearability, high rigidity, long service life and reusable after sharpening.
- Equipped with presetting knife jig, Rotating blades can be adjusted in the fixture outside the machine inside of machine instead of machine inside. It made blades adjustment must easier.
- Cutting chamber made of high rigidity material, after processing by CNC machine, has the features like high intensity, super wearability, no contamination, long service life and easy for maintenance and repairing.
- Optimized structure and hermetic double sound-proof layers keep noise level low.
- Sound-proof feeding box reduces the noise level in operation, also equips a safety material checking curtain which ensures no material sprinkling during granulating.
- V-type transmission belts help maintain a balanced operation mode, close contact, and also easy to disassemble and repair.
- Feeding box which is opened by electrical handspike with self-lock function ensures safe operation.
- Cooling water device at rear plate of cutting chamber can effectively cool down the cutting chamber and prevent the inside material from melting up.

#### Accessory option

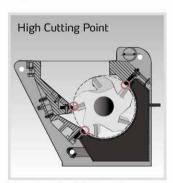
- Cyclone dust separator is available and the height of its floor stand can be adjusted to meet different requirements.
- For granulating thick or heavy material, extra fixed knives are available to increase the granulating capacity.
- For Fiber Reinforced material, SG-50 fiber reinforced model is optional. Adopt surface-hardening treatment on the material contacting components blade material is V-4E joint with S50C.
- Separate blower, conveyor and material side feed pipe are optional.

#### Application

SG-50 series granulators are applicable to granulate various kinds of plastic materials from injection molding, blow molding or extrusion molding. This series features compact design, easy operation and quick blade replacment. It is great in motor power, cutting chamber size, and output capacity. Gradually inclined cutting and integrated power design offers a better cutting effect and a lower noise level.

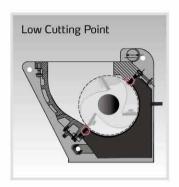
# SG-50 Series

#### Options



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.

Based on the high cutting point of standard layout, a row of fixed blade is added and makes it a 3 rows of fixed blades so that cutting performance is higher than that of 2 rows of fixed blades. But 3 rows have the same design parameter, features and applications as the 2 rows.



Low cutting point fixed blades model has big inlet space and initially low cutting point. Material can be easily grabbed and cut thus making this rotor/housing combination ideal for the granulation of hollow objects and frame material.



#### Separate Conveying Blower

The blower stands outside the machine. Without restriction of the inner space of the machine, customer can choose different kinds of blowers.



#### **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-50 series.

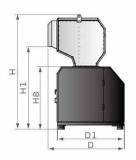


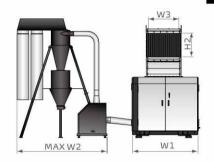
#### Material Side Feed Pipe

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.



#### Outline Drawings

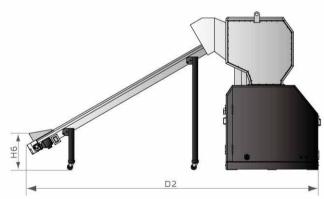








Control box



Conveyor belt is optional

#### Specifications

| Model                              |                         |      | SG-5080            | SG-50110          |
|------------------------------------|-------------------------|------|--------------------|-------------------|
| Motor Power (kW, 50/60Hz)          |                         |      | 37                 | 45                |
| Rotating Speed (rpm, 50/60Hz)      |                         |      | 525                | 525               |
| Conveying Blower (kW, 50/60Hz)     |                         |      | 7.5                | 7.5               |
| Handspike Motor Power (kw,50/60Hz) |                         |      | 0.25               | 0.25              |
| Material of Blades                 |                         |      | SKD11              | SKD11             |
| Quantity Fixed Blades(optional)    |                         |      |                    | A RECORD CONTRACT |
|                                    |                         |      | 2 (3)              | 2 (3)             |
| Quantity of Rotating Blades        |                         |      | 3 (5)              | 3 (5)             |
| Cutting Chamber                    |                         |      | 500 x 800          | 500 x 1100        |
| Max. Output                        |                         |      | 1100               | 1500              |
| Noise Level dB(A)                  |                         |      | 105~110            | 105~110           |
| Regrind Conveyor                   |                         |      | ~                  | ~                 |
| Cooling water device               |                         |      | V                  | ~                 |
| Screen (Φ12mm/0.47")               |                         |      | V                  | ~                 |
| Flywheel                           |                         |      | 0                  | 0                 |
| Full-receiver Alarm Device         |                         |      | 0                  | 0                 |
| Dust Separator (DS-50)             |                         |      | 0                  | 0                 |
|                                    | Н                       | mm   | 2980               | 2980              |
|                                    |                         | inch | 117.3              | 117.3             |
|                                    | H1 (mm)                 | mm   | 2150               | 2150              |
|                                    |                         | inch | 84.6               | 84.6              |
|                                    | H2 (mm)                 | mm   | 620                | 620               |
|                                    |                         | inch | 24.4               | 24.4              |
|                                    |                         | mm   | 690                | 690               |
|                                    | H7 (mm)                 | inch | 27.2               | 27.2              |
|                                    |                         | mm   | 1260               | 1260              |
|                                    | H8 (mm)                 | inch | 49.6               | 49.6              |
|                                    |                         | mm   | 1610<br>63.4       | 1610<br>63.4      |
| Dimension                          | D (mm)                  | inch | 2000               | 2000              |
|                                    |                         | inch | 78.7               | 78.7              |
|                                    |                         | mm   | 1740               | 1740              |
|                                    |                         | inch | 68.5               | 68.5              |
|                                    | D2 (mm)                 | mm   | 5470               | 5470              |
|                                    | D2 (mm)                 | inch | 215.4              | 215.4             |
|                                    | D3 (mm)                 | mm   | 690                | 690               |
|                                    | W1 (mm) W2 (mm) W3 (mm) | inch | 27.2               | 27.2              |
|                                    |                         | mm   | 1740               | 2040              |
|                                    |                         | inch | 68.5               | 80.3              |
|                                    |                         | mm   | 2390               | 2390              |
|                                    |                         | inch | 94.1               | 94.1              |
|                                    |                         | mm   | 800                | 1100              |
|                                    | W4 (mm)                 | inch | 31.5               | 43.3              |
|                                    |                         | inch | <b>700</b><br>27.6 | 700<br>27.6       |
|                                    | Weight                  | kg   | 3280               | 3820              |
|                                    |                         | ib   | 7,231              | 8422              |

Notes: 1) "  $\sqrt{ }$ " stands for standard, "  $\circ$  " stands for optional.

- Modified into stainless steel made feed hopper cover plate and storage tank. Add "R" at model behind.
- 3) SKD11 is steel grade of Japanese JIS standard.
- 4) According to different shapes of materials, the two-row or three-row fixed blade can collocate with three-row or five-row rotate blade so that these blade combinations can adapt to the shape requirements of materials.
- 5) When granulating fibers reinforced plastics or materials alike (e.g. CPVC), it is suitable to select granulators with special quenching process in for cutting chamber and blades, and also add "F" at end of the model code.
- Maximum throughput of granulator is subject to the diameter and matreial of screen mesh. For granulating frame and shell materials, maximum throughout will be reduced about half.
- 7) Noise level varies with different materials and motor types.
- Noise level is tested under conditions of 1m around the machine and 1.6m from the ground.
- To avoid plastic form sticking to the blades, all materials should be crushed at normal temperature.
- 10) Standard configuration is two rows of fixed blades with high cutting point model and low cutting point model. Upon no request of users, low cutting point model will be provided.
- 11) Power supply: 3Φ, 230/400/460/575VAC, 50/60Hz.

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#### Factories:

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