

# Sound-proof Central Granulator

SG-4390



Refer carefully to this manual before operation.



## 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.



**Cutting Chamber** 



Two Fixed plus Three Rotating Blades(SG-43)



Two Fixed plus Three Rotating Blades(SG-50/70)

#### • 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.





#### 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

#### 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.



#### • 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.

# 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. (Except SG-70 series) Add "FHM" at the end of the model code.

### **Special Screens**



 $\Phi 8$ ,  $\Phi 10$ ,  $\Phi 17$ ,  $\Phi 25$ (mm) are optional for SG-43;  $\Phi 8$ ,  $\Phi 10$ ,  $\Phi 14$ ,  $\Phi 17$ ,  $\Phi 25$ (mm)are optional for SG-50;  $\Phi 10$ ,  $\Phi 14$ , (mm) are optional for SG-70. Add "SS + screen diameter" at the end of the model code, e.g.:  $\Phi 8$ mm , add "SS08".



## Dust-separating system(SG-43)



## Dust-separating system+storage tank(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. (only suitable for SG-43)
- Higher-power motor is optional, add "H" at the end of the model code.(only suitable for SG-43)







Collocated with the power increased feeding blower







Specifications(SG-43)

110	del		SG-4360(H)	SG-4390(H)
Mo	tor Power (kW,	50/60Hz)	30/34 (37/41.5)	37/41.5 (45/51)
Cor	veying Blower	(kW, 50/60Hz)	2.2/2.55	2.2
Rot	ating Speed (rp	m, 50/60Hz)	525/630	525/630
Quantity of Fixed Blades			2 x 1	2 x 2
Qua	antity of Rotating	Blades(Optional)	3 x 1 (5 x 1)	3 x 2 (5 x 2)
Cut	ting Chamber	mm	430 x 600	430 x 900
CUL	ting chamber	inch	16.9 x 23.6	16.9 x 35.4
Ma	x. Output	kg/hr	800	1000
1•10	λ. Ουτροτ	lb/hr	1764	2205
Noi	ise Level dB(A)		105~110	105~110
Ma	terial of Blades		SKD11	SKD11
Scr	een		<b>Φ12 mm/</b> 0.47"	<b>Φ12 mm/</b> 0.47"
Hig	her-power blow	er (kW)	o <b>(</b> 7.5)	<mark>0</mark> (7.5)
	H (mm)	mm	2710~3155	2710~3155
		inch	106.7~124.2	106.7~124.2
		mm	1708	1708
	H1 (mm)	inch	67.2	67.2
		mm	430	430
	H2 (mm)	inch	16.9	16.9
	H3 (mm)	mm	2260	2260
		inch	89	89
	114 ()	mm	1240~1690	1240~1690
	H4 (mm)	inch	48.8~66.5	48.8~66.5
	H5 (mm)	mm	2277	2277
		inch	89.6	89.6
	H6 (mm)	mm	750	750
		inch	29.5	29.5
	H7 (mm) H8 (mm)	mm	1268	1268
		inch	50	50
		mm	636(970)	636(970)
ons		inch	25(38.2)	25(38.2)
Dimensions	W1 (mm)	mm	1450	1750
Ш		inch	57	69
Ö	W2 (mm) W3 (mm)	mm	1900~2310	1900~2310
		inch	74.8~90.9	74.8~90.9
		mm	600	900
		inch	23.6	35.4
	W4 (mm)	mm	166x 166	166 x 166
		inch	6.5 x 6.5	6.5 x 6.5
	W5 (mm)	mm		720
	VV5 (IIIII)	inch	28.3	28.3
		mm	552(630)	552(630)
	W6 (mm)	inch	21.7(24.8)	21.7(24.8)
		mm	1978	1978
	D (mm)	inch	77.9	77.9
		mm	1553	1553
	D1 (mm)	inch	61	61
	D2(m-)	mm	4300	4300
	D2 (mm)	inch	165.4	167.4
		mm	690	690
	D3 (mm)	inch	27.2	27.2
kg		2350 (2430)	2730 (2780)	
	Weight	ĸg	2330 (2430)	2/30 (2/00)

Notes: 1) " • " stands for optional.

" o " stands for optional.
 SKD11 is steel grade of Japanese JIS standard.
 Max. capacity of the machine is subject to diameter of screen mesh and composition of the material.
 Noise level varies with different materials and motor types.
 Noise level is tested under conditions of 1m around the machine and 1.6m form the ground.
 Power supply : 3Φ, 230/400/460/575VAC, 50/60Hz.

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Outline Drawings(SG-50)





Optional DS+300kg material storage tank



D2

Optional conveyor belt

Optional material storage tank

W4

• H

Control box

Optional side Feed Pipe



Optional DS



Optional height-increasing storage bin

Specifications(SG-50)

Mo	del		SG-5060	56-5080	56-5090	SG-50110			
Model Motor Power									
(kW, 50/60Hz)		37 45							
Rotating Speed (rpm, 50/60Hz)			525						
	ying Blowe 50/60Hz)	ſ	7.5						
	pike Motor 2/60Hz)	Power	0.25						
	rial of Bla	ades		SKD11					
	ty Fixed Bl	ades	2×1	2×2 (3×2)	2×2	2×2 (3×2)			
(option									
		ing 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						
Scree	in		Φ12mm/0.47"						
		mm	2850	2980	2850	2980			
	н	inch	112.2	117.3	112.2	117.3			
	Н1	mm	2115	2170	2115	2170			
		inch	83.3	85.1	83.3	85.1			
	H2	mm	620						
		inch	24.4						
	H3	mm	3100						
	-	inch mm	122 1625						
	H4	inch	64						
		mm	nm 700						
	H5	inch							
	H6	mm	-	1260	-	1260			
		inch	-	- 49.6 -	49.6				
	H7	mm	1630						
	H8	inch	64.2						
		mm inch	394						
	H9	mm	15.5						
E		inch	1077						
Dimension		mm	42.4 1120						
Шe	H10	inch		44					
ē	Н11	mm	3480						
	HII	inch	137						
	D	mm	2000 78.7						
		inch mm							
	D1	inch	1740 68.5						
		mm	5470						
	D2 D3	inch		21					
		mm		690	-	690			
		inch	-	27.2	-	27.2			
	Wl	mm	2300	1740	2600	2040			
		inch mm		68.5	730	80.3			
	W2	inch			2730 107.5				
		mm	600	800	900	1100			
	W3	inch	23.6	31.5	35.4	43.3			
	1010	mm	-	700	-	700			
	W4	inch	-	27.6	-	27.6			
	W5 -	mm	215x215						
		inch	8.5x8.5						
Weig	ght	kg	3600	3280	3690	3820			
		ib	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 throughout will be reduced about half.

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

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)

				SG-70120
	wer (kW, 50/60Hz)		75	90
	Speed (rpm, 50/60Hz)		525	525
	; Blower (kW, 50/60Hz)		7.5/8.6	7.5/8.6
	Motor Power (KW, 50/60Hz)		1.5	1.5
	of Blades		SKD11	SKD11
	f 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 Cl	hamber	mm	700 × 900	700 × 1200
Cutting Chamber – Max. Output –		inch	27.6 × 35.4	27.6 × 47.2
		kg/hr	1300	1800
		lb/hr	2866	3968
Noise Level dB(A)			115	115
		mm	3950	3950
	H (mm)	inch	155.5	155.5
	H1 (mm)	mm	2815	2815
		inch	110.8	110.8
		mm	840	840
	H2 (mm)	inch	33	33
		mm	3100	3100
	H3 (mm)	inch	122	122
	H4 (mm)	mm	1625	1625
		inch	64	64
		mm	1370	1370
	H5 (mm)	inch	53.9	53.9
	H6 (mm)	mm	1770	1770
	H6 (IIIII)	inch	69.7	69.7
		mm	1419	1419
	H7 (mm)	inch	55.9	55.9
	H8 (mm)	mm	846	846
5		inch	33.3	33.3
Dimension	H9 (mm)	mm	1077	1077
Iau		inch	42.4	42.4
Dİ	H10 (mm)	mm	1340	1340
		inch	52.8	52.8
		mm	4450	4450
	H11 (mm)	inch	175.2	175.2
		mm	2000	2300
	W1 (mm)	inch	78.7	90.6
		mm	2730	2730
	W2 (mm)	inch	107.5	107.5
		mm	900	1200
	W3 (mm)		35.4	47.2
		inch		
	W4 (mm)	inch	<u>    1000</u> 39.3	1000 39.3
	W5 (mm)	inch mm	350x350	39.3 350x350
				Construction and the second
		inch	13.8x13.8	13.8x13.8
	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
incn			23.6	23.6
Jeight (kg)		Kg	4500	5000

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.

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