

## Low-speed Granulator

SG-1628N

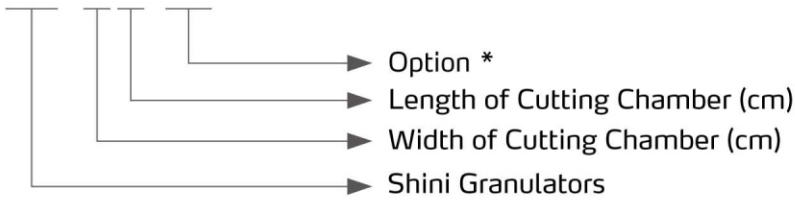


Refer carefully to this manual before operation.

# SG-16N/16D/20N Series

## ■ Coding Principle

SG - xx xx - xxx

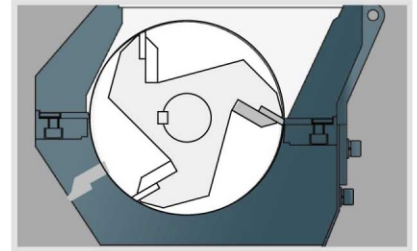


Note: \*

BR=Loading by Bolwer      VR=Loading by High Pressure Air

H=Higher Motor Power      DS=Dust Separator

F=Fiber reinforced plastics      CE =CE Conformity



SG-16N/16D/SG-20NC  
Structural Drawing of Staggered  
Blades

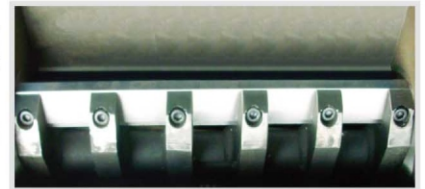
## ■ Features

### Standard configuration

- SG-16N/16D/SG-20NC series adopt new type staggered blades and unfixed blades which can keep a settled cutting clearance without adjustment after resharpening; SG-20N employs paddle blades and integration design to obtain better cutting performance.
- Low granulating speed and sharp angle design of rotating blades are helpful for smooth and continuous operation.
- SG-20N series is equipped with presetting knife jig, simple cutter installation adjusting technology makes the rotating blades be adjusted within clamps outside machine, no longer needs to be adjusted from inside of machine as before.
- Gear motor of SG-1628D series directly drives the blades to rotate for granulating, which saves regulation and maintenance time of belt driving and tension .
- The material collector is located outside the cutting chamber to avoid leakage.
- Optimal cutting angle makes resistance small and avoid blockage to improve cutting efficiency.
- Optimal design can effectively reduce vibration during operation of granulator.
- Low speed granulating ensures well-proportioned granules and low dust level .
- Low speed and sound-proof material hopper brings a quiet operation environment.
- Easy access to easy maintenance and cleaning.
- Small in size with castors for easy moving.
- High safety grade design to comply with European safety standard.
- With built-in magnet installed at the inlet of the feeding chamber, metal impurities in the materials can be avoided.



SG-16N/16D/SG-20NC  
Staggered Blades



SG-20N Paddle Blades



Presetting Knife Jig

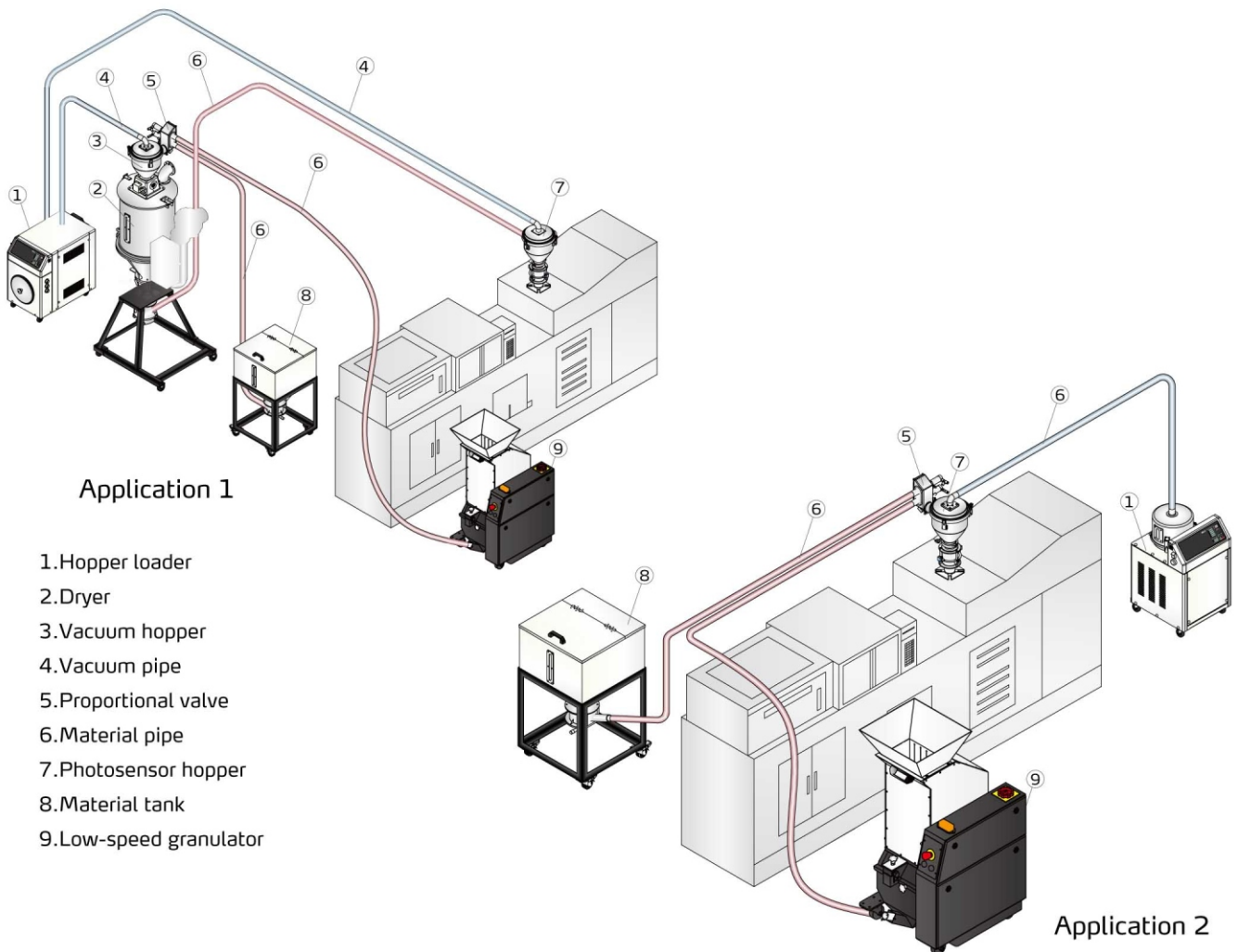


SG-1628D

### Accessory option

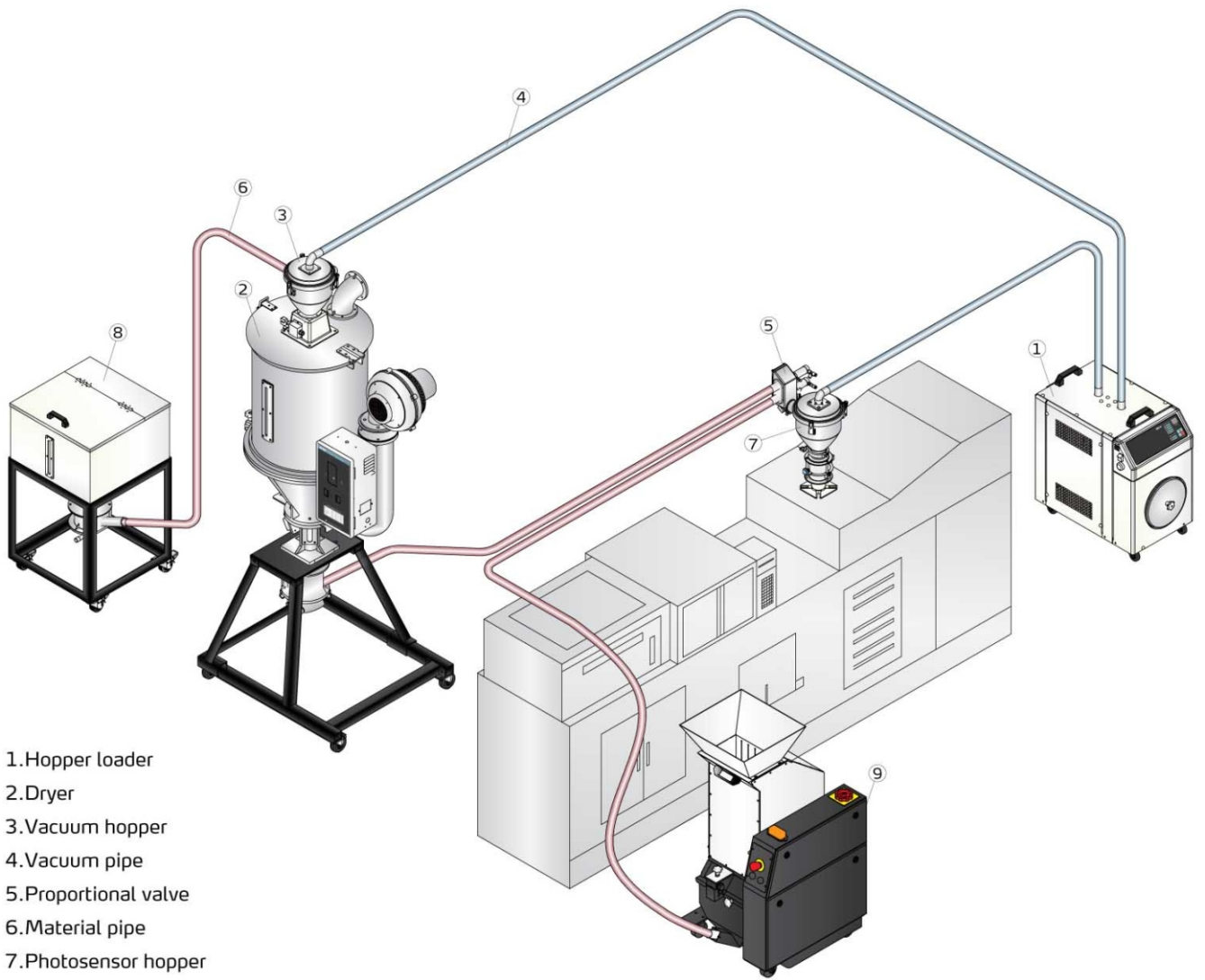
- 30-sec instant recycling system, regrinds conveying blower , cyclone dust separator, height-increasing storage tank (not for SG-16D) and full-receiver alarm device.
- Straight hoppers(only suitable for SG-20Nseries), double-layer screen, special screens.
- For granulating fibre-added material, it increases fibre-added granulator model for choose. Adopt surface-hardening treatment on the material contacting components. SG-20N fibre-added model chooses V-4E blade material.
- Coiled spring conveyor can make it more convenient for users to collect the regrinds from the discharge port automatically by putting a container under the discharge port without detaching the collecting box from the granulator.

## ■ Application



- 1.Hopper loader
- 2.Dryer
- 3.Vacuum hopper
- 4.Vacuum pipe
- 5.Proportional valve
- 6.Material pipe
- 7.Photosensor hopper
- 8.Material tank
- 9.Low-speed granulator

# SG-16N/16D/20N Series



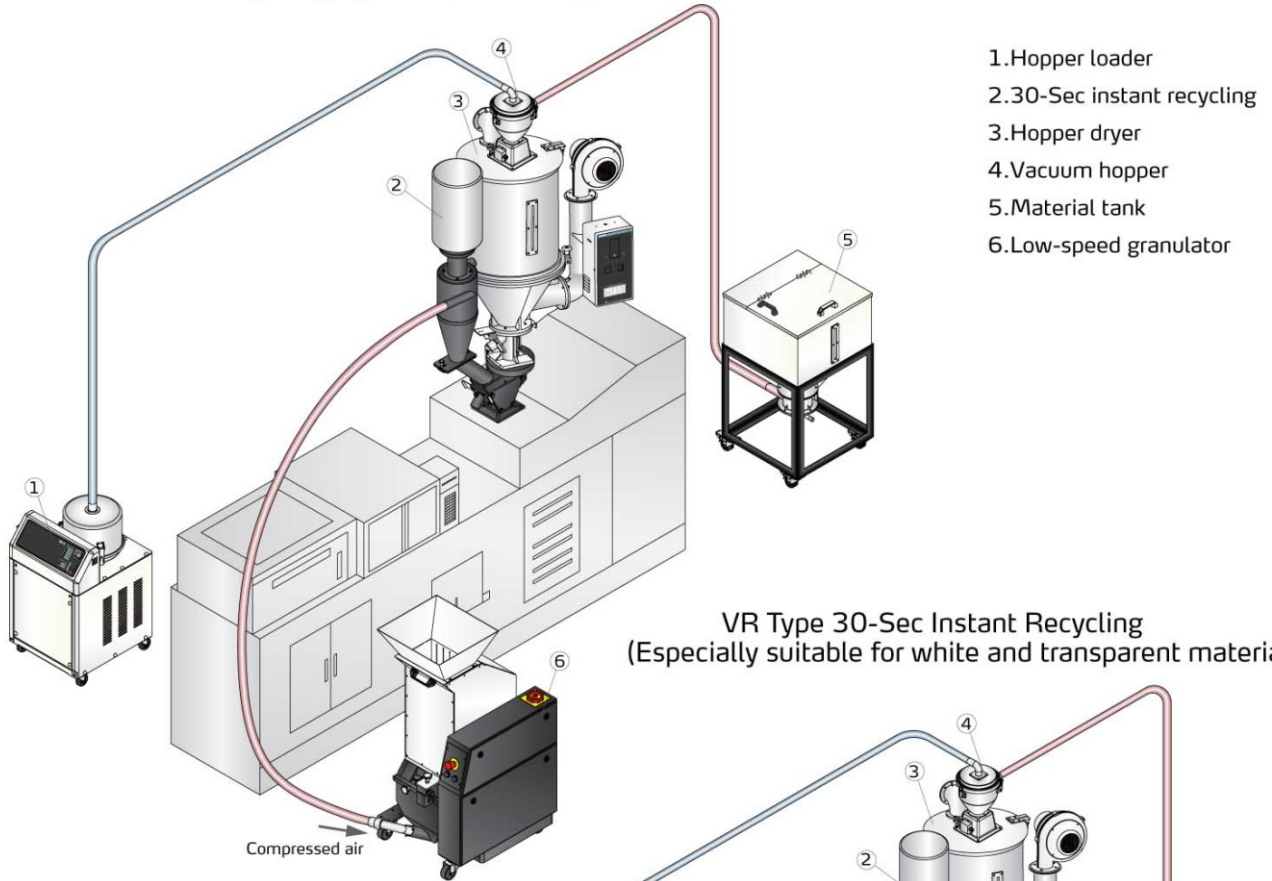
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Application 3

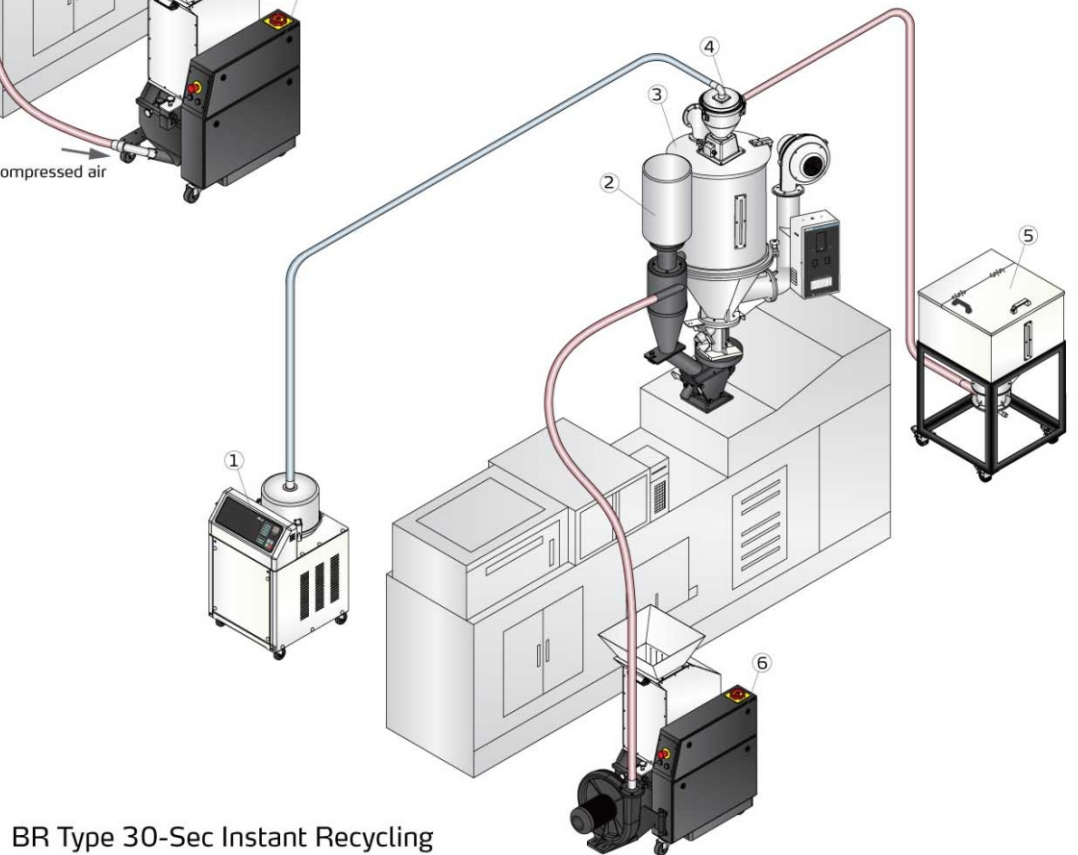


■ Options

30-Sec Instant Recycling System (Patented product)



VR Type 30-Sec Instant Recycling  
(Especially suitable for white and transparent material)



BR Type 30-Sec Instant Recycling

# SG-16N/16D/20N Series

## Full-receiver Alarm Device

Full-receive alarm device can help to realize 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 its sensor, thus stop the granulator and warn the user by sounding an alarm. Applicable to SG-16N/16D/20N series.



Level Motor

## Regrind Conveying Via Blower & Cyclone (BC Type)

This device utilizes loading blower to convey regrind into the cyclone dust collector to separate the regrind from the air and then the regrind will fall into storage hopper or cloth bag. Applicable to SG-16N/16D/20N series.

## Dust Separators (DS Type)

Dust Separator (DS type) can separate the dust in the regrind for immediate recycle use. The dust will be kept in filter bag, thus working environment will be maintained clean. This device ensures full use of regrind to avoid material wasting and enhance the economy returns. Applicable to SG-16N/16D/20N series.



### Straight Hopper



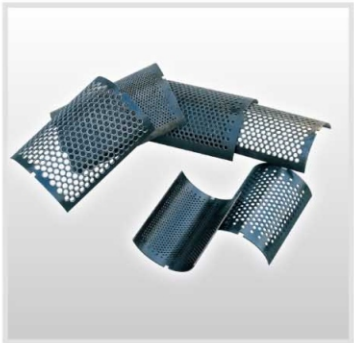
Straight hopper has been designed to meet the demand of grinding pipes and runners. Applicable to SG-20N blades series.

### Proportional Valve



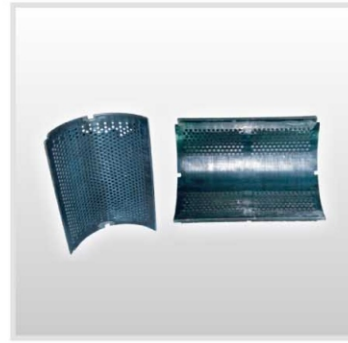
Proportional valves mix regrind with new materials in a proper proportion, and then send them back to the IMM. It features easy installation and excellent accuracy. For details, please refer to the brochure of SPV-U.

### Special Screen



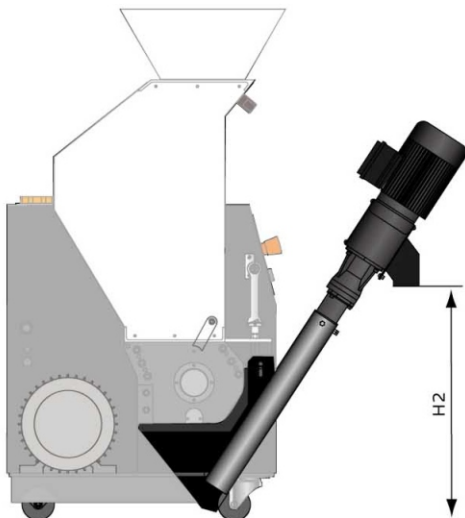
Special screen mesh sizes includes  $\Phi 4$ ,  $\Phi 6$ ,  $\Phi 8$ ,  $\Phi 10$ ,  $\Phi 12$ (mm), which are applicable to SG-16N/16D series; and  $\Phi 4$ ,  $\Phi 5$ ,  $\Phi 7$ ,  $\Phi 8$ ,  $\Phi 10$ ,  $\Phi 12$  (mm), which are applicable to SG-20N series. All can be selected to meet customer's requirement.

### Double-layer Screen



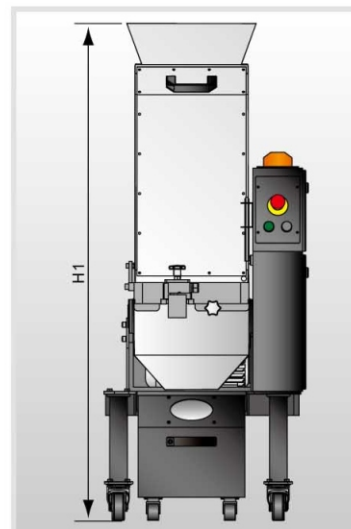
Double-layer screen is designed for customers with long and thin materials.

### Optionally Equipped with Coiled Spring Conveyor



Applicable to SG-16N/20N series.

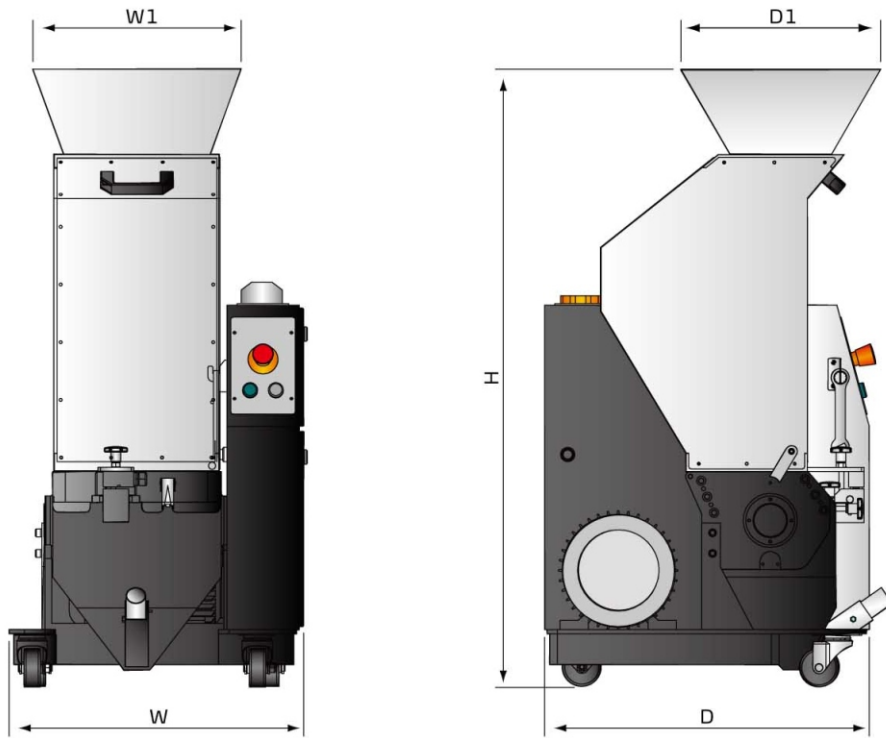
### Height-increasing storage bin



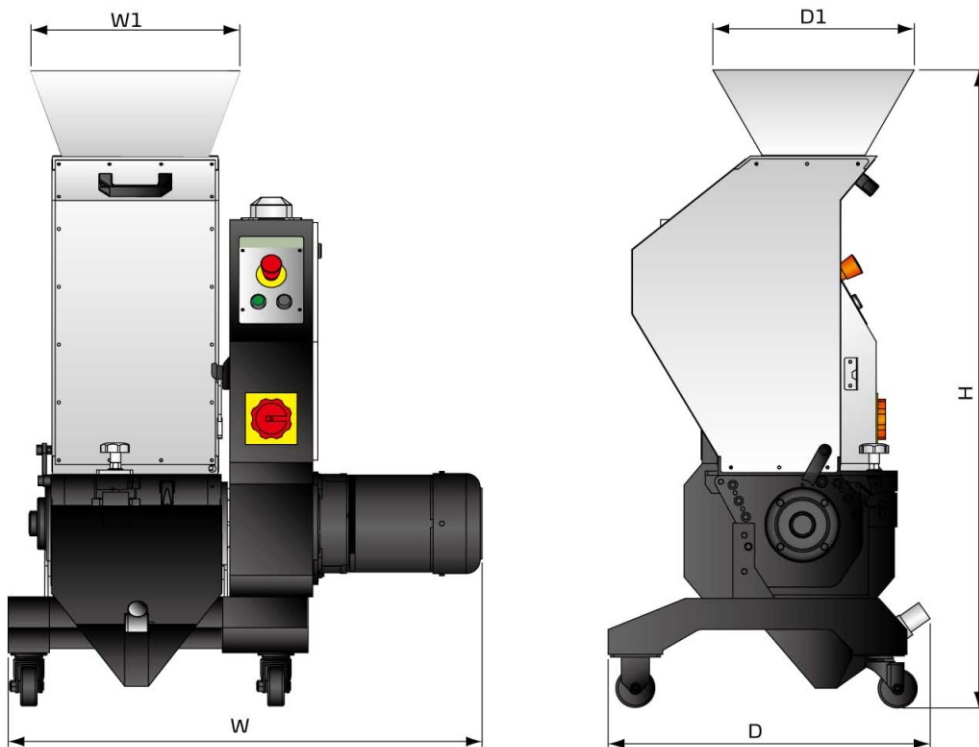
Height-increasing storage tank helps to collect and store regrind. Applicable to SG-16N/20N series.

# SG-16N/16D/20N Series

## ■ Outline Drawings



SG-16N/20N



SG-16D



## Specifications

Model	SG-	1621N	1628N	1635N(H)	2028N(H)	2028NC(H)	2042N(H)	2042NC(H)	1628D
Motor Power (kW, 50/60Hz)		1.5 / 1.75	2.2 / 2.55	2.2 / 2.55 (3.0 / 3.45)	2.2/2.55 (3.0/3.45)	2.2/2.55 (3.0/3.45)	3.0/3.45 (4.0/4.6)	3.0/3.45 (4.0/4.6)	2.2
Rotating Speed (rpm, 50/60Hz)		230/278	235 /285	235/285 (240/290)	290/350	290/350	290/350	290/350	220
Material of Blades		SKD11	SKD11	SKD11	SKD11	SKD11	SKD11	SKD11	SKD11
Type of Blades		Staggered	Staggered	Staggered	Paddle Blades	Staggered	Paddle Blades	Staggered	Staggered
Quantity of Fixed Blades		2 × 1	2 × 1	2 × 2	2	2	2	2	2 × 1
Quantity of Rotating Blades		9	12	15	3	12	3	18	12
Presetting Knife Jig		-	-	-	✓	-	✓	-	-
Cutting Chamber (mm)		160 × 210	160 × 280	160 × 350	200 × 280	200 × 280	200 × 420	200 × 420	160 × 280
Max. Output Capacity (kg/hr, 50/60Hz)		35	50	60 (80)	80	80	135	135	50
Noise Level dB(A)		85 - 90	85 - 90	85 - 90	85 - 90	85 - 90	85 - 90	85 - 90	85 - 90
Dia. of Screen Mesh (mm)		✓(φ5)	✓(φ5)	✓(φ5)	✓(φ6)	✓(φ6)	✓(φ6)	✓(φ6)	✓(φ5)
30-Sec Instant Recycling		○	○	○	○	○	○	○	○
Regrind Conveyor (BC Type)		○	○	○	○	○	○	○	○
Dust Separator (with Instant Recycling)		○	○	○	○	○	○	○	○
Level Detector		○	○	○	○	○	○	○	○
Straight Feed Hopper		-	-	-	○	-	○	-	-
Proportional Valve		○	○	○	○	○	○	○	○
Special Screens (mm)		○	○	○	○	○	○	○	○
Height-increasing Storage Bin		○	○	○	○	○	○	○	-
Double-layer Screen		○	○	○	○	○	○	○	○
Coiled Spring Conveyor (EA)		○	○	○	○	○	○	○	-
Dimensions									
H (mm)		1200	1200	1200	1270	1270	1270	1270	1180
H1 (mm)		1400	1400	1400	1450	1450	1450	1450	-
H2 (mm)		550	550	550	550	550	550	550	-
W (mm)		505	575	645	575	575	715	715	920
W1(mm)		330	400	470	405	405	545	545	365
D (mm)		630	630	630	695	695	695	695	620
D1 (mm)		385	385	385	435	435	435	435	330
Weight (kg)		175	195/185	210/225	265/280	280/295	300/315	320/335	180

Notes: 1) "✓" stands for standard, "○" stands for options.

2) "H" stands for higher motor power. "C" stands for staggered blades.

3) For stainless steel made feed port and storage box, add "R" at the end of the model code.

4) Max. capacity of the machine is subject to diameter of screen hole and composition of the material. The listed maximum output is tested continually with PET preforms.

5) Noise level varies with materials and motor types.

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

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

We reserve the right to change specifications without prior notice.

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