



The new C's Series
superior granulators
for in-line recycling



NEW!

Reduced noise due to specially
designed cutting chamber which
inhibits structure born noise.

compact
modular
flexible
reliable
extremely easy to use
high performance

Wanner C 13.20 s
with sprue picker hopper
for robot feeding

C 13.20 s
Standard



C 17.26 s
High stand



Product profile

The new **C's Series** ("compact & silent") Wanner granulators offer practical solutions for almost all problems presented by in-line recycling of sprues and defective parts in the production process.

The **C's Series** is based on three model sizes:

- the **C 13.20 s** with a cutting chamber opening of 130 mm x 200 mm
- the **C 17.26 s** with a cutting chamber opening of 170 mm x 260 mm
- and the **C 17.31 s** with a cutting chamber opening of 170 mm x 310 mm

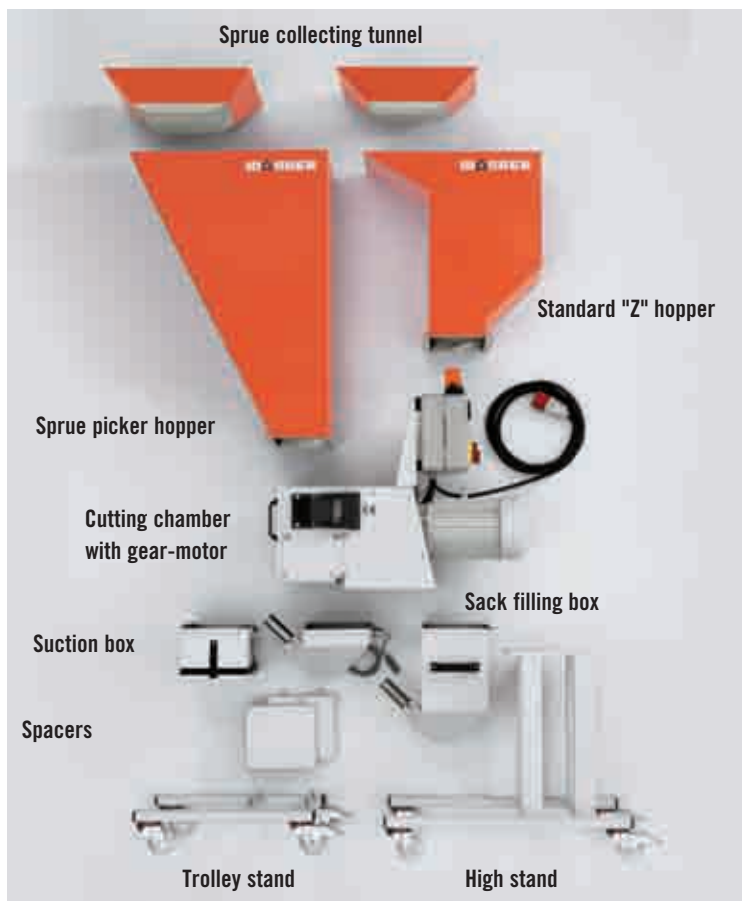
Because of their modular design and construction, the **C's Series** granulators can be easily adapted to meet many varying applications and operational needs. Depending on the manner in which the sprues are fed in, disposal of the reground material and the injection moulding machine in use, the **C's Series** from Wanner with its many standard components offers optimum solutions which can be adapted to your particular operational procedures.

The optimized cutting geometry and the low cutting speed guarantee high quality granulate with little dust. Noise-damped in-feed hoppers and the new cutting chamber design, which reduces structure born noise and spurious oscillation, help keep the sound level to a minimum.

The robust and compact gearbox construction ensures a long operational life whilst allowing extremely compact dimensions.

For colour or material changes the cutting chamber is very quick and easy to open, saving time and money.

The **C's Series** is hard to beat for its outstanding performance / price ratio.



The advantages of the C's Series

- ▶ modular building block system enables simple adaptation to any particular application
- ▶ only small footprint required due to compact design
- ▶ robust cast iron housing and steel rolls on casters
- ▶ robust motor and gear unit for long life
- ▶ significantly reduced noise level due to bevel cut action and reduction of structure born noise through optimized cutting chamber design.
- ▶ simplicity of use and ease of cleaning saves downtime and money
- ▶ improved 'pull-in' action of the rotor for bulky parts and awkward sprues.
- ▶ hardened components included within the cutting chamber reducing wear from abrasive materials
- ▶ high quality regrind with low dust content due to optimized rotor design. The rotating side disk in the cutting chamber side wall reduces friction and therefore prevents warming up and ultimately degradation of the regrind.
- ▶ knives easily resharpened without special equipment
- ▶ intrinsically safe and sound-damped in-feed hoppers
- ▶ variety of controls, from simple protection control to intelligent system controller with volt free contacts and alarm system.
- ▶ excellent price-to-performance ratio

The picture shows the modular nature of the C's Series granulators. Additional components such as a cyclone separator, auger feeding, blast feeding hoppers or hoppers specially adapted to injection moulding machines complete the product line.

C's Series – Flexible and Universal

Are your customers demanding short delivery times, just-in-time delivery, small or variable order lots, last-minute changes, etc.?

If so, then you need to be flexible to the wishes of your customers, therefore your production department requires machines which meet these demands and can be set up for varying requirements simply and quickly.

For in-line granulators this means that cleaning needs to be quick and simple when changing materials or colours, in order to keep set-up times short.

The C's Series granulators set the standards:

Extremely simple operation

- 1 To open the granulator, take out the suction / sack filling box from the front.
- 2 Open the quick release catch. The upper part of the cutting chamber and in-feed hopper is supported on a heavy duty hinge and can be swung completely aside.
- 3 Allows free access to the cutting chamber. The rotor and can be inspected freely and the screen can easily be removed. Undercuts and openings in which material could collect are reduced to a minimum allowing the granulator to be fully cleaned in seconds.



Quality pays over the long term

Whether you are processing thermoplastic rubber or fiberglass-reinforced polyamides, the C's Series is equally well suited.

All of the individual parts of a Wanner granulator are manufactured from high quality materials, which guarantee long life for the machine even under difficult conditions. This applies especially to the cutting chamber and cutting mechanism. Hardened inserts in the side of the cutting chamber are included as standard. This enables the granulator to give years of operation with little wear, even when processing fiberglass reinforced materials.

The knives can be sharpened simply, quickly, and without special equipment on any flatbed grinding machine. In addition, wear parts such as screens and knives are low in cost.

Changing the screens and knives is extremely simple and can be accomplished in a very short time. This reduces the costs for service and maintenance to a minimum.



Tough knives and wear-resistant inserts guarantee long life.

Special solutions as standard

The modular concept of the **C's Series** from Wanner simplifies the adaptation of the granulator to meet the needs of injection moulding machine equipped with a sprue picker device.

The **C's Series** offers a number of integrated granulator solutions for the various injection moulding machines with "built-in" sprue picker devices. These systems are designed for use with a specific injection moulding machine ensuring maximum process safety.

Granulators for the Arburg Allrounder S and Demag ERGOtech pro injection moulding machines are shown below. Also available are proven solutions for injection moulding machines from Engel, Dr. Boy and Krauss-Maffei when equipped with integrated sprue pickers or robots.

For sprues which fall inside the injection moulding machine we offer a solution which feeds the sprues by means of pulses of compressed air.

Customer specific solutions are possible at any time.

Wanner C13.20 s with special in-feed hopper for Arburg Allrounder S injection moulding machines with integrated sprue pickers. The granulator is designed so that it can be placed directly adjacent to the injection moulding machine. ▶



◀ **Wanner C 17.26 s with special in-feed hopper for Demag ERGOtech pro (Viva) IMM with integrated sprue picker (80 to machine shown).**

◀◀ **Wanner C 17.26 s adapted to the slide chute of an Engel injection moulding machine with integrated sprue picker. The granulator is also equipped with spacers to extend the height, to allow the use of a large suction box.**

The Wanner C13.20 s with horizontal hopper is ideal when the parts are removed and the sprue falls under gravity, or for three-plate dies. By means of pressurized air pulses with adjustable duration and cycle speed the sprues are "shot" to the cutting chamber, where they are granulated. ▶



The C's Series for high volume and awkward parts

This has been a critical problem for a long time: for bulky sprues or large volume hollow pieces which are produced in relatively small quantities, large granulators are typically required to ensure, that the pieces fall in and are captured, even though the amount of material needing to be granulated may only be a few kilograms per hour. The **C's Series** vertical forced input offers the ideal solution.

The **C's Series** with forced input, by means of an auger, offers the ideal solution to difficult to handle parts. The granulator with vertical auger is suitable for blow moulding applications, where other than the tops and tails, large hollow parts with a volume up to 3 litres require granulation from time to time. Also for bulky, stiff sprues the forced input utilising the auger increases the process stability by avoiding the jamming and seizing of sprues.

For three plate moulds and large sprues, the force feeding horizontal auger offers the best solution for processing the sprues directly under the mould area. The massive auger is capable of breaking large sprues and force feeding them into the cutting chamber for granulation. For safety reasons the granulator is electrically interlocked with the injection moulding machine, thus allowing operation of the granulator only when the machine safety guarding is closed.

Auger-feed granulator with cutaway hopper and a selection of parts.



Integrated handling of granulated materials

If some or all of the granulate produced by the granulator cannot be added to the current injection process, due to limits of allowable regrind percentages, then there are various options which can be implemented.

Wanner C's Series – with self-controlled suction disposal

As a solution for disposing of surplus regrind material, Wanner offers a system which includes an inexpensive industrial vacuum conveyor. The system uses a simple vacuum to evacuate the ground material directly into a 120 litre plastic barrel.

The vacuum conveyor is connected directly to the control box of the granulator and is activated according to the fill level or an adjustable timer. The controls for the system are completely integrated into the control box of the granulator. Alternatively any proprietary hopper loader can be used instead.



◀ **Wanner C13.20 s with sprue picker hopper, vacuum conveyor with material barrel and suction box with two discharge connectors.**



C13.20 s with cyclone. The unit is controlled by the granulator control system using compressed air for material transport. ▶

The Wanner C's Series with cyclone separator

The transport time, or the cycle time for the granulate disposal system can be set on the granulator controller either to the fill level in the suction box or by means of a timer. The actual process of conveying the material uses compressed air operating in a venturi principle.

A sack, box or barrel can be placed under the adjustable height cyclone in order to collect the granulate.

The Wanner granulator concept:

reliable, intelligent and flexible

Even when using in line granulators, the demand on the machine controllers can be quite complex.

Wanner offers a complete range of solutions, from simple protective controllers to intelligent programmable control systems.

The options described below have proven themselves throughout many industries and have contributed to lower downtimes, fewer malfunctions and greater safety for operator and process.

High quality components for your safety and versatile control options for increased productivity.

- ▶ The safety limit switches are electrically redundant and are monitored by a special safety monitoring control device meeting safety category 3, therefore meeting the high standards defined in EN 12012.
- ▶* Monitoring the incoming phase sequence prevents the motor and cutting rotor from turning in the wrong direction.
- ▶* Fill level monitoring avoids overfilling the suction box of the granulator. Various options allow for visual/audible warning lamps and signal outputs to be activated when the fill level is reached.
- ▶* Material feeding by conveyor belt or auger feeder as well as various devices for the conveying of the regrind can be controlled by optional selectable timers, various input signals, fill level control functions or electrical power drawn by the granulators motor.

* (Options against surcharge)



With their variety of model sizes, their modular construction and their great variety of control variants, Wanner granulators are solving thousands of problems in sprue recycling.

Pictured: C 13.20 s, C 17.26 s, and C 17.31 s, all with sprue picker hopper.

Technical data for the C's Series

General data: C 13.20 s

Cutting chamber opening	130 x 200 mm
Rotor diameter	130 mm
Rotor knives	9
Stator knives	2
Motor power	2.2 kW
Power supply	400 volts / 50 Hz
Screen size	3 - 8 mm
Weight (standard)	135 kg
Suction box volume	approx. 4 l
Standard configuration suitable for fiberglass material	
Controller	protective controller with overload release, electrically redundant safety limit switches and safety monitoring device according to EN 12012. 5 m connecting cable.

General data: C 17.26 s

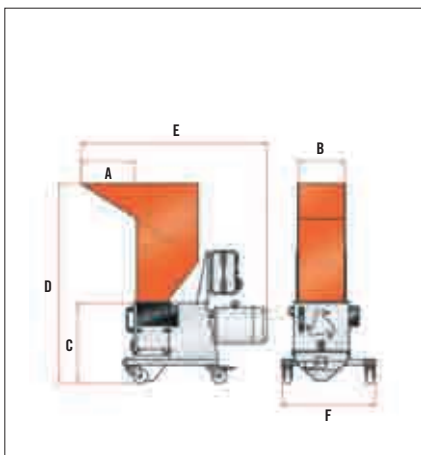
Cutting chamber opening	170 x 260 mm
Rotor diameter	170 mm
Rotor knives	12
Stator knives	2
Motor power	3 kW
Power supply	400 volts / 50 Hz
Screen size	3 - 8 mm
Weight (standard)	155 kg
Suction box volume	approx. 6 l
Standard configuration suitable for fiberglass material	
Controller	protective controller with overload release, 5 m connecting cord, direction of rotating monitor

General data: C 17.31 s

Cutting chamber opening	170 x 310 mm
Rotor diameter	220 mm
Rotor knives	12
Stator knives	2
Motor power	4 kW
Power supply	400 volts / 50 Hz
Screen size	3 - 8 mm
Weight (standard)	165 kg
Suction box volume	approx. 7 l
Standard configuration suitable for fiberglass material	
Controller	protective controller with overload release, 5 m connecting cord, direction of rotating monitor

Motors for other voltages are available upon request. Control systems according to the customer's wishes are available for all models.

Standard



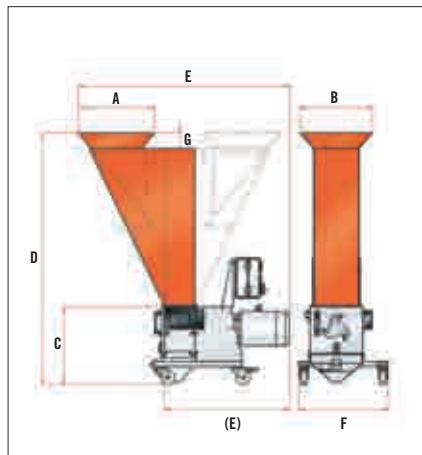
Measures

	13.20	17.26	17.31
A	230	290	290
B	200	255	310
C	400	440	485
D	890	1090	1170
E	750	1020	980
F	410	510	510
G	-	-	-
H	-	-	-

Application profile:

Because of its low height especially well suited for loading by conveyor belt with separating device or for feeding by hand from a sitting position. Evacuation should be by hopper loader or central vacuum material handling system – manual emptying is also possible.

Sprue picker hopper



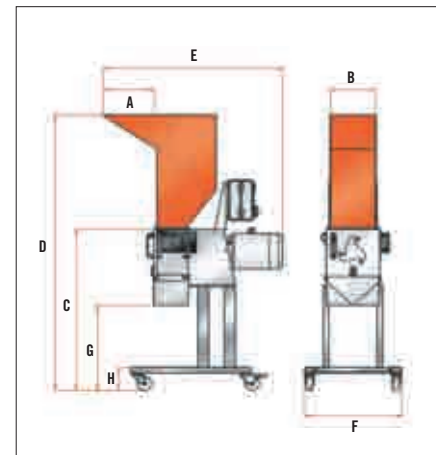
Measures

	13.20	17.26	17.31
A	420	435	435
B	380	410	445
C	400	440	485
D	1390	1430	1475
E (E)	1035 (660)	1210 (770)	1210 (770)
F	410	510	510
G	90	90	90
H	-	-	-

Application profile:

Especially well suited for loading by sprue picker or robot. Because of the long straight input path of the hopper even very long sprues do not present a problem. Evacuation should be by hopper loader or central vacuum material handling system. (Hopper can be rotated through 180°.)

High stand



Measures

	13.20	17.26	17.31
A	230	290	290
B	200	255	310
C	890	910	950
D	1380	1560	1640
E	755	1020	980
F	550	550	650
G	495	485	485
H	130	130	130

Application profile:

Especially well suited when the recycled material is not disposed of automatically but is collected in sacks or containers. Also suitable for loading by sprue picker or robot. The sack filling box can be replaced at any time with a suction box for automatic granulate removal.

Profile of expertise

All of our plastic granulators are designed and manufactured using experience and expertise gained from many years of activity in the field of plastic recycling.

This is evident in the many advanced detailed solutions which will make daily work easier for you and your employees and thus will ensure high productivity.

The source of our expertise is our effort to see everything through the eyes of our customers and to find innovative and simple solutions for special problems – from practical experience to practical use.

We have developed repeatedly proven solutions for your problems in the processing or disposal of sprues or defective parts.

Ask us your questions – our staff are at your service at any time for open advice without obligation.



B baby

Wanner B 06.08



C compact

Wanner C 13.20 s



D dynamic

Wanner D 25.25



E energy

Wanner E 45.50

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