

H Series



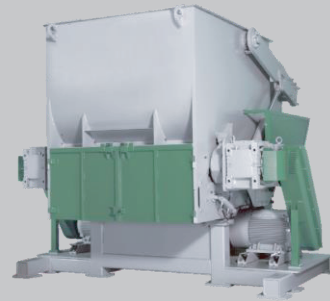
E Series



L Series



X Series



W Series



C Series





The Right Machine for
Today's Recycling Requirements

About Us

Virtus is focused on the development and production of size reduction machinery for the waste to energy, biomass, and general recycling industries. Our core strength lies as a machinery and component producer. As such, we are an ideal partner for systems integrators and OEM projects.

We remain committed to the improvement and development of size reduction machinery. The Virtus product line consists of two main machine types; granulators and shredders.

Our granulator product lines cover a full range of sizes and applications. We start from the slow speed, beside the press models of the **A Series**, and the compact, soundproofed granulators of the **C Series**. The large **H Series Heavy Duty Granulators** are also used in these applications, as well as high throughput operations and demanding post-consumer recycling.

Our second machine category is the **Virtus Single Shaft Shredders**. Again, we are able to cover a wide range of applications. We offer the small **L Series** for lumps, the **G** and **V Series** for general applications, and the **X Series** to achieve high throughputs. Our shredder offerings also include the **W Series** for wood and regenerative fuels.

The most recent addition to the Virtus family of products is the **Tire Shredding System**. These machines are designed to process used car and truck tires. We offer complete systems to produce separated crumb or powder.

In our continuing efforts to remain on the cutting edge of size reduction technology, Virtus offers comprehensive viability testing of your materials. Our complete in-house test lab and size reduction facility allows you and Virtus' engineers to perform feasibility studies on trial runs of your materials under your production conditions. All data along with technical analysis remains confidential between Virtus and the customer. For additional information or to schedule a test run, call 1(847) 291-1800.



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A Series – slow speed granulators Minimizes dust. Reduces noise.

General Description

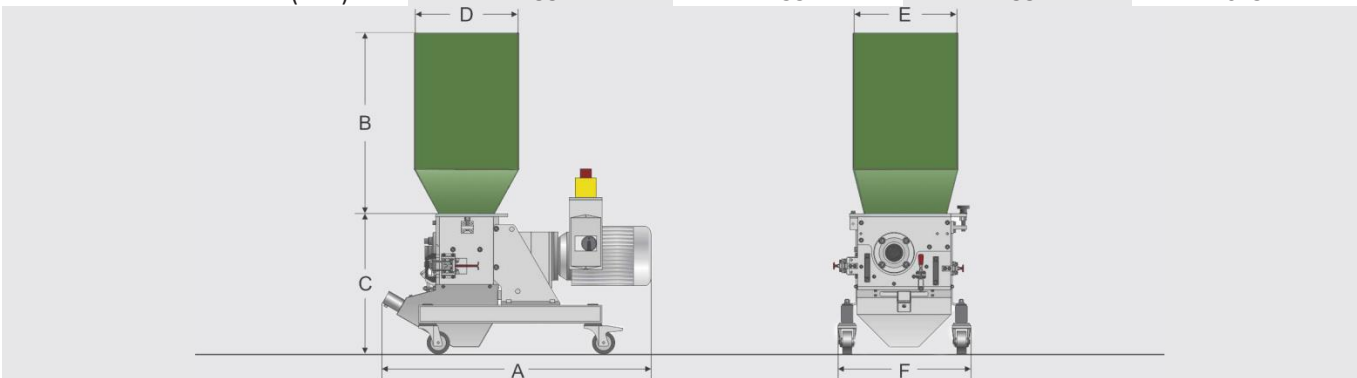
The **A series** slow speed granulators feature a staggered rotor directly driven by a geared motor. The low rotor speed reduces the noise level of the machine and creates less dust while grinding. The special design knives of the **A series** can be sharpened easily and do not need adjustment afterwards. The material is fed via a sound-absorbing feed hopper that can be tailored to fit various applications and feeding methods. Depending on the requirements, the machines can be fitted with a wide variety of hoppers. They are mounted on either low or high level base frames, and have matching suction bins or bag filling adapters. Quick snap fasteners and hand screws make access to the machine for cleaning and maintenance fast and easy.

Technical Machine Advantages

- Direct driven staggered rotor
- Special knife design makes adjustment unnecessary
- Easy access for maintenance and cleaning
- Slow rotor speed creates less noise and dust
- Easily customized to suit different applications

We reserve the right to make technical changes and measurement adjustments ver. 1.0 - 01/2018

A Series		A18-12	A18-18	A18-30	A18-43
Rotor diameter	(mm)	180	180	180	180
Rotor width	(mm)	120	180	300	430
Rotor speed	(rpm)	150	150	150	150
Drive capacity	(kW)	2.2	3	4	4
Rotor knives	(pcs)	12	18	30	45
Stator knives	(rows)	2	2	2	2
Screen size	(mm)	>5	>5	>5	>5
Dimensions					
A	(mm)	835	890	1095	1240
B	(mm)	610	610	610	610
C	(mm)	460	460	460	550
D	(mm)	345	345	345	430
E	(mm)	345	345	345	290
F	(mm)	455	455	455	615





A Series – slow speed granulators Minimizes dust. Reduces noise.

General Description

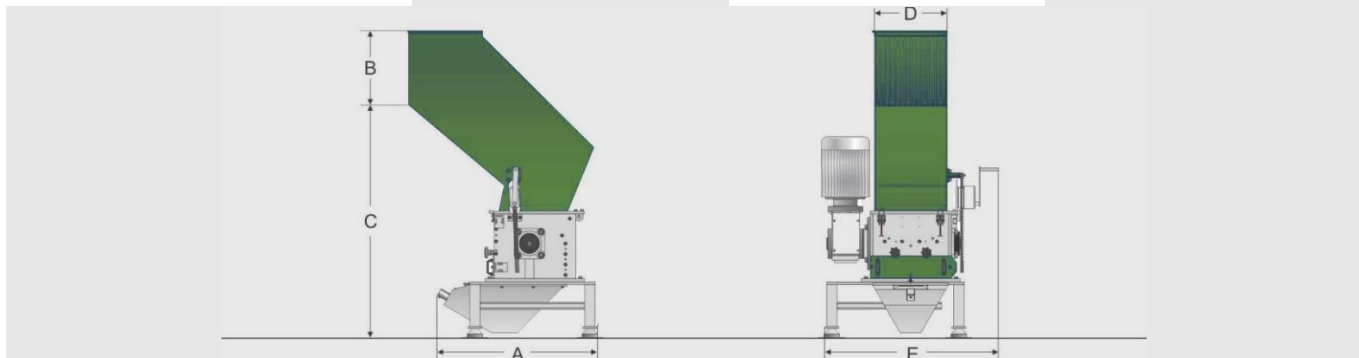
The **A series** slow speed granulators feature a staggered rotor directly driven by a geared motor. The low rotor speed reduces the noise level of the machine and creates less dust while grinding. The special design knives of the **A series** can be sharpened easily and do not need adjustment afterwards. The material is fed via a sound absorbing feed hopper that can be tailored to fit various applications and feeding methods. Depending on the requirements, the machines can be fitted with a wide variety of hoppers. They are mounted on either low or high level base frames, and have matching suction bins or bag filling adapters. Quick snap fasteners and hand screws make access to the machine for cleaning and maintenance fast and easy.

Technical Machine Advantages

- Direct driven staggered rotor
- Special knife design makes adjustment unnecessary
- Easy access for maintenance and cleaning
- Slow rotor speed creates less noise and dust
- Easily customized to suit different applications

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A Series		A30-40	A30-60	A30-80
Rotor diameter	(mm)	300	300	300
Rotor width	(mm)	400	600	800
Rotor speed	(rpm)	150	150	150
Drive capacity	(kW)	7.5	11	18.5
Rotor knives	(pcs)	33	48	66
Stator knives	(rows)	2	2	2
Screen size	(mm)	>5	>5	>5
Dimensions				
A	(mm)	1125	1125	1125
B	(mm)	400	400	400
C	(mm)	1335	1335	1340
D	(mm)	405	600	830
E	(mm)	1035	1230	1635





C Series – compact soundproofed granulators Allows even voluminous materials to be ground.

General Description

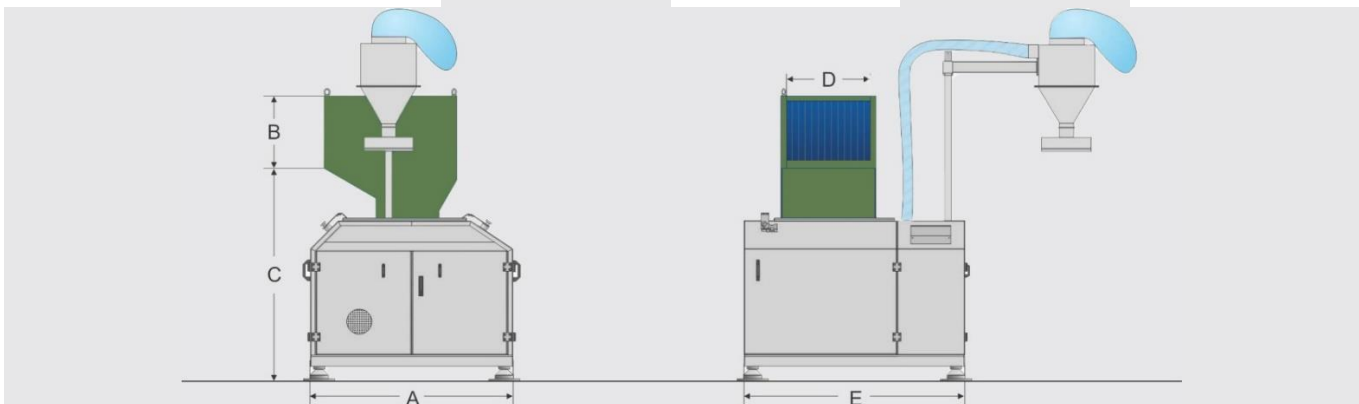
The **C series** compact granulators are designed with a completely soundproof enclosure resulting in an extremely quiet operation. Different rotor designs are available in widths ranging from 300 mm to 1400 mm. The completely welded cutting chamber, in conjunction with the "V" type rotor design, ensures dependability in operation and universal application use. While it delivers excellent sound proofing capabilities, it still offers easy and quick access to the cutting chamber during rotor and stator knife changes, servicing, or screen changes. The sound dampening material used in these machines is based on the latest technological research.

Technical Machine Advantages

- Knives are adjusted outside of the machine
- Compact design
- Different rotor types available
- Soundproofed housing
- Strong tangential infeed

We reserve the right to make technical changes and measurement adjustments ver. 1.0 - 01/2018

C Series		C30-30	C30-60	C30-100	C30-140
Rotor diameter	(mm)	300	300	300	300
Rotor width	(mm)	300	600	1000	1400
Drive capacity	(kW)	7.5	11	18.5	22
Rotor knives	(rows)	3	3	3	3
Stator knives	(rows)	2	2	2	2
Screen size	(mm)	>6	>6	>6	>6
Effective working area	(mm x mm)	400 x 290	400 x 590	400 x 990	400 x 1400
Dimensions					
A	(mm)	1550	1550	1550	1660
B	(mm)	420	420	420	420
C	(mm)	1570	1570	1570	1645
D	(mm)	300	590	990	1400
E	(mm)	1360	1680	1950	2200





C Series – compact soundproofed granulators Allows even voluminous materials to be ground.

General Description

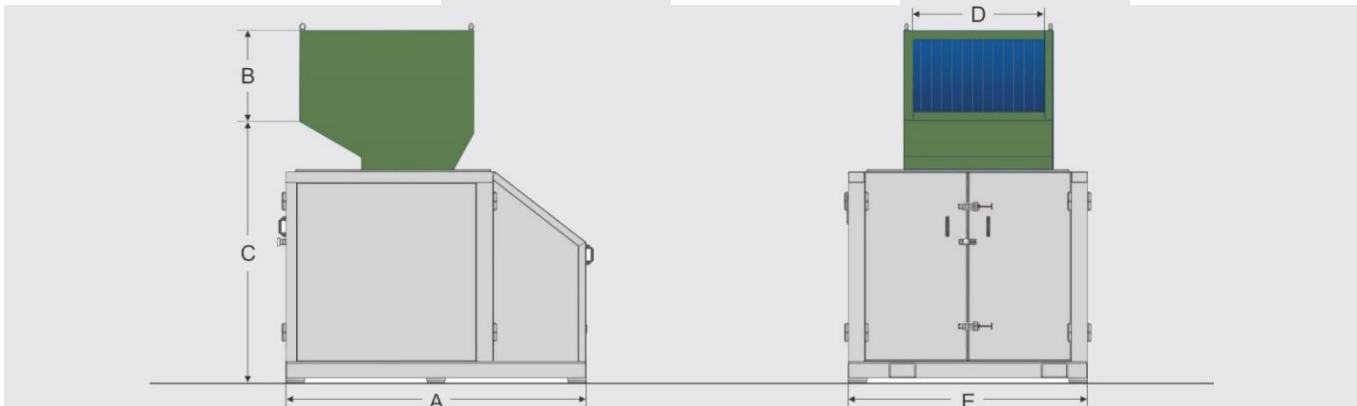
The **C series** compact granulators are designed with a completely soundproof enclosure resulting in an extremely quiet operation. Different rotor designs are available in widths ranging from 300 mm to 1400 mm. The completely welded cutting chamber, in conjunction with the "V" type rotor design, ensures dependability in operation and universal application use. While it delivers excellent sound proofing capabilities, it still offers easy and quick access to the cutting chamber during rotor and stator knife changes, servicing, or screen changes. The sound dampening material used in these machines is based on the latest technological research.

Technical Machine Advantages

- Knives are adjusted outside of the machine
- Compact design
- Different rotor types available
- Soundproofed housing
- Strong tangential infeed

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C Series		C50-50	C50-70	C50-100	C50-140
Rotor diameter	(mm)	500	500	500	500
Rotor width	(mm)	500	700	1000	1400
Drive capacity	(kW)	30	37	45	45
Rotor knives	(rows)	3 or 5	3 or 5	3 or 5	3 or 5
Stator knives	(rows)	2	2	2	2
Screen size	(mm)	>6	>6	>6	>6
Effective working area	(mm x mm)	560 x 500	560 x 700	560 x 990	560 x 1400
Dimensions					
A	(mm)	2010	2010	2410	2410
B	(mm)	600	600	540	540
C	(mm)	1795	1795	2025	2025
D	(mm)	500	700	990	1400
E	(mm)	1380	1580	1880	2210





C Series – compact soundproofed granulators Allows even voluminous materials to be ground.

General Description

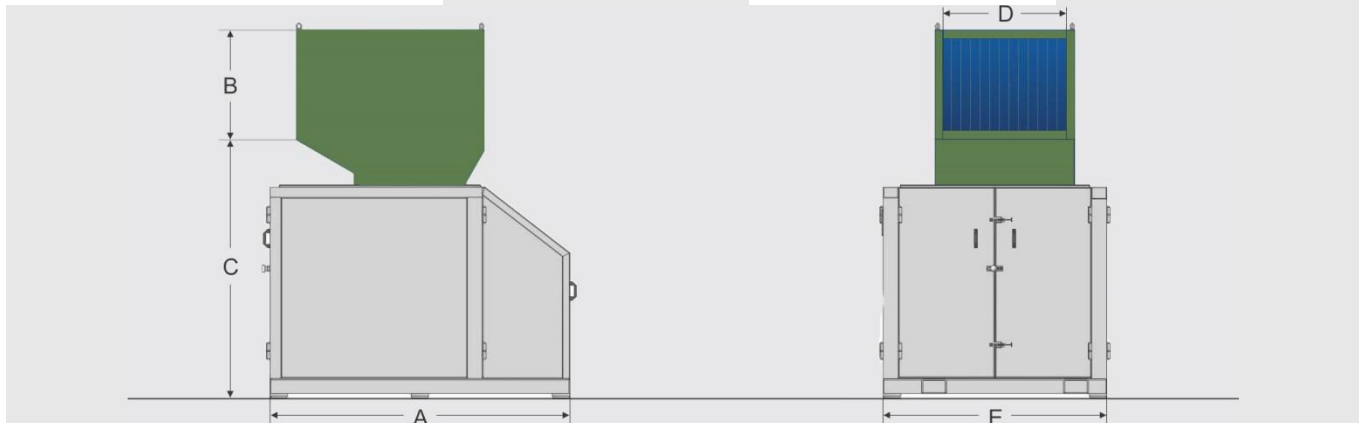
The **C series** compact granulators are designed with a completely soundproof enclosure resulting in an extremely quiet operation. Different rotor designs are available in widths ranging from 300 mm to 1400 mm. The completely welded cutting chamber, in conjunction with the "V" type rotor design, ensures dependability in operation and universal application use. While it delivers excellent sound proofing capabilities, it still offers easy and quick access to the cutting chamber during rotor and stator knife changes, servicing, or screen changes. The sound dampening material used in these machines is based on the latest technological research.

Technical Machine Advantages

- Knives are adjusted outside of the machine
- Compact design
- Different rotor types available
- Soundproofed housing
- Strong tangential in-feed

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C Series		C70-70	C70-100	C70-140
Rotor diameter	(mm)	700	700	700
Rotor width	(mm)	700	1000	1400
Drive capacity	(kW)	45	55	55
Rotor knives	(rows)	5 or 7	5 or 7	5 or 7
Stator knives	(rows)	2	2	2
Screen size	(mm)	>6	>6	>6
Effective working area	(mm x mm)	720 x 700	720 x 990	720 x 1400
Dimensions				
A	(mm)	2560	2560	2560
B	(mm)	740	740	740
C	(mm)	2140	2140	2240
D	(mm)	700	990	1400
E	(mm)	1560	1850	2210





C Series Tangential– compact soundproofed granulators

General Description

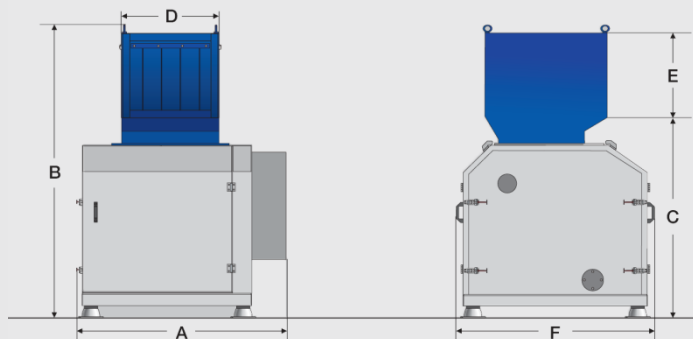
The **C series** Tangential compact granulators are designed with a completely soundproof enclosure resulting in an extremely quiet operation. Different rotor designs are available in widths ranging from 300 mm to 1000 mm. The completely welded cutting chamber, in conjunction with the F type rotor design, ensures dependability in operation. The curved backwall of the cutting chamber ensures an aggressive ingestion while also avoiding blockages. While it delivers excellent sound proofing capabilities, it still offers easy and quick access to the cutting chamber during rotor and stator knife changes, servicing, or screen changes. The sound dampening material used in these machines is based on the latest technological research.

Technical Machine Advantages

- Knives are adjusted outside of the machine
- Compact design
- Aggressive infeed and curved backwall
- Soundproofed housing
- Large screen area

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C Series		C25-30	C25-45	C25-60	C40-60	C40-100
Rotor diameter	(mm)	250	250	250	400	400
Rotor width	(mm)	300	450	600	600	1000
Drive capacity	(kW)	7.5	11	15	22	30
Rotor knives	(rows)	3 x 1	3 x 1	3 x 2	3 x 2	3 x 2
Stator knives	(rows)	2	2	2	2	2
Screen size	(mm)	≥6	≥6	≥6	≥6	≥6
Effective working area	(mm x mm)	250 x 300	250 x 450	250 x 600	400 x 600	400 x 1000
Weight approx.	(kg)	1200	1400	1850	3300	4000
Dimensions						
A	(mm)	1350	1600	1750	1550	1950
B	(mm)	1880	1880	1880	2180	2180
C	(mm)	1380	1380	1380	1540	1540
D	(mm)	300	450	600	590	990
E	(mm)	370	370	370	490	490
F	(mm)	1220	1220	1220	1460	1460





E Series – economical granulators Use as a central granulator for in-house recycling.

General Description

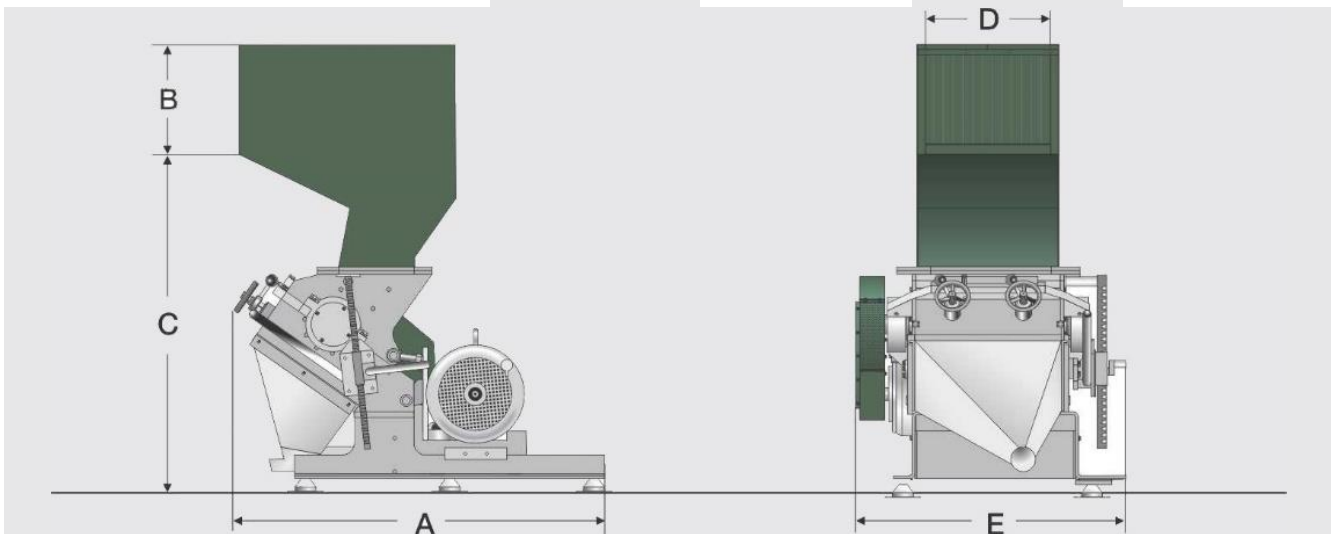
The completely welded cutting chamber in conjunction with the “V” type rotor design ensures dependability in operation and universal application use. The housing design offers easy and quick access to the cutting chamber during rotor and stator knife changes, servicing, or screen changes.

Technical Machine Advantages

- Knives are adjusted outside of the machine
- Mobile Compact design
- Different rotor types available
- Easy accessibility
- Strong tangential infeed

We reserve the right to make technical changes and measurement adjustments ver. 1.0 - 01/2018

E30 Series		E30-30	E30-60	E30-100	E30-140
Rotor diameter	(mm)	300	300	300	300
Rotor width	(mm)	300	600	1000	1400
Drive capacity	(kW)	7.5	11	18.5	22
Rotor knives	(rows)	3	3	3	3
Stator knives	(rows)	2	2	2	2
Screen size	(mm)	>6	>6	>6	>6
Effective working area	(mm x mm)	400 x 290	400 x 590	400 x 990	400 x 1400
Dimensions					
A	(mm)	1660	1695	1275	1380
B	(mm)	450	450	450	460
C	(mm)	1420	1420	1420	1450
D	(mm)	300	590	990	1400
E	(mm)	1085	1375	1620	1985





E Series – economical granulators Use as a central granulator for in-house recycling.

General Description

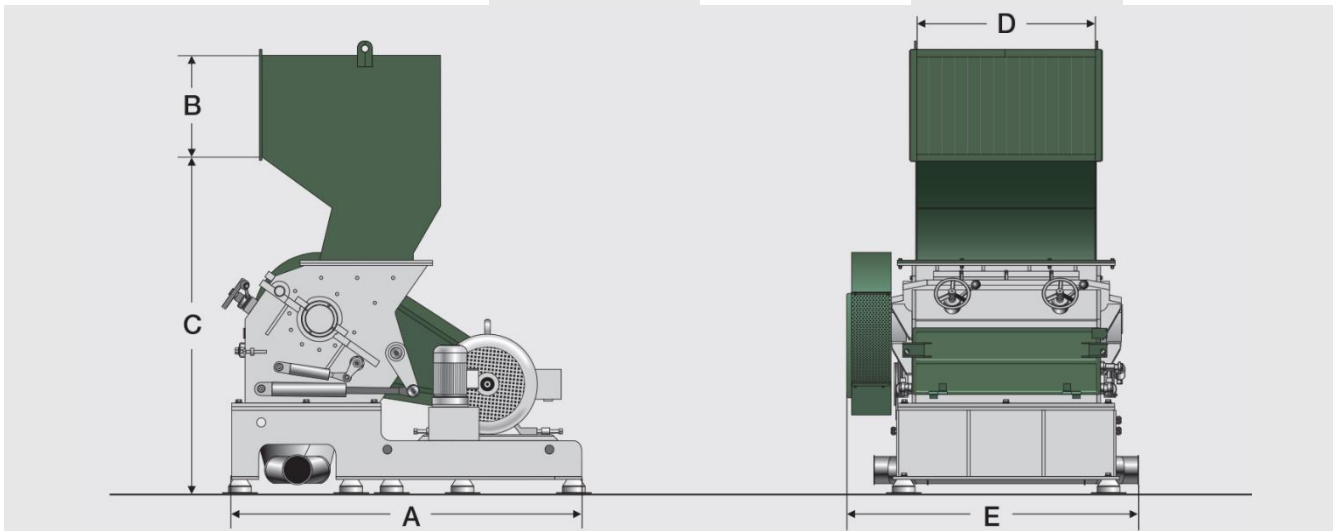
The completely welded cutting chamber, in conjunction with the “V” type rotor design, ensures dependability in operation and universal application use. The housing design offers easy and quick access to the cutting chamber during rotor and stator knife changes, servicing, or screen changes.

Technical Machine Advantages

- Knives are adjusted outside of the machine
- Mobile Compact design
- Different rotor types available
- Easy accessibility
- Strong tangential infeed

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E50 Series		E50-50	E50-70	E50-100	E50-140
Rotor diameter	(mm)	500	500	500	500
Rotor width	(mm)	500	700	1000	1400
Drive capacity	(kW)	30	37	45	55
Rotor knives	(rows)	5	5	5	5
Stator knives	(rows)	2 or 3	2 or 3	2 or 3	2 or 3
Screen size	(mm)	>6	>6	>6	>6
Effective working area	(mm x mm)	560 x 500	560 x 700	560 x 990	560 x 1400
Dimensions					
A	(mm)	1675	1675	1900	2050
B	(mm)	580	580	580	580
C	(mm)	1840	1840	1840	1840
D	(mm)	515	715	990	1400
E	(mm)	1130	1330	1645	2000





E Series – economical granulators Use as a central granulator for in-house recycling.

General Description

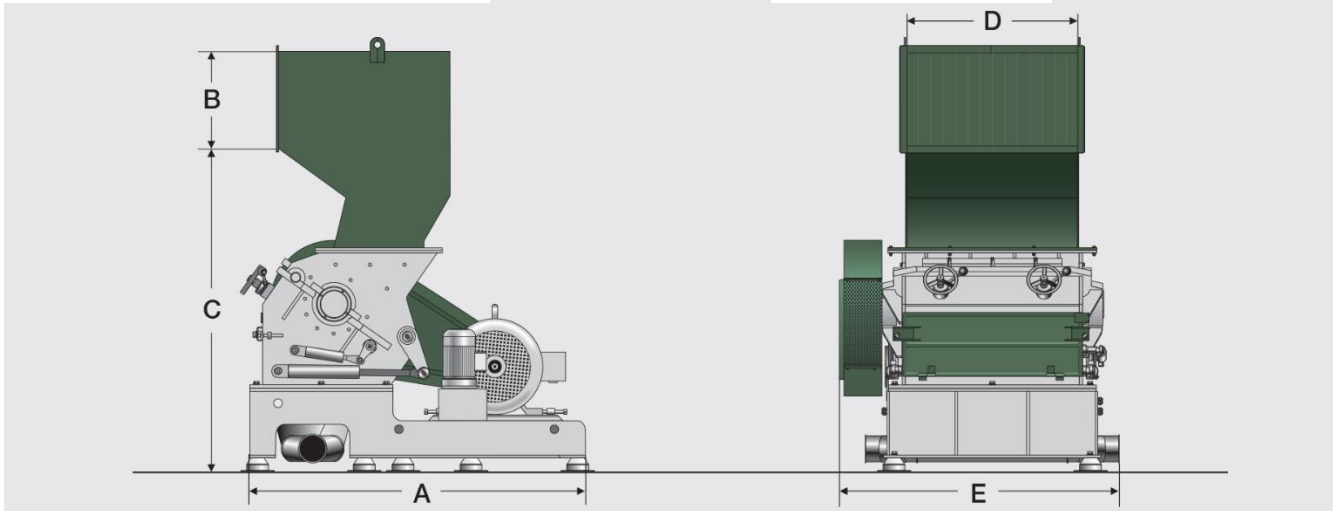
The completely welded cutting chamber, in conjunction with the “V” type rotor design, ensures dependability in operation and universal application use. The housing design offers easy and quick access to the cutting chamber during rotor and stator knife changes, servicing, or screen changes.

Technical Machine Advantages

- Knives are adjusted outside of the machine
- Mobile Compact design
- Different rotor types available
- Easy accessibility
- Strong tangential infeed

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E70 Series		E70-70	E70-100	E70-140
Rotor diameter	(mm)	700	700	700
Rotor width	(mm)	700	1000	1400
Drive capacity	(kW)	45	55	55
Rotor knives	(rows)	5	5	5
Stator knives	(rows)	2 or 3	2 or 3	2 or 3
Screen size	(mm)	>6	>6	>6
Effective working area	(mm x mm)	720 x 700	720 x 990	720 x 1440
Dimensions				
A	(mm)	2205	2205	2205
B	(mm)	740	740	740
C	(mm)	1900	1900	2000
D	(mm)	700	990	1400
E	(mm)	1325	1665	2000





H 35 and 50 Series – heavy duty granulators

General Description

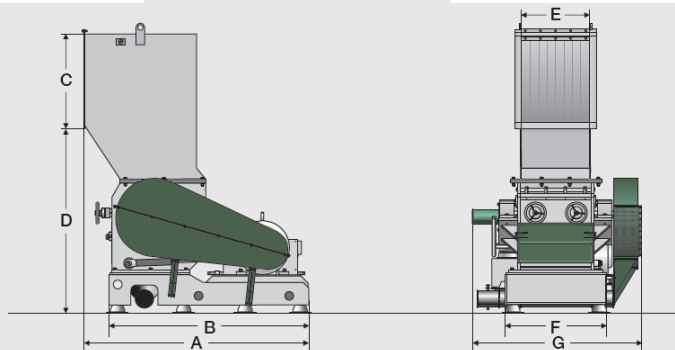
The heavy duty granulators of the **H 35 and 50 series** offer a wide array of rotor designs with widths ranging from 500 mm to 1000 mm and diameters of 350 mm to 500 mm. The completely welded heavy steel construction is designed to withstand the most demanding and universal applications. Rotor bearings, knife mounts, and the rotor shaft are oversized. The standard V-cut creates a high quality chip with a very low percentage of dust in the output material. The removable third stator blade acts as a deflector wedge and allows the machine to be quickly adjusted to different application scenarios. Other standard features include easily replaceable wear plates in the cutting chamber, and outboard bearings reducing the risk of contamination.

Technical Machine Advantages

- Knives are adjusted outside of the machine
- Specially developed deflector wedge
- Wide choice of rotor types
- Easy accessibility
- Strong welded steel construction
- Oversized outboard bearings

We reserve the right to make technical changes and measurement adjustments ver. 1.0 - 01/2018

H Series		H35-50	H50-60	H50-100
Rotor diameter	(mm)	350	500	500
Rotor width	(mm)	500	600	1000
Drive capacity	(kW)	22	55	75
Rotor knives	(rows)	3 or 5	3 or 5	3 or 5
Stator knives	(rows)	2 or 3	2 or 3	2 or 3
Effective working area	(mm x mm)	460 x 516	590 x 636	590 x 985
Dimensions				
A	(mm)	1820	2105	2255
B	(mm)	1600	1850	2000
C	(mm)	740	800	900
D	(mm)	1650	1765	1840
E	(mm)	520	635	985
F	(mm)	775	945	1350
G	(mm)	1280	1560	1945



H 60 and 70 Series – heavy duty granulators



General Description

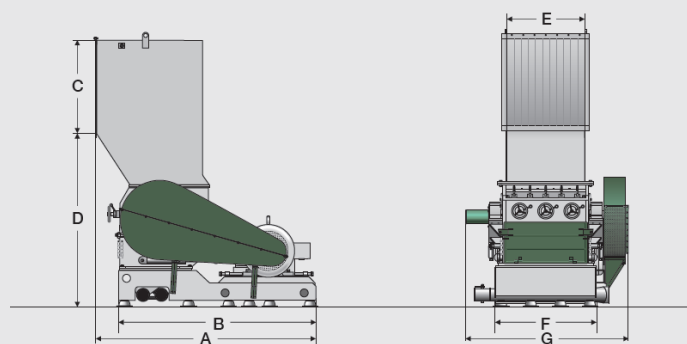
The heavy duty granulators of the **H 60 and 70 series** offer a wide array of rotor designs with widths ranging from 800 mm to 1600mm and diameters of 600 mm to 700 mm. The completely welded heavy steel construction is designed to withstand the most demanding and universal applications. Rotor bearings, knife mounts, and the rotor shaft are oversized. The standard V-cut creates a high quality chip with a very low percentage of dust in the output material. The removable third stator blade acts as a deflector wedge and allows the machine to be quickly adjusted to different application scenarios. Other standard features include easily replaceable wear plates in the cutting chamber, and outboard bearings reducing the risk of contamination.

Technical Machine Advantages

- Knives are adjusted outside of the machine
- Specially developed deflector wedge
- Wide choice of rotor types
- Easy accessibility
- Strong welded steel construction
- Oversized outboard bearings

We reserve the right to make technical changes and measurement adjustments ver. 1.0 - 01/2018

H Series		H60-80	H60-160	H70-100
Rotor diameter	(mm)	600	600	700
Rotor width	(mm)	800	1600	1000
Drive capacity	(kW)	75	132	90
Rotor knives	(rows)	5 or 7	5 or 7	5 or 7
Stator knives	(rows)	2 or 3	2 or 3	2 or 3
Effective working area	(mm x mm)	790 x 695	1500 x 695	900 x 800
Dimensions				
A	(mm)	2350	2535	2815
B	(mm)	2100	2390	2500
C	(mm)	1000	1000	1100
D	(mm)	1940	1940	2250
E	(mm)	788	1560	985
F	(mm)	1125	1980	1290
G	(mm)	1840	2360	2060





H 80 Series – heavy duty granulators

General Description

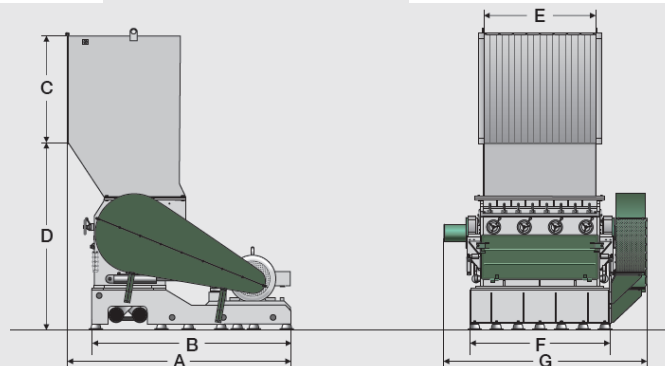
The heavy duty granulators of the **H 80 series** offer a wide array of different rotor designs with widths ranging from 1200 mm to 2000 mm and a diameter of 800 mm. The completely welded heavy steel construction is designed to withstand the most demanding and universal applications. Rotor bearings, knife mounts, and the rotor shaft are oversized. The standard V-cut creates a high quality chip with a very low percentage of dust in the output material. The removable third stator blade acts as a deflector wedge and allows the machine to be quickly adjusted to different application scenarios. Other standard features include easily replaceable wear plates in the cutting chamber, and outboard bearings reducing the risk of contamination.

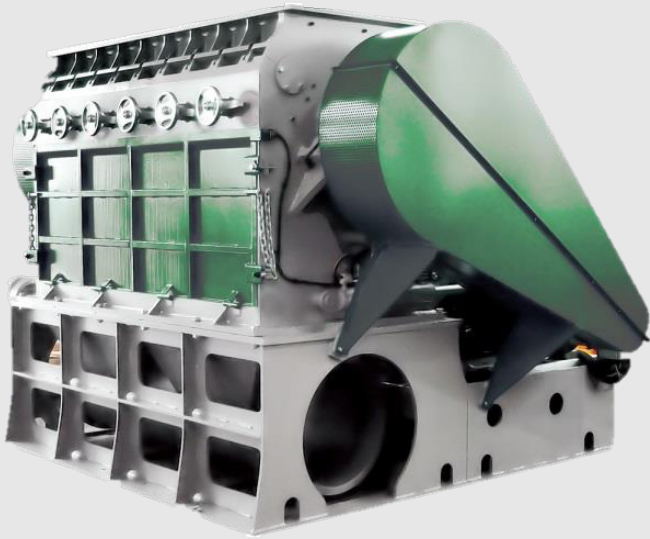
Technical Machine Advantages

- Knives are adjusted outside of the machine
- Specially developed deflector wedge
- Wide choice of rotor types
- Easy accessibility
- Strong welded steel construction
- Oversized outboard bearings

We reserve the right to make technical changes and measurement adjustments ver. 1.0 - 01/2018

H Series		H80-120	H80-160	H80-200
Rotor diameter	(mm)	800	800	800
Rotor width	(mm)	1200	1600	2000
Drive capacity	(kW)	132	160	2 x 160
Rotor knives	(rows)	5 or 7 or 9	5 or 7 or 9	7 or 9
Stator knives	(rows)	2 or 3	2 or 3	2 or 3
Effective working area	(mm x mm)	1150 x 915	1570 x 915	1960 x 915
Dimensions				
A	(mm)	3100	3100	3100
B	(mm)	2800	2800	2800
C	(mm)	1200	1200	1600
D	(mm)	2570	2570	3055
E	(mm)	1150	1150	1965
F	(mm)	1535	1535	2250
G	(mm)	2430	2430	3465





H 110 Series – heavy duty granulators

General Description

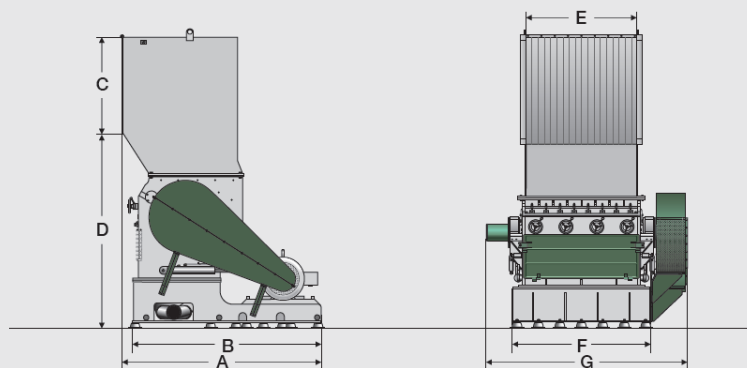
The heavy duty granulators of the **H 110 series** offer a wide array of different rotor designs with widths ranging from 1200 mm to 2400 mm and a diameter of 1100 mm. The completely welded heavy steel construction is designed to withstand the most demanding and universal applications. Rotor bearings, knife mounts, and the rotor shaft are oversized. The standard V-cut creates a high quality chip with a very low percentage of dust in the output material. The removable third stator blade acts as a deflector wedge and allows the machine to be quickly adjusted to different application scenarios. Other standard features include easily replaceable wear plates in the cutting chamber, and outboard bearings reducing the risk of contamination.

Technical Machine Advantages

- Knives are adjusted outside of the machine
- Specially developed deflector wedge
- Wide choice of rotor types
- Easy accessibility
- Strong welded steel construction
- Oversized outboard bearings

We reserve the right to make technical changes and measurement adjustments ver. 1.0 - 01/2018

H Series		H110-120	H110-240
Rotor diameter	(mm)	1100	1100
Rotor width	(mm)	1200	2400
Drive capacity	(kW)	200	2 x 200
Rotor knives	(rows)	7 or 9 or 11	7 or 9 or 11
Stator knives	(rows)	2 or 3	2 or 3
Effective working area	(mm x mm)	1150 x 1210	1960 x 1210
Dimensions			
A	(mm)	3115	3115
B	(mm)	2900	3000
C	(mm)	1400	1400
D	(mm)	3030	3030
E	(mm)	1150	2330
F	(mm)	1680	2760
G	(mm)	2440	3830



L 30 Series – single shaft shredder



General Description

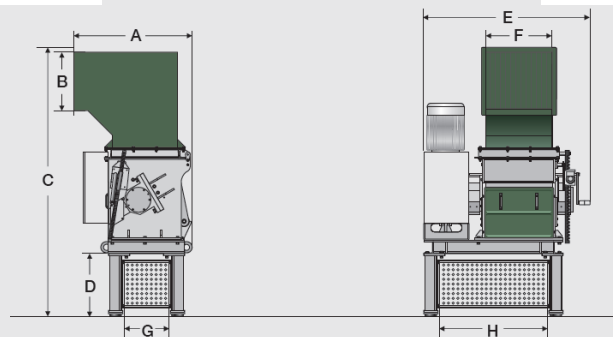
The **L 30 Series** shredders are single shaft shredders with a tangential in-feed to eliminate the need for a hydraulic feeding system. The space saving and maneuverable design combined with the “plug and play” controls make this machine very flexible and ready to go in no time. Like its bigger brothers in the **G series**, they are equipped with outboard bearings, 310 mm diameter flat "E" rotors, with 600 mm or 850 mm widths driven by an oversized geared motor. Utilizing the proven Virtus knife holder and knife design, the user-friendly design makes cleaning and maintenance work a breeze. The low speed of 60 rpm combined with the compact design of the "L" shredders, makes it possible to shred lumps at a relatively low noise level. The machines can be fed manually or by conveyor and material discharge can be done via conveyor or into a drop box.

Technical Machine Advantages

- Affordable solution for small lumps
- Simple upgrade for existing granulation system
- Easy to move and place
- Tangential in-feed avoids the need for a hydraulic pusher
- Small footprint
- Low energy consumption

We reserve the right to make technical changes and measurement adjustments ver. 1.0 01/2018

L Series		L30-60	L30-85
Rotor diameter	(mm)	310	310
Rotor width	(mm)	600	850
Rotor speed	(rpm)	60	60
Drive capacity	(kW)	11	18.5
Rotor knives	(pcs)	26	40
Stator knives	(rows)	1	1
Effective working area	(mm x mm)	490 x 550	490 x 830
Dimensions			
A	(mm)	995	1045
B	(mm)	490	490
C	(mm)	2255	2255
D	(mm)	525	525
E	(mm)	1400	2080
F	(mm)	550	830
G	(mm)	420	470
H	(mm)	950	950



G Series – general purpose shredder Designed for a wide range of applications.

General Description

The **G series** shredders are single shaft shredders with a powerful two speed swing ram design, eliminating the risk of blocking and wearing out of internal guide rails. The machine is very versatile and can be used for shredding all kinds of input materials and is well suited for different industries. The 457 mm diameter rotor ranges from 850 mm to 2000 mm width, and are driven by one or two oversized gearboxes. The hydraulic power pack is well integrated into the machine housing to save space and protect it from damage, but remains easy to access or remove for maintenance. The standard "E" rotor features the proven Virtus knife and knife holder design, as well as outboard bearings and a hydraulically-operated screen cradle. The machines can be tailored to various applications with cooling or hard facing and other wear options.

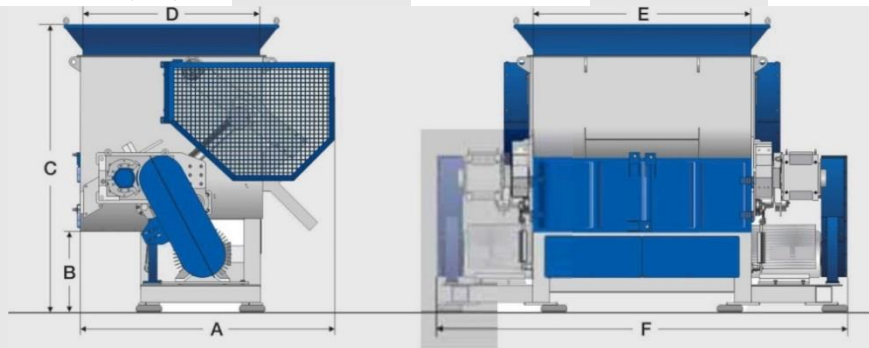
Technical Machine Advantages

- Low speed, high torque gear drive
- Powerful hydraulic swing type pusher
- Smaller footprint compared to traditional shredders with horizontal pushers
- Bolted in drive shafts
- Two speed hydraulic ram design comes standard

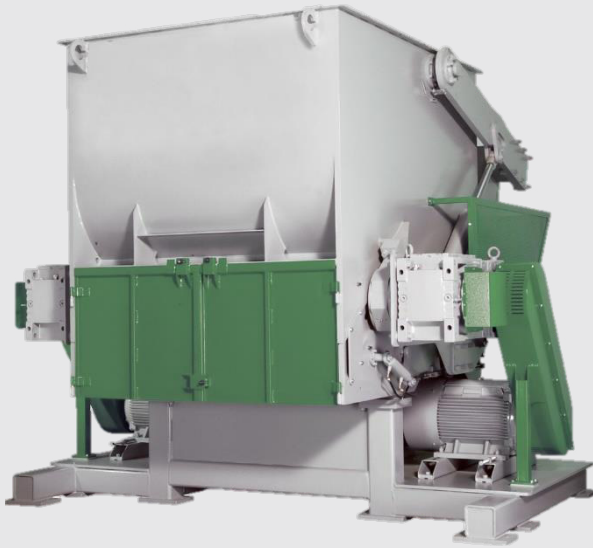


We reserve the right to make technical changes and measurement adjustments ver. 1.0 -01/2018

G Series		G38-85	G45-85	G45-120	G45-150	G45-200
Rotor diameter	(mm)	387	457	457	457	457
Rotor width	(mm)	850	850	1200	1500	2000
Rotor speed	(rpm)	74	74	74	74	74
Drive capacity	(kW)	37	55	55	75	2 X 55
Rotor knives	(pcs)	40/60	40/60	54/81	68/102	96/144
Stator knives	(rows)	1 or 2	1 or 2	1 or 2	1 or 2	1 or 2
Ram feeder drive	kW	3.75	3.75	5.6	5.6	5.6
Screen size	(mm)	>40	>40	>40	>40	>40
Cutting chamber volume	(m ³)	1.16	1.37	1.82	2.27	3.16
Effective working area	(mm x mm)	690 x 730	800 x 730	800 x 1010	800 x 1290	800 x 1850
Weight	Kg	4200	4800	5500	6500	8500
Dimensions						
A	(mm)	2085	2300	2300	2300	2300
B	(mm)	625	725	725	725	725
C	(mm)	2435	2585	2585	2585	2585
D	(mm)	1385	1590	1590	1590	1590
E	(mm)	840	840	1120	1400	1960
F	(mm)	1940	1985	2265	2590	3710



V Series – big volume shredders Recycle post-consumer waste



General Description

The **V series** shredders are single shaft shredders with a large internal volume. The redesigned hydraulic pusher system creates about 35% more space in the cutting chamber while increasing the power and speed of the ram itself. The machines are equipped with a 457 mm diameter Virtus "E" rotor with widths ranging from 1200 mm to 2000 mm. As on the "G" machines, the rotor is driven via an oversized gearbox. The completely closed, welded steel housing increases stability and avoids material spillage. The **V series** inherits all of the advantages of the Virtus knife and knife holder design, as well as standard features such as outboard bearings, hydraulic screen cradle, easy maintainability, and advanced controls.

Technical Machine Advantages

35% more internal volume compared to the **G series**

Internal hydraulic pusher

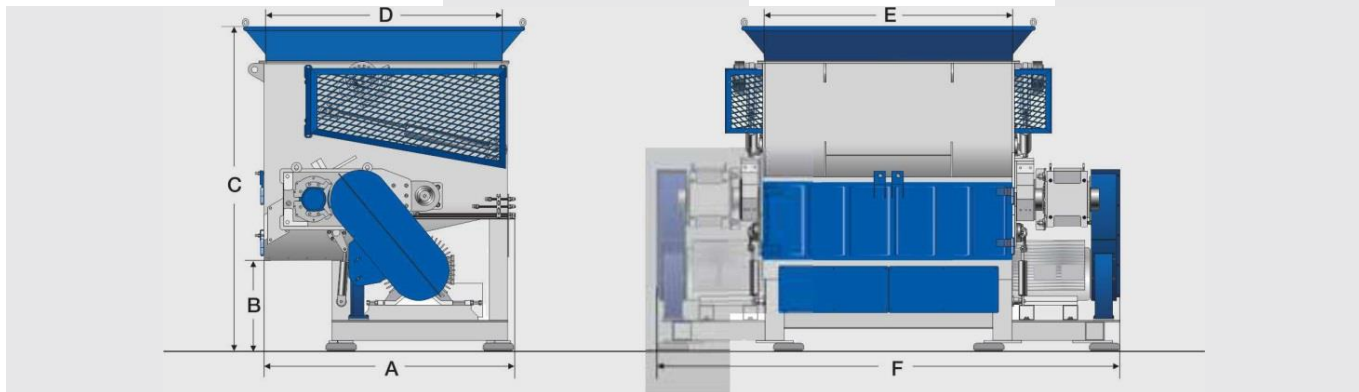
Variable faster pusher movement

Smaller footprint compared to traditional shredders with horizontal pushers

Closed cutting chamber to avoid material spillage

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V Series		V45-120	V45-150	V45-200
Rotor diameter	(mm)	457	457	457
Rotor width	(mm)	1200	1500	2000
Rotor speed	(rpm)	74	74	74
Drive capacity	(kW)	55	75	2 x 55
Rotor knives	(pcs)	54/81	68/102	96/144
Stator knives	(rows)	1	1	1
Ram feed drive	(kW)	5.6	5.6	5.6
Screen size	(mm)	>40	>40	>40
Cutting chamber volume	(m³)	2.15	2.70	3.75
Effective working area	(mm x mm)	1400 x 1010	1400 x 1290	1400 x 1850
Weight (approx.)	(kg)	5000	6400	8800
Dimensions				
A	(mm)	2560	2560	2560
B	(mm)	740	740	740
C	(mm)	2140	2140	2240
D	(mm)	700	990	1400
E	(mm)	1560	1850	2210
F	(mm)	2320	2635	3710





P Series – large diameter continuous shredder Reclaimed pipe – no problem.

General Description

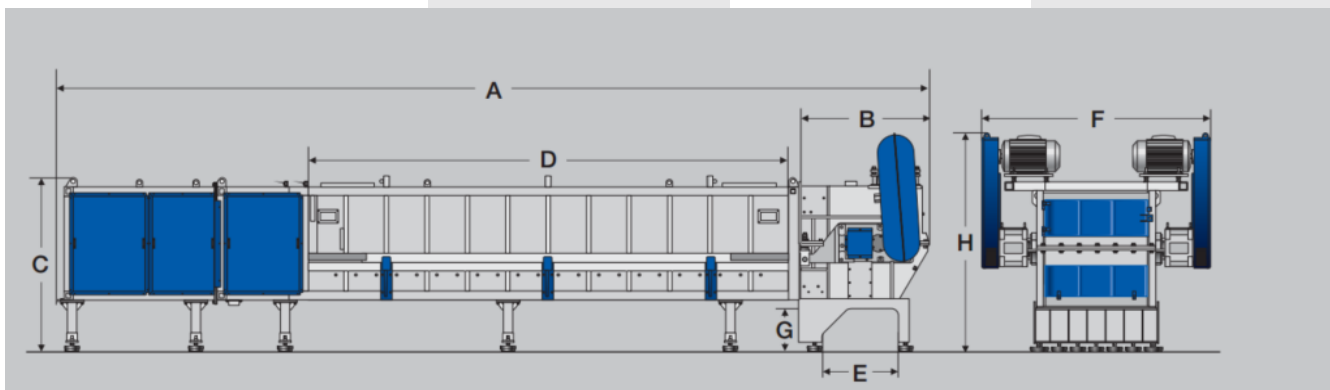
The **P Series** shredder is the world's first single shaft shredder capable of handling many types of large diameter forms such as reclaimed pipes. Depending on the item's diameter, the **P Series** rotor diameters and widths range from 800 mm up to 1500 mm. The standard hopper accepts lengths up to 6 m. The combination of advanced controls, low rotor speed, and smooth hydraulics, create a reliable and easy to use system.

Technical Machine Advantages

- Internal hydraulic pusher
- Variable faster pusher movement
- Smaller footprint compared to traditional shredders with horizontal pushers
- Closed cutting chamber to avoid material spillage

We reserve the right to make technical changes and measurement adjustments ver. 1.0 - 01/2018

P Series		P80	P100	P150
Rotor diameter	(mm)	852	1033	1482
Rotor width	(mm)	800	1000	1500
Rotor speed	(rpm)	40	36	23
Drive capacity	(kW)	2 x 37	2 x 45	2 x 55
Rotor knives	(pcs)	60	81	136
Ram feeder drive	(kW)	11	15	15
Feeding trough volume	(m ³)	2.7	6.7	12.6
Largest diameter object	(mm)	3500 x 630	6500 x 850	6500 x 1200
Weight approx.	(kg)	11000	16000	25000
Dimensions				
A	(mm)	7695	11940	12180
B	(mm)	1420	1580	1820
C	(mm)	1830	1965	2320
D	(mm)	3860	6720	6720
E	(mm)	975	1080	1080
F	(mm)	2545	2965	3250
G	(mm)	590	590	590
H	(mm)	2565	2660	3160



T Series – shredder for car tires.

General Description

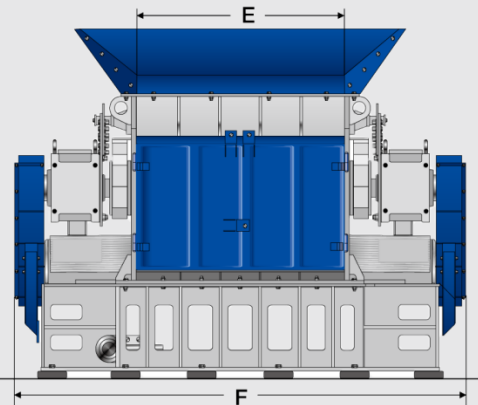
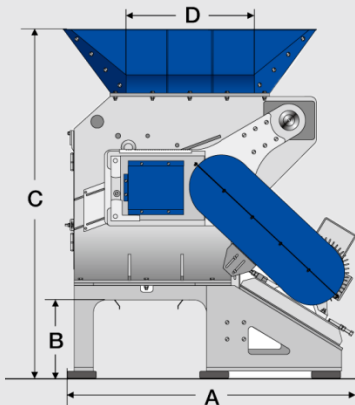
The **T Series** shredders are single shaft shredders specifically designed for processing complete or pre-shredded tires. Features a 760 mm diameter rotor with 1500 mm to 3000 mm width options. Machines include outboard bearings and twin gearbox drives. The tangential in-feed ensures optimal feeding of the tires while eliminating the need for a hydraulic feeding system. The shredders are equipped with a complete wear package including: rotor hard facing, special knives, and wear plates made from highly wear-resistant steel. The modular design makes it easy to integrate into existing installations.

Technical Machine Advantages

- Single large diameter rotor (760 mm)
- Proprietary knife design and material
- Variable knife gap to improve separation of steel and rubber
- Compact heavy duty design
- High throughput rates



T Series		T150	T200	T300
Rotor diameter	(mm)	760	760	760
Rotor width	(mm)	1500	2000	3000
Rotor speed	(rpm)	45	45	45
Drive capacity	(kW)	2 x 90	2 x 110	On request
Rotor knives	(pcs)	76	96	136
Stator knives	(rows)	1 or 2	1 or 2	1 or 2
Screen size	(mm)	>16	>16	>16
Effective working area	(mm x mm)	1005 x 1620	1005 x 2020	1005 x 2820
Dimensions				
A	(mm)	2245	2270	2300
B	(mm)	605	605	605
C	(mm)	2700	2700	2700
D	(mm)	1000	1000	1000
E	(mm)	1620	2020	2820
F	(mm)	3525	4105	4955



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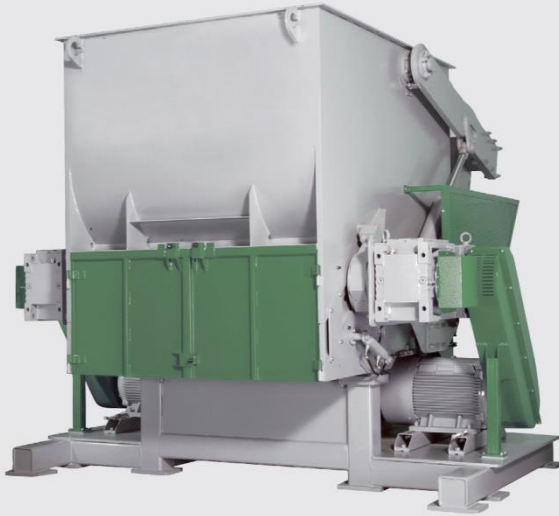
X Series – heavy duty shredder

General Description

The X Series shredders are single shaft shredders with a powerful two speed swing ram design, eliminating the risk of blocking and wearing out of internal guide rails. The machine is very versatile and can be used for shredding all kinds of input materials. The 750 mm diameter rotors, ranging from 1500 mm to 3000 mm width, are driven by two oversized gearboxes. The low speed of 45 rpm guarantees a high torque and smooth operation. The hydraulic power pack is well integrated into the machine housing to save space and protect it from damage, but is still easy to access or remove for maintenance. The proven "E" rotor, knife holder, and knife designs are taken to new dimensions to conquer the most demanding applications and challenges. The machines can be tailored to various applications with advanced controls and hydraulics, hard facing, and other wear options.

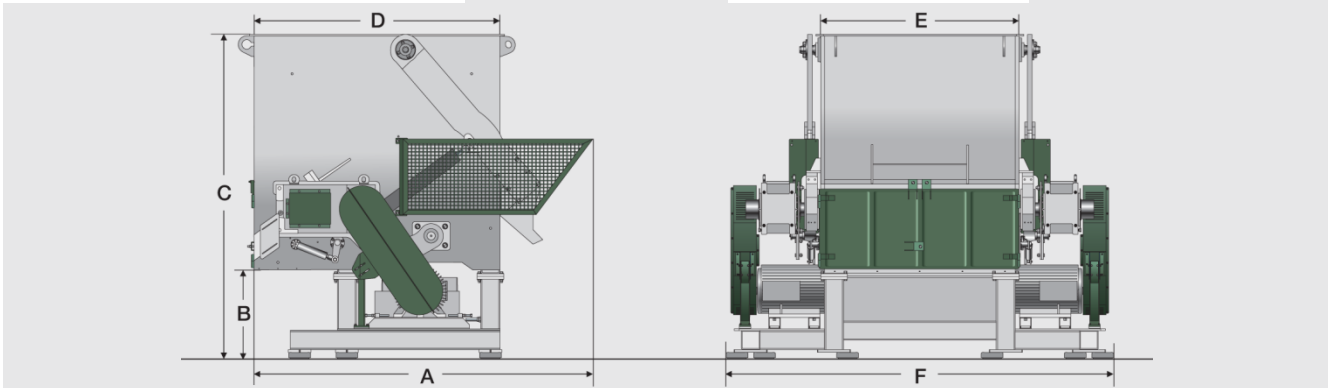
Technical Machine Advantages

- Powerful two speed hydraulic swing type ram
- Heavy duty design
- High throughput rates
- Suitable for very large and heavy pieces
- Large diameter rotor (750 mm)



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X Series		X75-150	X75-200	X75-300
Rotor diameter	(mm)	750	750	750
Rotor width	(mm)	1500	2000	3000
Rotor speed	(rpm)	45	45	45
Drive capacity	(kW)	2 x 75	2 x 90	2 x 100
Rotor knives	(pcs)	76	96	136
Stator knives	(rows)	1	1	1
Cutting chamber volume	(m ³)	7.75	9.67	13.5
Effective working area	(mm x mm)	1500 x 1490	1500 x 1900	1500 x 2600
Dimensions				
A	(mm)	3580	3580	3580
B	(mm)	935	935	1015
C	(mm)	3420	3420	3500
D	(mm)	2540	2540	2540
E	(mm)	1620	2020	2820
F	(mm)	3560	4190	5070





W 40 Series – wood shredder for crushing biomass

General Description

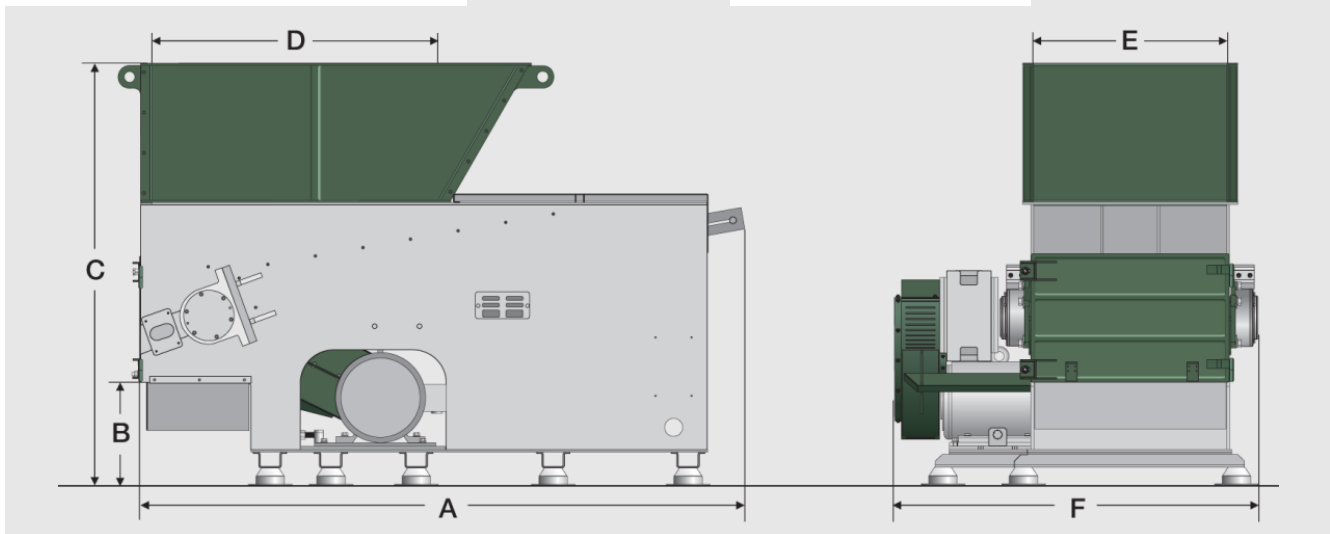
The **W 40 Series** light duty wood shredders are single shaft shredders specifically designed for the wood industry. The 400 mm diameter rotors with widths, ranging from 600 mm to 1100 mm, are driven by an oversized gearbox. They can be used to grind small quantities of off-cuts or to create sawdust from all kinds of waste wood and be used as fuel directly or further processed in a briquetting press to create heating pellets.

Technical Machine Advantages

- Low speed, high torque gear drive
- Proven well engineered design
- Bolted-in drive shafts
- Multiple rotor designs and material

We reserve the right to make technical changes and measurement adjustments ver. 1.0 - 01/2018

W40 Series		W40-60	W40-85	W40-110
Rotor diameter	(mm)	400	400	400
Rotor width	(mm)	600	800	1100
Drive capacity	(kW)	18.5	22	30
Rotor knives	(pcs)	13	20	27
Stator knives	(rows)	1	1	1
Cutting chamber volume	(m ³)	0.6	1.25	2
Effective working area	(mm x mm)	520 x 470	800 x 820	1080 x 1040
Dimensions				
A	(mm)	2060	2719	3270
B	(mm)	400	400	440
C	(mm)	1740	1826	1920
D	(mm)	1280	1620	1885
E	(mm)	680	960	1240
F	(mm)	1190	1490	1850



W 40 Series – wood shredder for crushing biomass



General Description

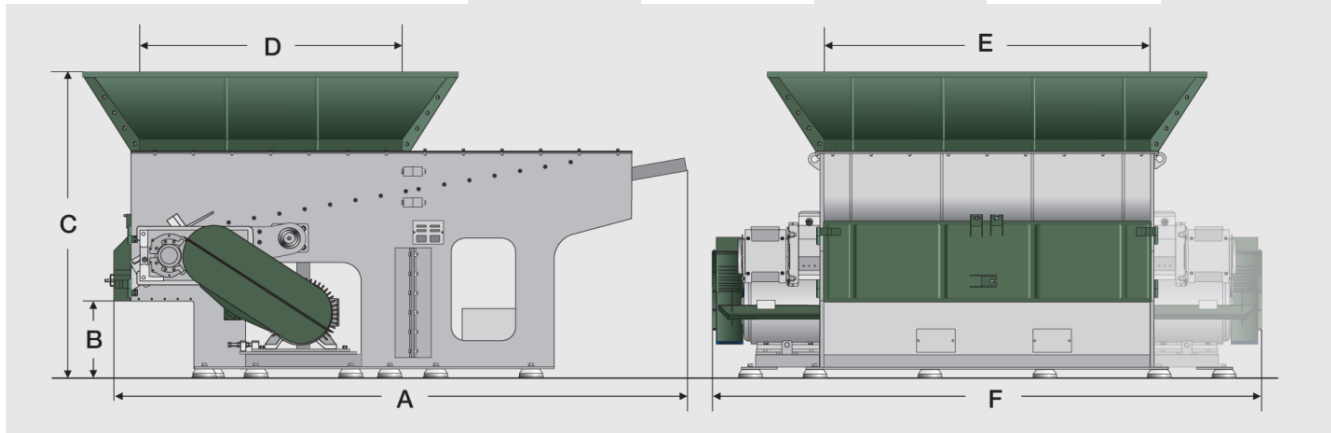
The **W 40 Series** light duty wood shredders are single shaft shredders specially designed for the wood industry. The 400 mm to 600 mm diameter rotors with widths, ranging from 1400 mm to 2600 mm, are driven by two oversized gearboxes. They can be used to grind small quantities of off-cuts or to create sawdust from all kinds of waste wood and be used as fuel directly or further processed in a briquetting press to create heating pellets.

Technical Machine Advantages

- Low speed, high torque gear drive
- Proven well engineered design
- Bolted-in drive shafts
- Multiple rotor designs and material

We reserve the right to make technical changes and measurement adjustments ver. 1.0 - 01/2018

W40 Series		W40-140	W40-170	W40-200	W40-260	W60-260
Rotor diameter	(mm)	400	400	400	400	600
Rotor width	(mm)	1400	1700	2000	2600	2600
Drive capacity	(kW)	45	55	90	2 x 75	2 x 90
Rotor knives	(pcs)	34	41	48	124	186
Stator knives	(rows)	1 x 5	1 x 6	1 x 7	1 x 9	1 x 9
Cutting chamber volume	(m ³)	3.6	4.7	5.5	7.2	8.9
Effective working area	(mm x mm)	1360 x 1430	1640 x 1550	1920 x 1550	2480 x 1550	2480 x 1550
Dimensions						
A	(mm)	4080	4930	4330	4330	4420
B	(mm)	460	460	460	600	700
C	(mm)	2170	2430	2240	2380	2730
D	(mm)	2195	2380	2380	2785	3080
E	(mm)	1530	1800	2090	3350	3420
F	(mm)	2410	2580	3080	4235	4415





Recycling Application Worksheet

Name *

 First Last

Company *

Street Address

Address Line 2

City _____ State / Province / Region _____

ZIP / Postal Code _____ Country _____

Phone * _____ Fax _____

Website _____ Email _____

Application Information
 Material _____ Initial Moisture _____

Material Thickness

Feeding From Loose Bailed Impurity Content Sand Metal Clay Other

Power Supply 208-230/3/60 460/3/60 575/3/60

Finished Size _____ Required Throughput _____

Application Location _____ Location Temp _____ Location Altitude _____

- Additional Resources Required
- Feeding Conveyor Discharge Conveyor Metal Detector Metal Separator
 - Magnetic Separation Wear Proofing Suction Group Dust Filtration and Collection

Application Description / Special Requirements

The product range – the right solution



A - Slow speed granulators

E - Economical granulators

C - Compact soundproofed granulators

G - General purpose shredders

With more than 75 years of experience, **VIRTUS** is one of the leading manufacturers of high quality size reduction machinery. From the small A slow speed granulators to the versatile H Series heavy duty granulators, our product lines also include small, compact granulators with integrated blower and soundproofing. Specialized machines are available like the H pipe granulators and the **VIRTUS** PM disc pulverizer systems for fine grinding applications. Adding a complete line of shredders, starting with light shredders up to large heavy duty shredders, **VIRTUS** recycling machines range in drive power from 2.2 kW up to 200 kW, and cover the whole spectrum of plastic size reduction applications.

n for any application



T - Heavy duty shredders

PM - Pulverizer

VIRTUS

The Right Machine for
Today's Recycling Requirements



The Right Machine for
Today's Recycling Requirements



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