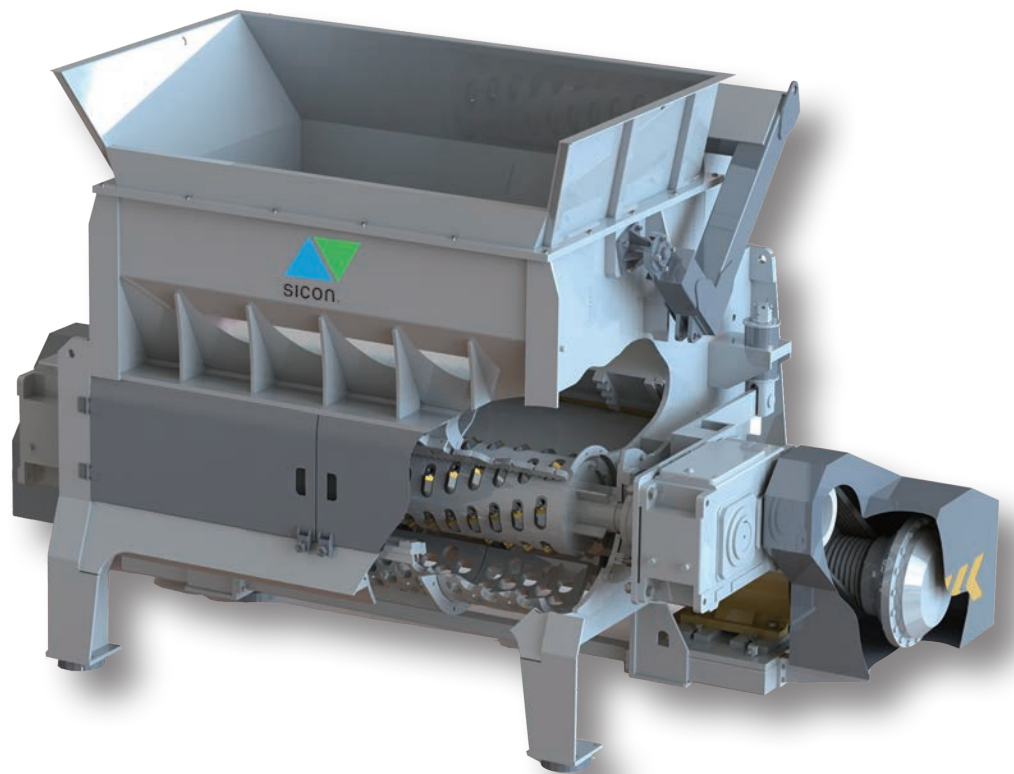




EcoShred 1SS

Single Shaft Shredder



DEDICATED TO PERFORMANCE



SICON Single Shaft Shredder / A-Serie

Many possible Applications

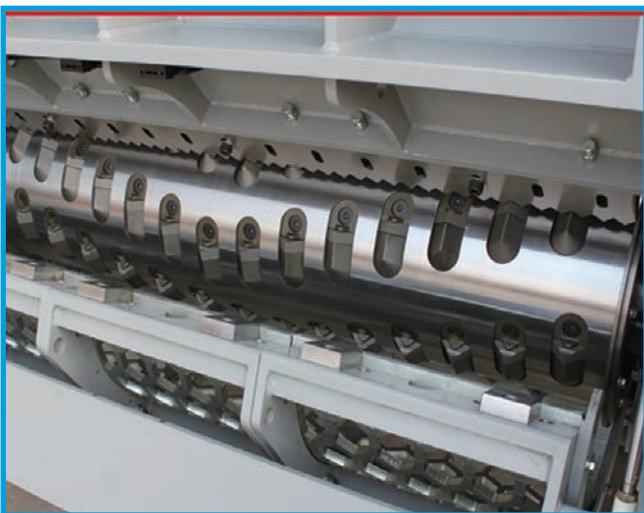
A-Series Single Shaft Shredders are heavy duty machines suitable for processing a wide range of materials. This range of shredders are ideal for the size reduction of flexible and/or medium hardness, voluminous products often loaded in bales. The fast acting, PLC controlled swing pusher automatically forces material to the rotor according to motor loading, maximizing material throughput. Machine capacities typically range between 1,500kg/hr – 9,000kg/hr+ depending on the model, material type and application.

Typical applications includes:

- ▶ Various Plastics – Mouldings, Purgings/Lump, Profiles, Films etc.
- ▶ Paper & Cardboard – Confidential Documents, Production Waste, Packaging Materials etc.
- ▶ Copper – Household, Automotive, Telecoms and Industrial Cables including S.W.A
- ▶ Aluminum – Used Beverage Cans (UBC's), Swarf, Cables etc.
- ▶ Textiles – Carpet (Rolls & Tiles), Garments, Production Waste etc.
- ▶ Security Destruction – Counterfeit Items, Faulty Goods, Out of Date Stocks etc.
- ▶ Foams – Production Waste, Insulation Materials, Product Fillings etc.
- ▶ Mixed Household, Commercial & Industrial Wastes – RDF/SRF Production

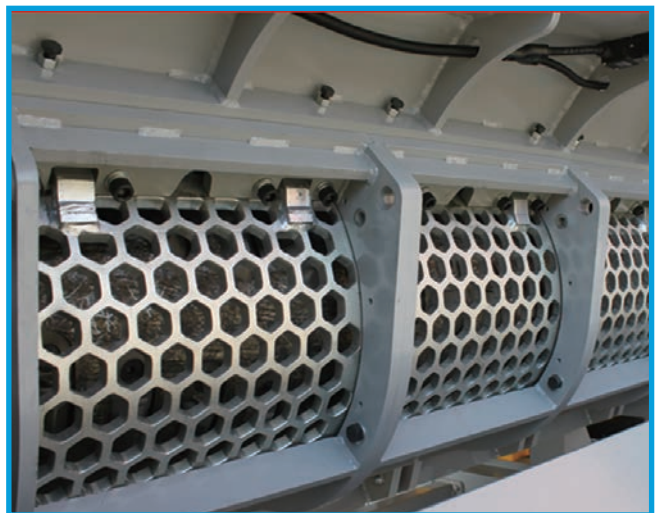
High performance rotors

The single shaft milling rotor results in high performance & efficient operation, producing high quality products. Multiple rotor knives positioned in a chevron configuration and mounted in easily replaceable knife holders result in low vibration, efficient operation and reduced maintenance costs..



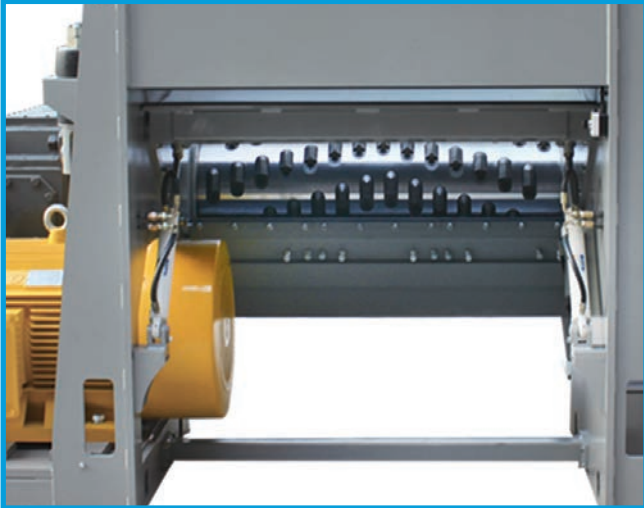
Classifier Screen

Changeable screen plate inserts manufactured from high quality steels and mounted in a welded support frame with various different apertures available to suit specific applications. Access to the screen is via maintenance door. Easy change of the screen modules using a swivel mounted hydraulically operated system.



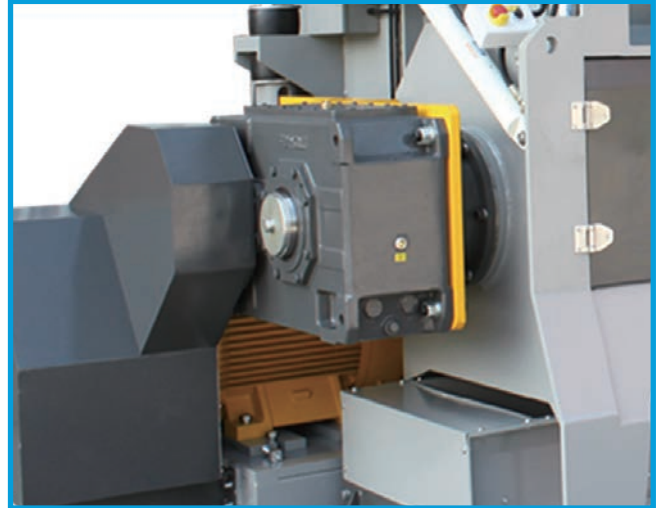
Maintenance Access Door

- Direct service access to the rotor and blades from the rear of the machine.
- Quick removal of large foreign objects from the cutting chamber.
- Simplified machine maintenance.
- Quick and easy replacement & adjustment of the knives.



Robust Drive & Gearbox

- Powerful electric motor provides drive to the rotor shaft via a low maintenance, shock absorbing v-belt
- The oversized gearbox with increased service factor and shock absorbing mount results in long life
- The speed reduction gearbox is mounted directly on the rotor shaft.



Hydraulic Pusher

The hydraulic pusher effectively delivers material to the rotor according to motor load. The system uses an unguided pusher unit and all load bearing parts are mounted out-board of the shredding chamber resulting in low maintenance, trouble free operation. The curved chamber floor naturally encourages material towards the rotor shaft.

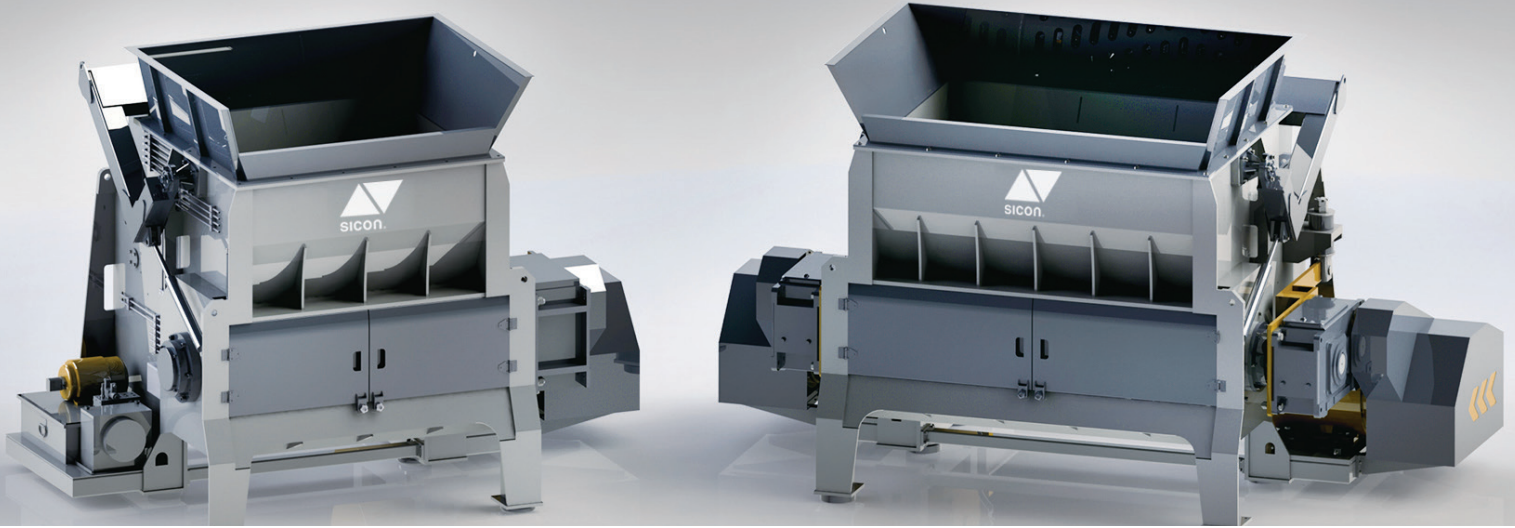


Intelligent Control Panel

Programmed to allow material specific machine adjustments on site. Maintenance, inspection, and fault failure signals. Available with optional touch screen and remote maintenance features.

High quality, readily available Siemens & Schneider electrical components.

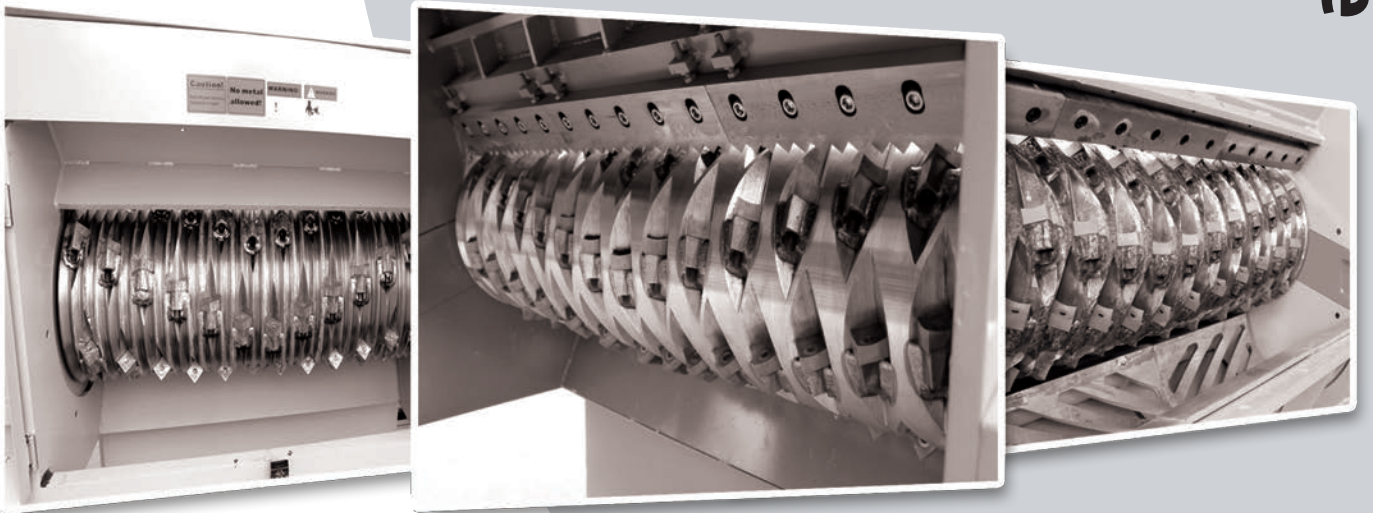
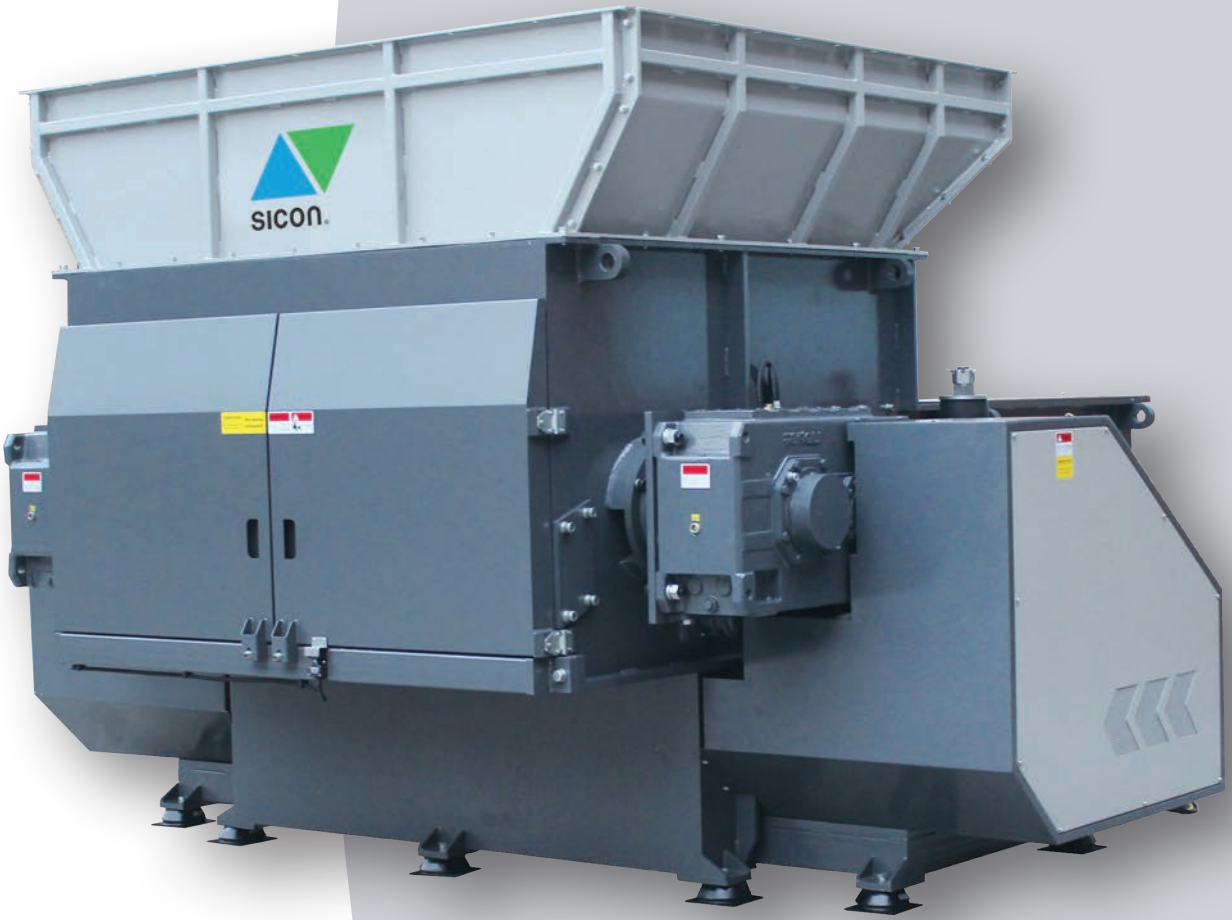




Model	EcoShred 1SS-1500-A	EcoShred 1SS-2000-A	EcoShred 1SS-1700-A	EcoShred 1SS-2200-A
Dimension L / W / H (mm)	3,660 x 2,210 x 2,950	4,590 x 2,210 x 2,970	5,500 x 2,400 x 3,100	6,200 x 2,400 x 3,100
Hopper Inlet (mm)	1,900 x 1,440	2,400 x 1,440	2,100 x 1,450	2,650 x 1,450
Discharge Height (mm)	440	440	550	600
Ram Travel (mm)	1,000	1,000	1,000	1,000
Rotor Diameter (mm)	Ø 480		Ø 650	
Rotor Operation Length (mm)	1,500	2,000	1,650	2,200
Rotor Speed (rpm)	80	80	80	80
Screen (mm)	Ø 40	Ø 40	Ø 40	Ø 40
Rotor Knives (pcs)	84	95	78	105
Counter Knives (pcs)	3 + 3	4 + 4	3 + 3	4 + 4
Drive Power (kW)	110	75 + 75	132	90 + 90
Hydraulic Power (kW)	5.5	5.5	7.5	11
Hopper Volume (litres)	2,650	3,500	3,000	4,000
Approximate Weight (kg)	11,000	16,720	14,000	18,000

Model	EcoShred 1SS-2800-A	EcoShred 1SS-1800-A	EcoShred 1SS-2400-A	EcoShred 1SS-3000-A
Dimension L / W / H (mm)	7,000 x 2,400 x 3,100	5,800 x 2,450 x 3,280	6,500 x 2,450 x 3,280	7,400 x 2,450 x 3,280
Hopper Inlet (mm)	3,200 x 1,450	2,300 x 1,450	2,900 x 1,450	3,500 x 1,450
Discharge Height (mm)	600	600	600	600
Ram Travel (mm)	1,000	1,000	1,000	1,000
Rotor Diameter (mm)	Ø 650	Ø 800		
Rotor Operation Length (mm)	2,750	1,800	2,400	3,000
Rotor Speed (rpm)	80	80	80	80
Screen (mm)	Ø 40	Ø 40	Ø 40	Ø 40
Rotor Knives (pcs)	118	105	124	156
Counter Knives (pcs)	5 + 5	3 + 3	4 + 4	5 + 5
Drive Power (kW)	110 + 110	110 + 110	132 + 132	160 + 160
Hydraulic Power (kW)	11	5.5	7.5	11
Hopper Volume (litres)	5,000	3,300	4,500	5,500
Approximate Weight (kg)	22,000	15,000	21,000	26,000

SICON Single Shaft Shredder / B-Serie



SICON Single Shaft Shredder / B-Series

Many possible Applications

B-Series Single Shaft Shredders are heavy duty reduction machines specifically designed for shredding a wide variety of untreated waste material streams down into either coarse or medium sized fractions. The powerful, wear resistant machine structure is well suited to demanding recycling tasks.



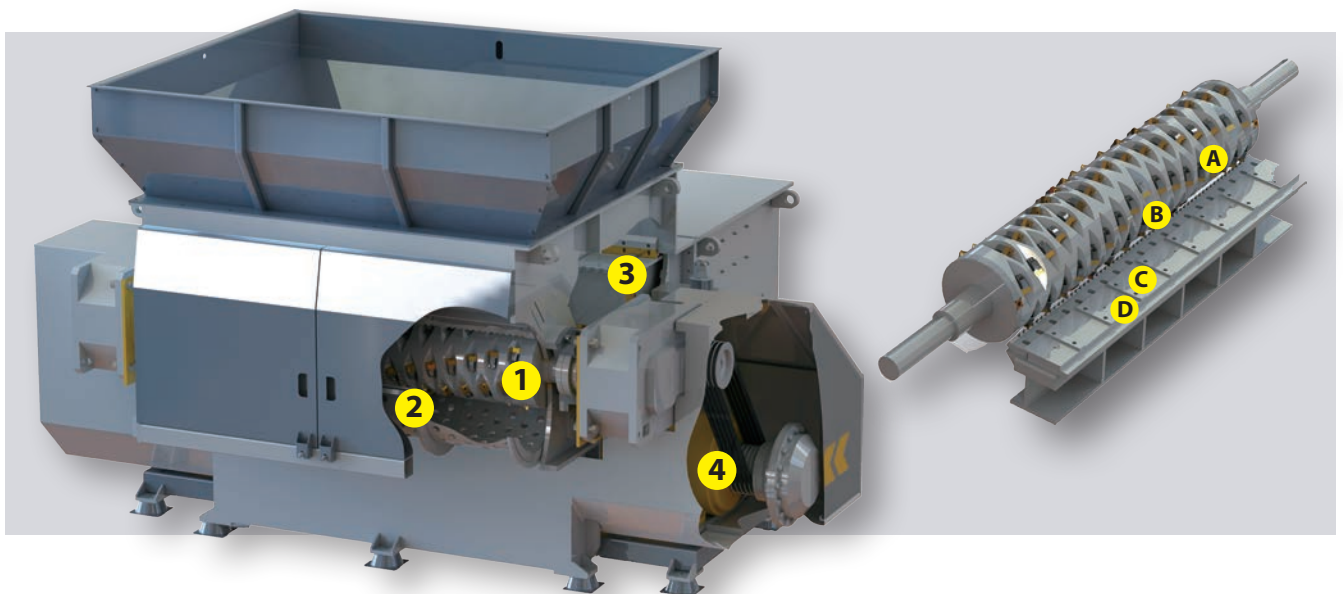
Typical applications for this heavy duty series of shredders includes:

- ▶ Municipal Waste (MSW)
- ▶ Industrial Waste (C&I)
- ▶ Beverage Cans (UBC's)
- ▶ Wood Waste (Pallets etc.)
- ▶ Plastics (Pipes etc.)
- ▶ Bulky Items (Mouldings etc.)
- ▶ Demolition Waste (C&D)
- ▶ Paper (Security Destruction)
- ▶ Alternative Fuels (SRF & RDF)



Sectional View & Explanation of Functions

The force feeding ram (3) pressurized by the hydraulic unit (5), forces the material to be processed against the rotor shaft (1) which is powered by the drive system (4). The rotor is equipped with multiple knife inserts (A), screwed into the knife supports (B). These rotating knives shred the material against the counter knives (C) as the rotor turns. Clearance between the rotor knives and counter knives can be maintained by loosening the counter knife fixing bolts and adjusting the position of the counter knife support screws (D). The shredded fractions, when small enough, fall through the classifier screen (2). Output product size is determined by the size of the holes in the classifier screens.





High Performance Rotor

- V-Cutting Rotor Design with staggered cutter positioning
- Heat Treated Rotor Knives, special DC53 steel (hardened) four edges use before replacement
- Long Life, Adjustable Counter Knives, cutter clearance can be maintained
- Wear Resistant Rotor (Optional), surface coating for abrasive applications



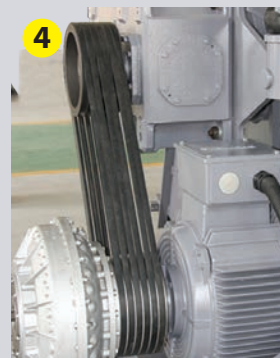
Classifier Screen

- Quick Change Screens, accurate particle size control
- Access Door Limit Switch, ensures safety of personnel
- Assisted Screen Opening, for easier access
- Various Screen Designs, specially developed screens for flexible materials such as films



Force Feeding Ram

- Segmented Shredding Chamber Floor, precision machined chamber base with adjustable/replaceable brass guides
- Ram Bypass Discharge Chute, material that passes by the ram seals is automatically discharged to a single collection point, protecting the rear mounted hydraulic power pack from dust & debris



Classifier Screen

- Powerful Electric Drive Motors, configured for Star/Delta starting
- Heavy Duty, Oversized Gearboxes, mounted directly on the rotor shaft
- Shock Absorption System, reduces stress on drive components
- Fluid Drive Coupling(s), improved performance and reduced current during start-up & reversals

Bearings

- High Quality, Oversized Shaft Bearings, spherical bearings mounted outboard from the cutting chamber to prevent product migration through the grease seals
- Integral Machined Bearing Housing ensures reliability and longevity of the bearings
- Rotor Shaft Cooling (Optional) water cooling of the rotor shaft through the bearing housing is possible

Hydraulic Power Unit

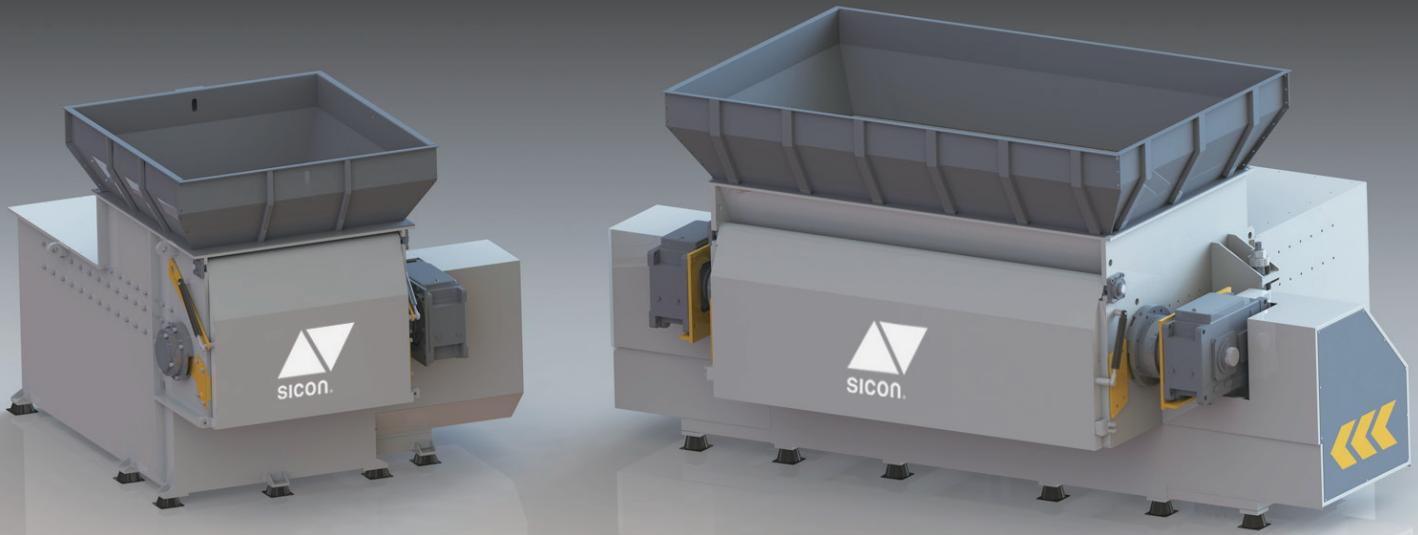
- Dual Speed Hydraulics, adjustable forward speed, and fast retraction of the force feeding ram to maximize machine throughput
- Integrated Oil / Air Blast Cooler, maintains the hydraulic oil temperature for continuous operation and prolonged service life
- Isolation Cover (Optional), prevents build up of dust and debris on system components to ensure effective cooling

Hydraulic Opening Design

- Hydraulic Powered Front Access Door, on request BH Series machines can be equipped with a hydraulic opening front access and screen supporting door. The single piece supporting door design provides quick and easy access to the classifier screen and blades during machine clean downs, and during maintenance

Electrical Control Panel

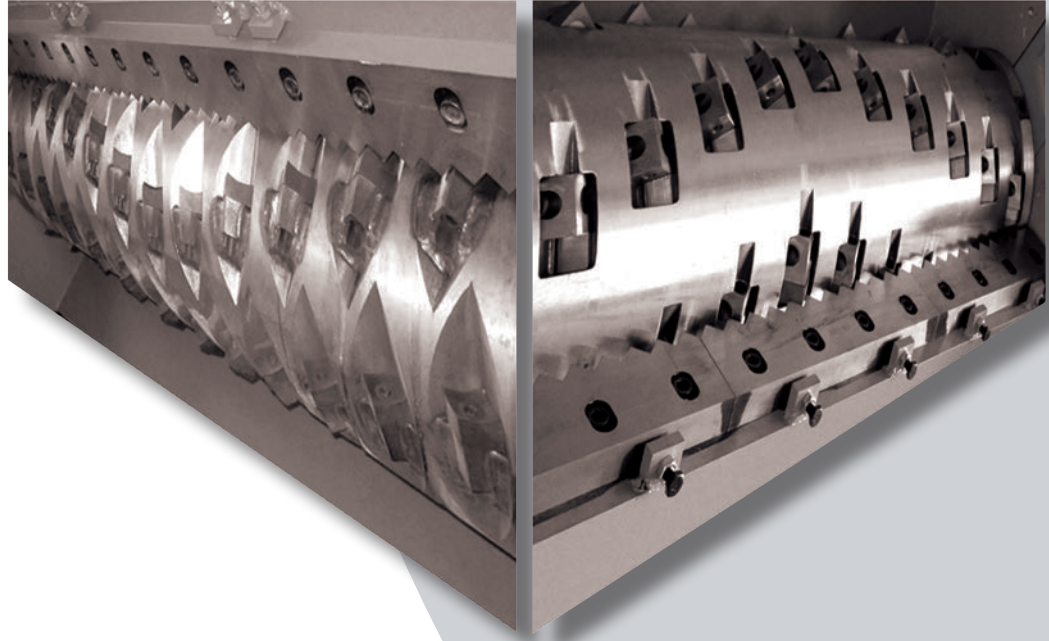
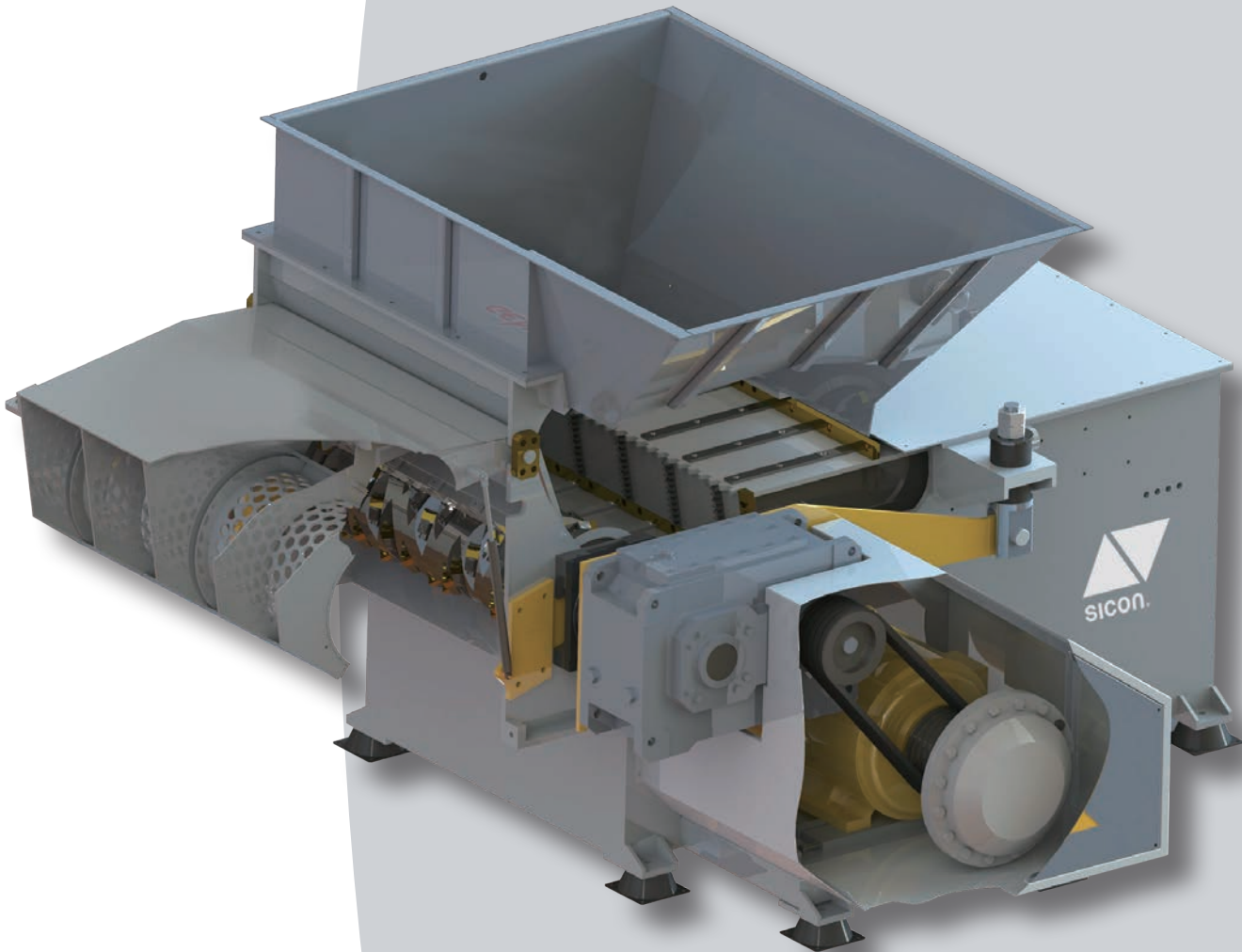
- Stand Alone Control Cabinet, incorporating Siemens PLC controller with integrated display, and readily available Schneider & ABB components
- Dual Mode Operation, "Manual" & "Automatic" modes for rotor motion and force feeding ram direction control
- Intelligent Programming, auto-reverse during overload scenarios & autosutdown when ran idle for prolonged periods



Model	EcoShred 15S-1500-B	EcoShred 15S-2000-B	EcoShred 15S-1700-B	EcoShred 15S-2200-B
Dimensions L / W / H (mm)	3,700 x 2,880 x 2,530	3,700 x 4,150 x 2,530	4,100 x 3,100 x 2,750	4,100 x 4,560 x 2,750
Hopper Inlet (mm)	1,400 x 1,500	1,400 x 2,000	1,970 x 1,650	1,970 x 2,200
Discharge Height (mm)	720	720	630	630
Ram Travel (mm)	1,100	1,100	1,100	1,100
Rotor Diameter (mm)	Ø 480		Ø 650	
Rotor Operation Length (mm)	1,500	2,000	1,650	2,200
Rotor Speed (rpm)	80	80	80	80
Screen (mm)	Ø 40	Ø 40	Ø 40	Ø 40
Rotor Knives (pcs)	84 + 6	95 + 6	78 + 6	105 + 6
Counter Knives (pcs)	3 + 3	4 + 4	3 + 3	4 + 4
Drive Power (kW)	90	55 + 55	132	90 + 90
Hydraulic Power (kW)	7.5	11	7.5	15
Hopper Volume (litres)	3,850	5,027	5,610	7,110
Approximate Weight (kg)	11,100	14,460	12,800	17,000

Model	EcoShred 15S-2800-B	EcoShred 15S-1800-B	EcoShred 15S-2400-B	EcoShred 15S-3000-B
Dimensions L / W / H (mm)	4,100 x 5,100 x 2,750	4,000 x 4,100 x 2,850	4,000 x 4,700 x 2850	4,000 x 5,400 x 2,850
Hopper Inlet (mm)	1,970 x 3,200	2,300 x 2,100	2,300 x 2,800	2,300 x 3,400
Discharge Height (mm)	630	630	630	630
Ram Travel (mm)	1,100	1,100	1,100	1,100
Rotor Diameter (mm)	Ø 650	Ø 800		
Rotor Operation Length (mm)	2,750	1,800	2,400	3,000
Rotor Speed (rpm)	80	80	80	80
Screen (mm)	Ø 40	Ø 40	Ø 40	Ø 40
Rotor Knives (pcs)	118 + 6	105 + 6	124 + 6	156 + 6
Counter Knives (pcs)	5 + 5	3 + 3	4 + 4	5 + 5
Drive Power (kW)	110 + 110	90 + 90	132 + 132	160 + 160
Hydraulic Power (kW)	15	11	15	15
Hopper Volume (litres)	8,000	7,500	7,400	9,100
Approximate Weight (kg)	21,000	16,000	20,000	27,000

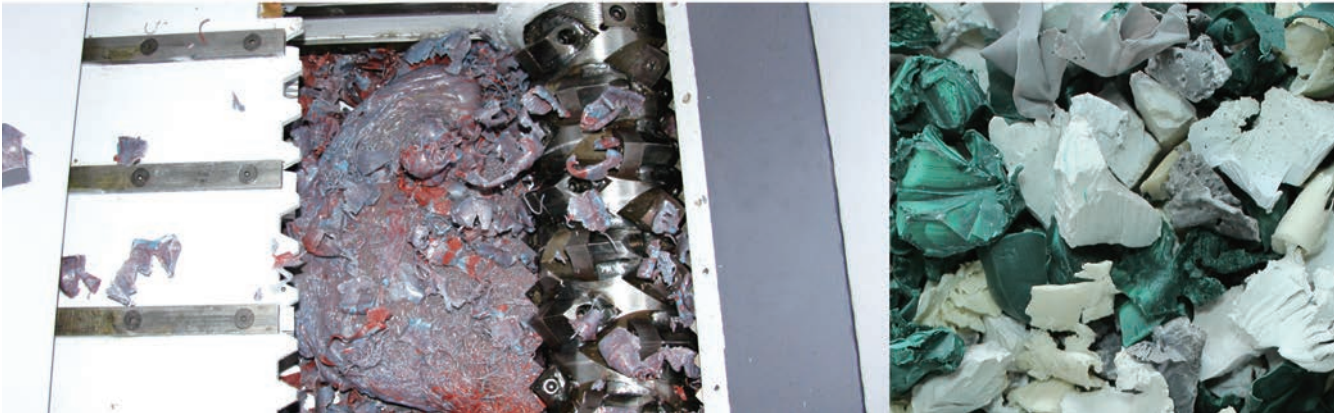
SICON Single Shaft Shredder / C-Serie



SICON Single Shaft Shredder / C-Series

Many possible Applications

C-Series Single Shaft Shredders are small - medium size reduction machines suitable for processing a wide range of materials to a uniform particle size. The output products created can often be sold as is, or be sent for further processing through additional equipment (granulators briquetters etc). Throughputs typically range between 300kg/hr – 5,000kg/hr+ depending on the machine model, material type, screen size and application.



Shaft Shredders are small - medium size reduction machines suitable for processing a wide range of materials to a uniform particle size. The output products created can often be sold as is, or be sent for further processing through additional equipment (granulators briquetters etc). Throughputs typically range between 300kg/hr – 5,000kg/hr+ depending on the machine model, material type, screen size and application.

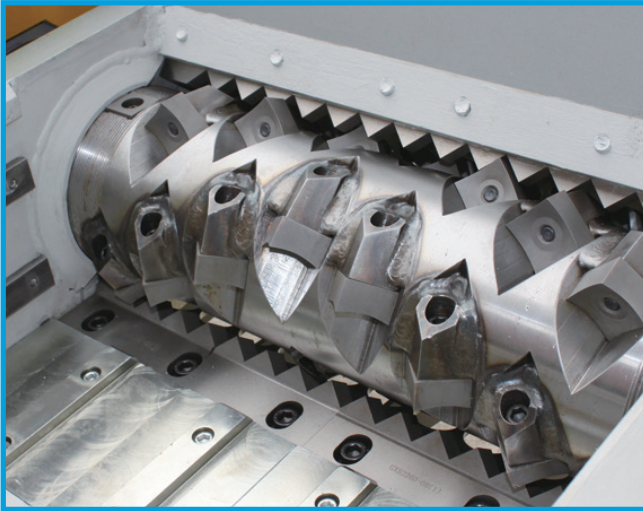


Typical applications for this versatile range of shredders:

- Plastics – Mouldings, Purgings / Lump, Profiles, Films etc.
- Timber / Wood – Pallets, Joiners Waste, Green Waste etc.
- Paper & Cardboard – Confidential Documents, Production Waste, Packaging Materials etc.
- Copper – Household, Automotive, Telecoms and Industrial Cables including S.W.A
- Aluminum - Used Beverage Cans (UBC's), Swarf, Cables etc.
- Textiles – Carpet (Rolls & Tiles), Garments etc.
- Security Destruction – Counterfeit Items, Faulty Goods, Out of Date Stocks etc.
- Foams – Production Waste, Insulation Materials, Product Fillings etc.

Rotor

- V-Cutting Rotor Design with staggered cutter positioning
- Heat Treated Rotor Knives special DC53 steel (hardened) four edges use before replacement
- Long Life, Adjustable Fixed Blades cutter clearance can be maintained
- Wear Resistant (Optional) tungsten surface coating for abrasive applications



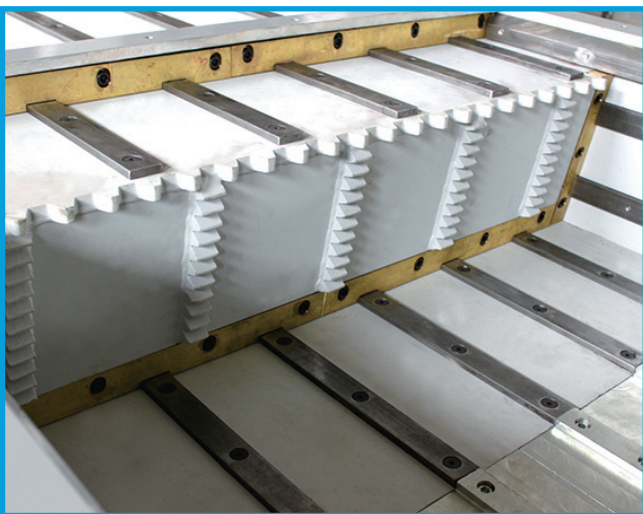
Classifier Screen

- Quick Change Screens accurate particle size control
- Access Door Limit Switch ensures safety of personnel
- Assisted Screen Opening on V800+ models for easier access
- Various Screen Designs specially developed screens for flexible materials such as films



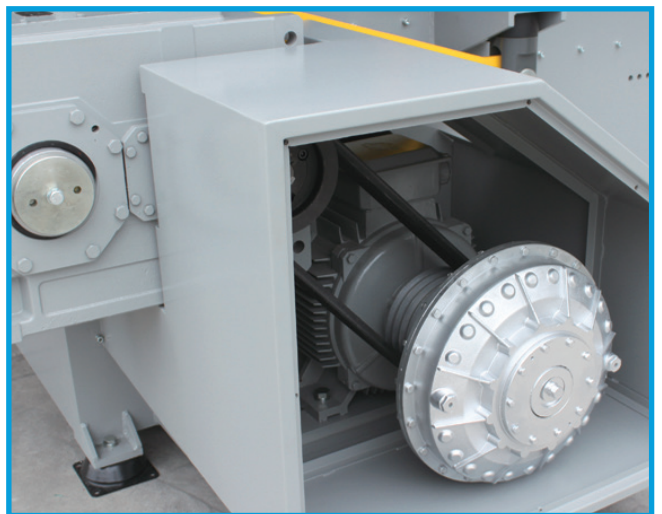
Force Feeding Ram

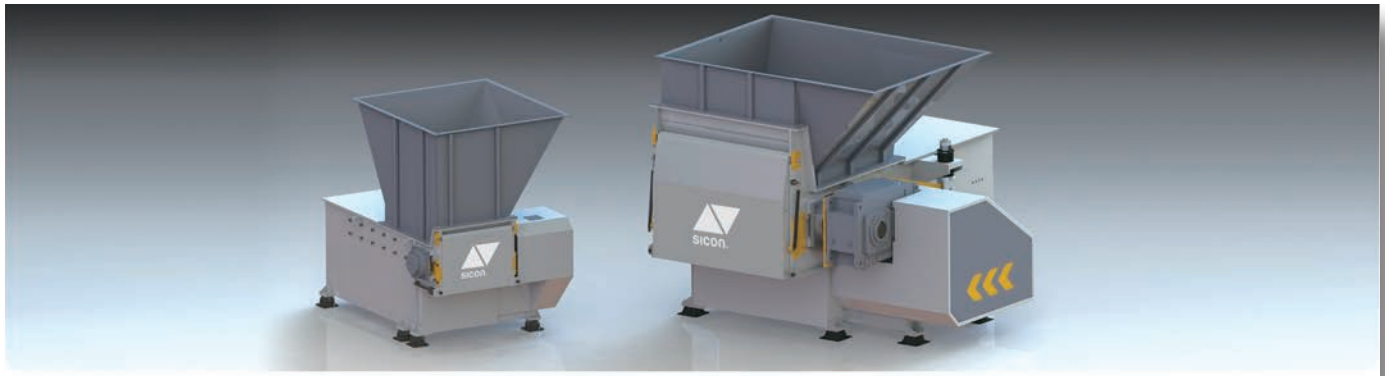
- Segmented Shredding Chamber Floor for precision machined chamber base with adjustable / replaceable brass guides
- Ram Bypass Discharge Chute material that passes by the ram seals is automatically discharged to a single collection point, protecting the rear mounted hydraulic power unit from dust & debris



Driving System

- Powerful Electric Drive Motors configured for Star/Delta starting
- Heavy Duty, Oversized Gearboxes mounted directly on the rotor shaft
- Shock Absorption System reduces stress on drive components
- Fluid Coupling (V1200 & V1500 Models) improves performance and reduces current during start-up & reversals





Model	EcoShred 1SS-500-C	EcoShred 1SS-600-C	EcoShred 1SS-800-C
Dimension L / W / H (mm)	1,820 x 1,200 x 1,730	1,820 x 1,300 x 1730	2,800 x 1,780 x 2,080
Hopper Inlet (mm)	660 x 500	660 x 600	1,080 x 800
Discharge Height (mm)	490	490	565
Ram Travel (mm)	500	500	815
Rotor Diameter (mm)	Ø 220		Ø 400
Rotor Operation Length (mm)	500	600	800
Rotor Speed (rpm)	80	80	80
Screen (mm)	Ø 40	Ø 40	Ø 40
Rotor Knives (pcs)	19 + 4	23 + 4	35 + 4
Counter Knives (pcs)	2 + 2	2 + 2	2 + 2
Drive Power (kW)	15	18.5	37
Hydraulic Power (kW)	2.2	2.2	3.75
Hopper Volume (litres)	490	670	1,220
Approximate Weight (kg)	1,500	1,650	3,980
Model	EcoShred 1SS-1000-C	EcoShred 1SS-1200-C	EcoShred 1SS-1500-C
Dimension L / W / H (mm)	2,800 x 1,980 x 2,080	2,800 x 2,500 x 2,130	2,800 x 2,750 x 2,130
Hopper Inlet (mm)	1,080 x 1,000	1,080 x 1,200	1,080 x 1,400
Discharge Height (mm)	565	565	565
Ram Travel (mm)	815	815	815
Rotor Diameter (mm)	Ø 400		
Rotor Operation Length (mm)	1,000	1,200	1400
Rotor Speed (rpm)	80	80	80
Screen (mm)	Ø 40	Ø 40	Ø 40
Rotor Knives (pcs)	45 + 4	55 + 4	78 + 4
Counter Knives (pcs)	2 + 2	3 + 3	3 + 3
Drive Power (kW)	45	55	75
Hydraulic Power (kW)	3.75	5.5	5.5
Hopper Volume (litres)	1,440	1,660	1,880
Approximate Weight (kg)	4,290	5,300	6,680

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