

PRODUCT GUIDE

2013



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Introduction



Welcome to the all-new GreenMech catalogue! We are delighted to showcase our range of world-class wood chippers and shredders in this brand-new format at the beginning of a special anniversary year for us. In July 2013, GreenMech celebrated the double milestone of 20 years manufacturing wood chippers and Chairman Tony Turner's 50 years in engineering.

Tony formed GreenMech Ltd in 1993 to design, manufacture and market a British range of wood chippers and shredders to professional arborists, landscapers, contractors and local authorities across the world. Over the last two decades, GreenMech has successfully developed a unique and innovative range of professional machines which are now exported to 28 countries. Among many significant achievements are a prestigious Queen's Award for International Trade in 2005 and a second for Innovation in 2009.

Very much a family-run enterprise, in 2002, GreenMech was joined by Tony's son Jonathan in the role of Managing Director. Following that, Jonathan's cousin David Turner became Operations Director and now Tony's grandchildren, Guilhem and Emma Pages-Turner head up the French side of the company. These two represent the third generation of the Turner family to become involved in this award-winning business.

Since 2007, our Midlands-based factory site has expanded by 50 per cent and we now employ over 60 people including three new engineering apprentices. Export sales have doubled since the financial crash of 2008 and, in tandem with that rise, our world-wide sales and support service, through appointed dealerships across four continents, continues to flourish.

We are passionate supporters of British manufacturing and work proactively with our regional Chamber of Trade & Commerce to lobby the UK government on its behalf. Since 2006 GreenMech have partnered with the UK Health & Safety Executive in their 'Buy Quiet' campaign to reduce workplace noise emissions.

Jonathan Turner says:

"We are proud of our achievements over the last 20 years and are feeling positive and excited about the future. We look forward to improving and developing our products and, above all, keeping our customers happy."



GreenMech
Celebrating
20 YEARS
1993-2013
of chippers & shredders

Turner Engineering
Celebrating
50 YEARS
1963-2013
of innovative engineering

Innovative Engineering

We have a proud heritage of ground-breaking inventions

GreenMech has been creating industry standards for 20 years and constantly brings new ideas to wood chipper production. Our reputation for innovation goes back fifty years to when Tony Turner invented the world's first hydraulic flail mower in 1963.

From dialogue with customers and dealers, ideas are fed to our design and development team who then turn them into reality. The result of this collaboration has been a number of ground-breaking products that allow for safer, faster and less noisy operation.

From the development of quieter machines to the award-winning SAFE-Trak and the revolutionary Disc-Blade cutting system, all have ultimately added value to our customers.

The original SAFE-Trak extension system

In 1999, at the request of several customers, GreenMech produced the UK's first tracked wood chipper. At the time we thought the market would be small, but we were wrong, as significant UK and European sales followed.

Designed on a conventional track carrier - similar to that of mini excavators - we soon found out the limitations and frequently found ourselves stuck on top of tree stumps and unable to climb slopes due to either instability or restrictions with oil flows to the engine.

After further years of research and development, the SAFE-Trak was launched in 2006. This brand-new design broke the mould because it was the first chipper that was both tracked and narrow – increasing accessibility – but which could safely operate on slopes and embankments.

Since its introduction into the professional arb world, the SAFE-Trak has become one of the most popular models in the GreenMech range. A particular favourite with de-veg contractors who work to maintain highways, power lines and railway networks, the SAFE-Trak has the capacity to go virtually anywhere.

Its innovative patented track-extension system extends each track independently to give up to 550mm ground clearance, enabling it to access the most difficult terrain. By extending only one track, slopes up to 35° can be traversed in complete safety, allowing the chipper to be closer to the job in hand, saving both time and money.

One of the SAFE-Trak models has the option to have the rubber tracks fit neatly under the chipper body so that when fully retracted the SAFE-Trak's minimum width is only 740mm, allowing it to fit through a standard 760mm gateway.



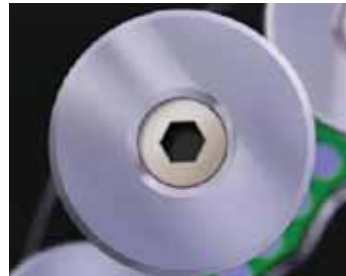
The revolutionary Disc-Blade chipping system

The vulnerability of conventional straight blades, highlighted by rental companies, when contaminants such as soil and nails are inadvertently introduced into the chipper, means that users often find that sharpening and even the replacement of blades become necessary all too frequently.

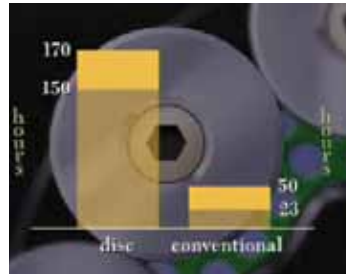
Following the introduction of the Disc-Blade system in 1995 these issues have been greatly reduced. As a result, these pioneering round blades are now the preferred choice with many contractors. Unless requested, all GreenMech hydraulic machines are fitted with Disc-Blades as standard.

Reasons to choose Disc-Blades over conventional blades

- Significant cost savings
- 600% more blade life
- Reduction in noise emissions
- Less power requirement
- Less maintenance



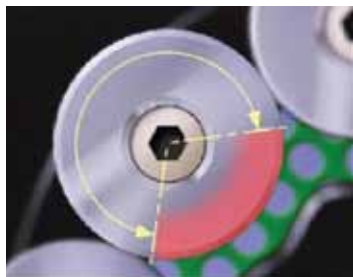
By loosening the retaining bolt, the Disc-Blades can be rotated in either direction. If damage occurs to the blade through insertion of contaminants such as stones or nails, the damaged section can simply be positioned away from the cutting area.



Conventional straight blades are more susceptible to damage and therefore will need to be replaced more frequently for optimal performance. When sharpened and refitted, the distance between the anvil and blade also needs to be adjusted. This does not apply to Disc-Blades, as they are sharpened from the rear so the front face does not alter and the gap remains constant.



The Disc-Blade system, with its slicing action as opposed to chopping, is 1.5dB quieter than conventional straight blades, according to data obtained from the recognised standard noise test for wood chippers. It is worth noting that for every 3dB reduction in noise emissions the sound pressure on the ears is reduced by a massive 50 per cent.



When the Disc-Blades are used, only 30 per cent of their circumferences come into contact with the woody material, hence the blades can be turned to the next sharp section when the edge has worn. This allows the blades to be turned twice before they need to be re-sharpened, in essence giving you three blades in one.

Operating cost comparisons from figures given to us by a ChipMaster 220 user compared to his experience with a competitor's machine of similar size.

Annual saving using Disc-Blades based on 450 hours chipping:

	Normal Blade	Disc-Blade
Sharpen:	15 @ £50 = £750	3 @ £50 = £150
Remove & Re-fit:	15 x 1 hour = £150	3 x 1 hour = £30
Rotate Blades:	6 x ½ hour = £30	
New Blades:	2 x sets = £500	½ x set = £135
Total cost:	£1400	£345
		Total saving: £1055

Manufacturing Process

Choosing GreenMech means investing in British engineering and skills

Over the last two decades GreenMech has revolutionised the world of wood chippers with numerous innovations in design and technology. In order to do this we have consistently invested in the most up-to-date manufacturing processes to bring a superlative range of quality and value-for-money products to the chipper market.

From a CAD design system, through to the precision of a laser cutter and powder coat system, this investment has allowed our design and manufacturing team to put our customers' ideas into reality.

We are passionate about British engineering and proud to produce the vast majority of component parts at our manufacturing headquarters based in the Midlands. Through fabrication to assembly, from the discharge chute to the steel chassis, a GreenMech wood chipper is created supporting British jobs and British manufacturing.

We are proud of our growth and expansion over the last two decades, and are secure in the knowledge that we are one of the largest chipper manufacturers in Europe. Engineering has been the backbone of the Midlands' economy for more than a century and at GreenMech we are confident we will continue to play a part in its resurgence.



ISO9001 accreditation

GreenMech are proud to be an ISO9001-accredited company giving you the knowledge that the machines you buy are manufactured by a British company to a high-quality international standard.



Environmental credentials

GreenMech prides itself on engineering for a greener environment. Our wood chippers and shredders are designed to help keep as much green waste as possible out of landfill by turning woody waste into a useable asset. As a manufacturing company we are conscious of re-using as many resources as possible, so all our metal off-cuts, waste oil, cardboard and paper are recycled.



Three-stage paint system

All metal components manufactured in-house go through a vigorous three-stage paint process which involves shot blasting, powder prime and powder coating. Each part is then subject to oven curing, which exceeds the industry-accepted 1000-hour salt spray test.

Bespoke corporate colours

Unlike other chipper manufacturers, GreenMech has the capability to produce machines in your organisation's own livery colours. Please talk to us about this bespoke service that we are able to offer.



Standard Features List

GreenMech - Setting a new standard

Wide infeed chute

All models come with a large infeed chute for easy disposal of awkward bushy brush.



Letterbox opening*

A letterbox throat enables heavily forked branches and brush to be easily processed, resulting in a significant reduction in the number of chainsaw cuts per day and making the job safer whilst saving you time and money.



Outstanding Disc-Blade system**

As standard our professional wood chipper range comes fitted with our patented, Disc-Blade system which can give up to 120 hours chipping before re-sharpening and up to 900 hours before replacement.

We also recognise that many traditionalists prefer to use straight blades as standard on their machines, therefore GreenMech have developed a flywheel that will accept either the reversible straight blades or Disc-Blade options. Please note that this special flywheel applies to the Arborist and Quad range only.



No-Stress control and hydraulic feed rollers**

GreenMech offer either twin vertical or twin horizontal hydraulic feed rollers to powerfully crush woody material. These are governed by the advanced No-Stress control system, giving effective throughput management which helps prevent blockages.



Powerful engine

A varied choice of world-class engine makes such as Kubota, Briggs & Stratton, Yanmar and Honda, provides flexibility for each end-user to have a power source and fuel type that matches each application and budget.



Control bar

There are two allowed standards for wood chipper control bars under the current safety legislation which are governed by the height of the lowest edge of the infeed chute measured from the ground when the machine is on a level surface. We manufacture machines which fit into both categories.

If the height of the lower edge of the infeed chute is more than 600mm from the ground, the machine requires a bottom and side control bar. If the lower edge height of the infeed hopper is less than 600mm from the level ground, only a top and side control bar is required. The elimination of the bottom bar helps reduce any nuisance tripping when brush is pulled in for processing.

The reset facility can be controlled either mechanically, by a lever on either side of the infeed chute, as on the Arborist 19-28 and ChipMaster 220, or electrically controlled as on the Arborist 130, 150 and QuadChip 160.



Versatile discharge chute*

A 280-degree rotation on the discharge chute allows it to be positioned to discharge in the safest place and then be repositioned for transportation.



Homologation**

All of GreenMech's road tow wood chippers and bespoke trailers come with a Certificate of Conformity to show they are fully homologated and compliant with the European Whole Vehicle Type Approval (ECWVTA) legislation.



Outstanding paint quality

All metal components manufactured in-house by GreenMech go through a vigorous three-stage paint technique which we are proud to state exceeds the 1000-hour salt spray test. To achieve this exacting benchmark we shot blast, powder prime and powder coat each metal panel which is then subjected to oven curing.

This process enhances the build quality and helps keep the machine looking good and retain a good second-hand value for years to come.



* does not apply to ChipMaster 220, Eco 150 TMP or EcoCombi 150

** does not apply to CS 100

Why it's good to Buy Quiet



Wood chippers are some of the noisiest machines working in the urban environment and because of this, GreenMech have long been at the forefront of the technological drive to engineer quieter machines. For several years we have also been keen supporters of the UK Health & Safety Executive's **Buy Quiet** campaign to highlight issues around noise-induced hearing loss in the workplace.

As a result of our ongoing mission, we have produced probably the quietest chippers on the market, achieved in part thanks to the Disc-Blades, the insulated steel chassis that protects the engine, and a novel means of extracting the hot air and exhaust heat from the acoustic engine housing via the chipper chamber.

All new products developed by GreenMech since 2006 have incorporated significant noise reduction features but the noise level on the latest Arborist range is 115dB offering a significant reduction on comparative models.

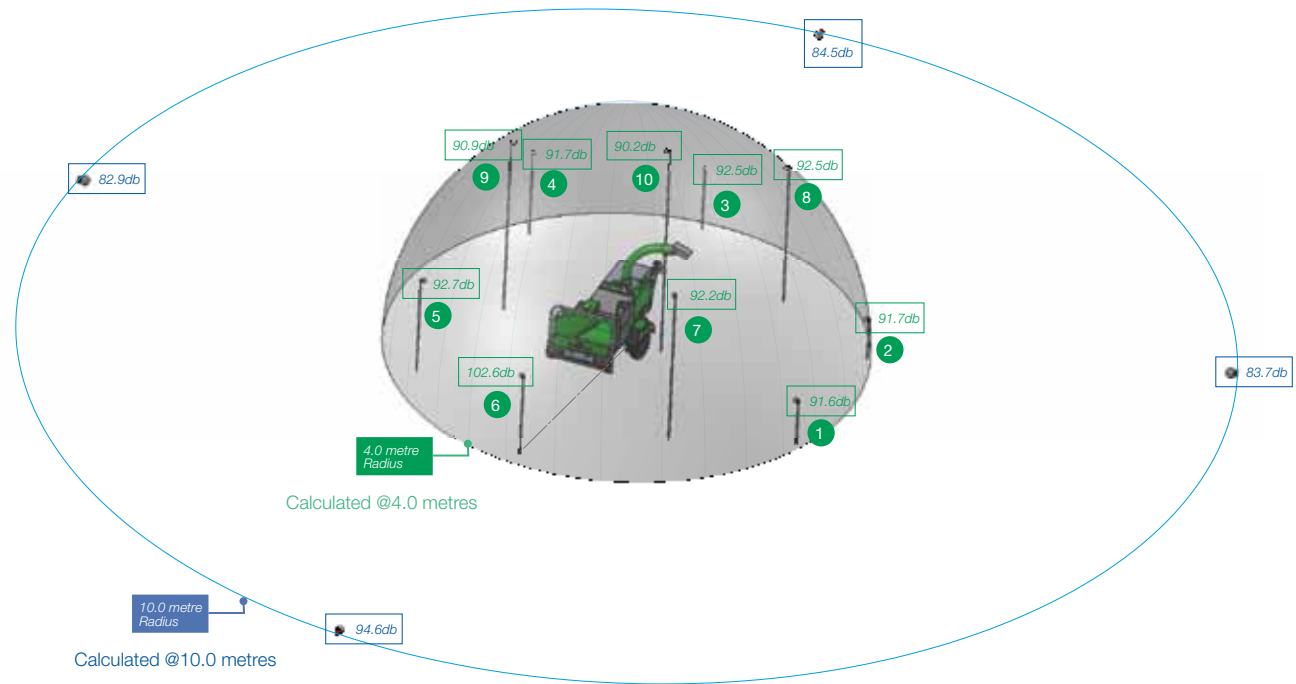
Tony says:

"Greentech will continue to implement design features that will lower noise emissions and ensure that correct and clear noise emission data is available in our sales and technical literature. We expect to achieve further reductions in the future."

Wood chipper sound levels are required by EU safety standards

LHS - Sound measurements taken chipping 2.0m lengths of pine 8-10cm in diameter

RHS - 10 microphones arranged in a sphere around an Arborist 150, measuring sound levels simultaneously, produced a total Sound Power of Lw(A) 115dB.



Noise is measured in decibels (dB)

0 dB is the quietest sound the human ear can detect
 10 dB is a 10 times increase in sound energy
 60 dB is a million times higher than 0 dB
 Lw(A) dB is the total Sound Power in dB radiating from the source.

Note:
 Every 3 dB reduction halves the Sound Power
 Every 3 dB increase doubles the Sound Power

Worried about your hearing? For more information go to www.hse.gov.uk/noise/worried

Quick Reference Guide

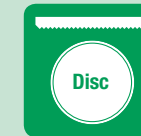
Which machine works best for you?

Key: Standard ✓ Option ○

Capacity	Model	Type	Engine					Cutting Blade Type				Feed Mechanism		
			Petrol			Diesel		Disc	Square*	Duo**	Straight	Hydraulic	Gravity	
			16hp	18hp	23hp	26hp	34hp	50hp						
100mm	CS 100	Pedestrian	○	○								✓		✓
	CS 100 TMP	Pedestrian										✓		✓
130mm	Arborist 130	Road Tow			✓				✓		○		✓	
150mm	Arborist 150	Road Tow				○	○		✓		○		✓	
	ArbTrak 150	Tracked					✓		✓		○		✓	
	Eco 150 TMP	Tractor-mounted							✓				✓	
	EcoCombi 150	Road Tow					✓		✓				✓	
160mm	QuadChip 160	Road Tow					✓		✓		○		✓	
	QuadTrak 160	Tracked					✓		✓		○		✓	
	SAFE-Trak 16-23	Tracked					✓		✓				✓	
190mm	Arborist 19-28	Road Tow						✓	✓				✓	
	SAFE-Trak 19-28	Tracked						✓	✓				✓	
220mm	ChipMaster 220	Road Tow						✓	✓				✓	
	ChipMaster 220 TMP	Tractor-mounted							✓				✓	

* Square Blades have 4 sharpened edges ** Duo Blades have 2 sharpened edges

Icon Key



Disc Blade



Straight Blade



Capacity
9" • 220mm

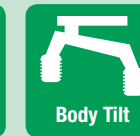


Throat Dimension



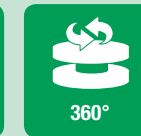
Power: 117dB
Pressure: 92dB

Noise Values



Body Tilt

Tilting Body



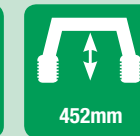
360°

Turntable



SAFE Trak

Safe-Trak



452mm

Ground Clearance



860kg

Weight



60-80hp

TRACTOR MOUNTED

Tractor-mounted

CS 100

Key features

- 100mm chipping capacity
- 16hp or 18hp B&S Vanguard V-Twin petrol engine
- Twin reversible chipping blades
- Adjustable discharge chute
- Optional dedicated trailer
- From 195kg weight



Scan to watch me in action



Powerful, effective & value for money

The compact gravity feed chipper that copes with all tasks

Designed with the professional Landscaper, Arborist or Parks Manager in mind, the CS 100 makes easy work of a wide range of wood waste and vegetation. Compact and easy to move, this powerful workhorse combines versatility with economy making it the ideal chipper for big jobs in small spaces.

Its impressive chipping ability for timber up to 100mm in diameter is provided by twin long-life reversible blades made of high grade steel that can be easily re-sharpened, thus helping to ensure low running costs.

The wide, open design of the infeed chute enables large volumes of bushy material to be processed with minimal snedding/reducing, saving you time and money. A powerful centrifugal force with the help of a deflector plate ejects the wood chip out of the discharge chute. Three positions on the discharge head along with the adjustable deflector allow the operator to chip into the required direction and up to 5m.

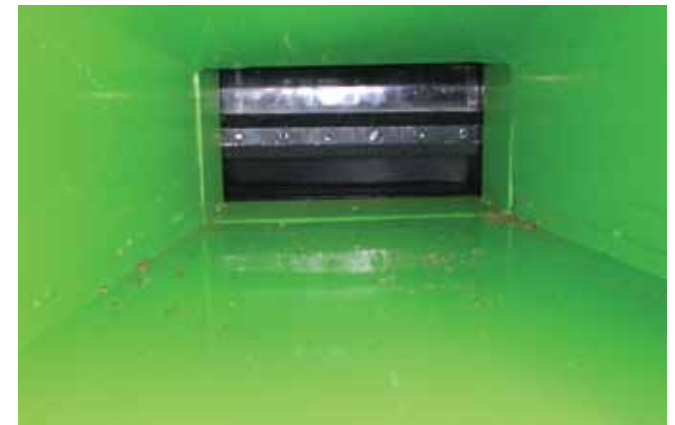
The CS 100 has the option of being transported in the back of a van or on its own bespoke trailer. At only 760mm wide it easily gets into tight spaces and through restricted access such as back gardens, making it perfect for 'on-the-spot' chipping.

Fabricated from sheet steel at our Warwickshire manufacturing headquarters, this robust chipper is unquestionably built to last. Our exacting engineering standards coupled with top quality paint finish ensure it will stand up to the rigours of daily use and keep its looks and value for years to come.



I just love my CS 100. It's been brilliant!

Max Jeleco, MJ Rural Services, UK



For your local GreenMech dealer call: **01789 400044** or visit **www.greenmech.co.uk**

CS 100 TMP

Key features

- 100mm chipping capacity
- 15hp to 30hp tractor requirement
- Twin reversible chipping blades
- Adjustable discharge chute
- 195kg weight



Scan to watch
me in action



15-30hp

TRACTOR MOUNTED

Straight



Power: 118dB
Pressure: 94dB



4" • 100mm



195kg

For strength, efficiency and safety

The ideal partner for your compact tractor

The CS 100 TMP is an ideal chipper for customers such as golf courses and private estates when it comes to tidying up waste brush from tree and shrub pruning. Designed to suit compact tractors of between 15hp to 30hp and powered by the tractor's PTO shaft, this means of course that there is no additional engine to buy and service.

The wide infeed throat of 315mm x 160mm allows for the processing of solid timber of up to 100mm in size but, more importantly, in combination with the large chute, the CS 100 TMP is capable of taking in armfuls of bushy material.

For easy maintenance, the reversible chipping blades are housed within a removable cassette. Three positions on the discharge head allow the chip to be projected into the required direction up to a distance of 5m.

For smaller tractors without 3-point linkage, the CS 100 TMP can be trailed with its own drawbar and simply powered by the tractor's PTO shaft.





For your local GreenMech dealer call: **01789 400044** or visit **www.greenmech.co.uk**

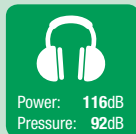
Arborist 130

Key features

- 150mm chipping capacity
- 23hp Briggs & Stratton or Honda petrol engine
- Disc-Blade chipping technology
- Twin hydraulic feed rollers
- No-Stress power control
- 670kg weight



Scan to watch
me in action



Compact without compromise

The low cost entry point for a hydraulic chipper

The compact Arborist 130 is a simple-to-use and cost-effective road tow chipper designed in traditional in-line format. A member of the popular Arborist range, it has been specifically engineered for disposal of waste brush, as over the last few years an increase in the market for firewood means that useable wood is kept for log production.

With a choice of either a 23hp B&S or Honda petrol engine, the Arborist 130 is value-engineered for quality, performance and economy. Fabricated with a deep-beam high tensile steel chassis construction for strength, the engine is protected by insulated steel panels giving robustness and lower noise emissions. These panels are designed to be easily removed, enabling good access for routine care and maintenance.

A generous 970mm x 790mm infeed hopper which aids bushy brash reduction, coupled with a 150cm x 230cm letterbox-style throat enables heavily forked branches to be fed in easily. This reduces the number of chainsaw cuts by hundreds per day, and thereby increases output.

The twin vertical hydraulic rollers efficiently crush the material with minimal lateral movement. The electronically controlled No-Stress feed system reverses the feed rollers to relieve the chipper blades, allowing the rotor speed to recover quickly, once again increasing output.

As standard the Arborist 130 comes fitted with our patented Disc-Blade system which gives up to 150 hours of chipping before requiring re-sharpening. Since we recognise that some traditionalists prefer to use straight blades on their machines, the Arborist 130 flywheel will accept either Disc-Blade or straight blade options.





For your local GreenMech dealer call: **01789 400044** or visit **www.greenmech.co.uk**

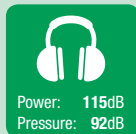
Arborist 150

Key features

- 150mm chipping capacity
- 26hp or 34hp Kubota diesel engine
- Disc-Blade chipping technology
- Twin hydraulic feed rollers
- No-Stress power control
- Sub 750kg weight



Scan to watch
me in action



The everyday chipper that ticks all the boxes

Value-engineered for strength, performance and economy

The popular Arborist 150 is a simple-to-use and cost-effective road tow chipper designed in a traditional in-line format. Part of GreenMech's much-admired Arborist range, the Arborist 150 has been particularly designed for disposal of waste brush, as an increase in the market for firewood means that useable wood is kept for log production.

With a choice of either a 26hp or 34hp Kubota diesel engine, the Arborist 150 is value-engineered for quality, strength, performance and economy. Designed with a deep-beam high tensile steel chassis construction for strength, the Kubota engine is protected by insulated steel panels providing robustness and lower noise emissions. These panels are designed to be easily removable enabling good access for routine maintenance.

A generous 970mm x 790mm infeed hopper which aids bushy brush reduction, coupled with a 150mm x 230mm letterbox-style infeed throat opening enables heavily forked branches to be fed in easily. This has the effect of reducing the number of chainsaw cuts by hundreds per day and thereby increases output.

The twin vertical hydraulic rollers efficiently crush woody material with minimal lateral movement. The electronically controlled No-Stress feed system reverses the feed rollers to relieve the chipper blades, allowing the rotor speed to recover quickly, once again increasing output.

As standard, the Arborist 150 chipper comes fitted with our patented Disc-Blade system, giving up to 150 hours of chipping before requiring re-sharpening. Since we recognise that some traditionalists prefer to use straight blades on their machines, the Arborist 150 flywheel will accept either Disc-Blade or straight blade options.





For your local GreenMech dealer call: **01789 400044** or visit **www.greenmech.co.uk**

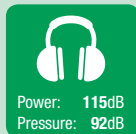
ArbTrak 150

Key features

- 150mm chipping capacity
- 34hp Kubota diesel engine
- Disc-Blade or straight blade chipping technology
- No-Stress power control
- Twin vertical hydraulic feed rollers
- High speed track system
- 1046kg weight



Scan to watch me in action



The ArbTrak goes where your truck can't

Designed to get to those hard-to-reach locations

The ArbTrak 150 is one of GreenMech's Arborist range of wood chippers, launched in 2012 to universal acclaim from dealers and end-users alike. Built to effortlessly get to all those hard-to-reach locations, you can rely on this popular tracked chipper to get to the job in hand.

Value-engineered with a deep-beam high tensile steel chassis construction for strength, performance and economy, this in-line chipper is simple and cost-effective to use. Insulated steel panels protect the powerful 34hp Kubota diesel engine, offering robustness and, importantly, noise emission reduction. These are designed to be easily removed, enabling quick access for routine maintenance.

As standard the ArbTrak 150 comes fitted with our patented Disc-Blade system which gives up to 150 hours chipping before requiring re-sharpening. We also recognise that some traditionalists prefer to use straight blades on their machines, hence this model has a flywheel that will accept either Disc-Blade or straight blade options.

A wide 970 x 790mm infeed chute allows for bushy brush reduction and a 150mm x 230mm wide letterbox-style infeed throat opening makes light work of heavily forked branches. This capability reduces the number of chainsaw cuts per day, thereby increasing output, saving you both time and money.

The twin vertical hydraulic rollers efficiently crush the material with minimal lateral movement. The control box and reset button are located in a safe and convenient place on top of the infeed chute for easy access and simplicity of use.

The electronically controlled No-Stress feed system reverses the feed rollers to relieve the chipper blades, allowing the rotor speed to recover quickly, yet again increasing output.

High ground clearance at 274mm allows for easy access to site over rough terrain. A fold-out platform gives you the option when tracking long distances to walk behind the machine or to stand on it. A fast tracking speed of 3 kph allows the operator to get to the job quickly.





For your local GreenMech dealer call: **01789 400044** or visit **www.greenmech.co.uk**

Eco 150 TMP

Your mid-range choice for compact tractors

Key features

- 150mm chipping capacity
- 25-45hp tractor requirement
- Disc-Blade chipping technology
- Spring-tensioned twin feed rollers
- No-Stress power control
- Off-set infeed loading
- 490kg weight

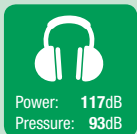


25-45hp

TRACTOR MOUNTED



Disc



Power: 117dB
Pressure: 93dB



6" • 150mm



490kg

The compact tractor-mounted chipper designed with safety in mind

The Eco 150 TMP is designed to fit the 3-point linkage of compact tractors from 25hp to 45hp. The flywheel is powered by the tractor PTO whilst the machine uses tractor hydraulics to power the twin feed rollers.

Popular with golf club and estate owners, this compact chipper has all the outstanding features of the GreenMech range including the unique cost-saving Disc-Blade chipping technology and advanced No-Stress electronic control system.

Its generous 150mm timber chipping capacity is assisted by an infeed throat of 150mm x 150mm and large 800mm x 700mm folding infeed chute, which is ideal for stowing equipment when in transport position. A 280° rotation on the discharge chute allows the operator to chip into the required direction up to 5m.

The Eco 150 TMP uses a bi-directional gearbox, which allows for offset infeed loading and provides the option of either a left or right-hand side infeed chute. This facilitates the loading of brush into the chipper chute away from traffic or the general public, making the Eco 150 TMP particularly safe to operate in restricted areas.



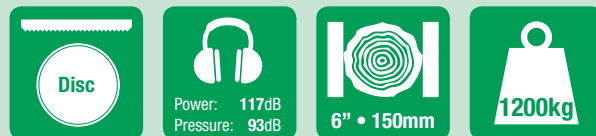


For your local GreenMech dealer call: **01789 40044** or visit **www.greenmech.co.uk**

EcoCombi 150

Key features

- 150mm chipping capacity
- 50mm shredding capacity
- 35hp Yanmar diesel engine
- Disc-Blade chipping & shredding technology
- No-Stress power control
- Twin hydraulic feed rollers on chipper/ single on shredder
- 1200kg weight



Combined versatility of a chipper & shredder

The ultimate machine for mixed green and wood waste

Combining the versatility of both a chipper and a shredder, the award-winning EcoCombi 150 comes with a 35hp water-cooled diesel Yanmar engine and uses GreenMech's patented Disc-Blade chipping/shredding system.

Designed with power, strength and versatility in mind, this trailed unit has proven popular with contractors and local authorities who need to process a mixture of both wood and green waste.

The EcoCombi 150 has the capacity to deal with up to 150mm of clean timber and a shredding section for up to 50mm of organic material contaminated with soil, stones and green wet waste.

Once the material is placed in the 800mm x 700mm wide infeed chute the powerful hydraulic feed rollers on the chipper and shredder are linked to the No-Stress power control system with independent control valves.

This allows both systems to be used in unison, with the No-Stress system reducing the likelihood of blocking and the control valve ensuring a smoother feed to the Disc-Blades. This model comes with an optional conveyor on the shredder infeed hopper and for convenience, both infeed chutes fold for easy transporting.

There is nothing else out there on the market that can touch an EcoCombi in both versatility and flexibility. It is one machine that does two jobs perfectly!

Angus Lindsay, Head of Assets and Fleet,
The Landscape Group, UK





For your local GreenMech dealer call: **01789 400044** or visit **www.greenmech.co.uk**

QuadChip 160

Key features

- 160mm chipping capacity
- Full 360° turntable
- 34hp Kubota turbo diesel engine
- Disc-Blade chipping technology (optional Quad-Blades)
- Twin hydraulic feed rollers
- No-Stress power control
- Sub 750kg towing weight



Scan to watch me in action



Great from any angle

The ultimate choice for roadside performance

The innovative QuadChip 160 is the ultimate road tow chipper with a 360° turntable allowing definitive positioning of infeed chute for convenient and safe loading at the kerb-side and in restricted spaces. Engineered with a world-renowned 34hp Kubota diesel engine and a high tensile steel chassis, you know that the QuadChip 160 has the power to tackle any task safely, efficiently and effectively.

The QuadChip 160 comes fitted as standard with the patented Disc-Blade system, which offers a simple maintenance process and increased time period between rotations, giving dramatic cost savings. Since we recognise that many traditionalists prefer to use straight blades on their machines, GreenMech has developed a flywheel that will accept either Quad-Blades or Disc-Blades.

The high throughput of this machine is provided by powerful twin vertical feed rollers and a 160mm x 230mm letterbox infeed throat. This offers exceptional crushing capacity for awkward forked branches and fast processing of bushy, leafy brash. This road tow chipper comes with a discharge chute that rotates 280° and folds down for compact transport and storage.

GreenMech has long been at the forefront of a technological drive to engineer quieter machines and is a keen supporter of the HSE's Buy Quiet campaign to highlight issues around noise-induced hearing loss.

As a result of this ongoing drive, at GreenMech we are proud to state we believe the QuadChip 160 is one of the quietest chippers in its class on the market today.

I love it!
It is loads quieter than comparable machines and quicker processing awkward branches, too.
I don't know how I've managed without a turntable before now

Oliver Marks, Branch Off Tree Services, UK





Centralised Greasing



Wide Infeed Chute

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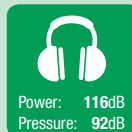
QuadTrak 160

Key features

- 160mm chipping capacity
- 34hp Kubota turbo diesel engine
- Disc-Blade with option of Quad-Blade
- Twin hydraulic feed rollers
- No-Stress power control
- 270° turntable & tilt bed system
- Sub 1100kg weight



Scan to watch me in action



The all round 2-in-1 package

The tracked and towed combination giving total versatility

The QuadTrak 160 is a tracked 160mm chipper that comes with an optional turntable and tilt system making it good from any angle. Its innovative design allows the machine to be tilted for stability when working on slopes up to 30°, assuring correct flow of oil to the engine.

Powered by a Kubota turbo-charged diesel engine, the high throughput of this impressive workhorse is provided by twin vertical feed rollers and a large 160mm x 230mm letterbox opening. This facilitates exceptional crushing of difficult branches and fast processing of woody brush.

A wide operating platform is positioned to give excellent visibility and good access to controls, allowing for safe and efficient tracking. High ground clearance of 240mm ensures easy clearance of hidden stumps and other obstacles over unknown terrain.

The QuadTrak 160 comes with the option of a bespoke trailer ensuring the safe and simple loading of the chipper for the operator. There is also the added bonus of being able to use the machine whilst still mounted on the trailer, giving the benefits of a trailed and tracked machine in one package.



It's very good. It does what it says on the tin and does it very well

Jason Tombs, Assistant Forestry Officer,
Warwickshire County Council, UK



Dedicated trailer



Safe on slopes upto 30°



Easy to use Controls

For your local GreenMech dealer call: **01789 400044** or visit **www.greenmech.co.uk**

SAFE-Trak 16-23

The pioneering tracked chipper with exceptional performance

Key features

- 160mm chipping capacity
- 35hp Isuzu diesel engine
- Disc-Blade chipping technology
- Twin hydraulic feed rollers
- No-Stress power control
- Patented SAFE-Trak system
- 1400kg weight

For unbeaten stability and ground clearance on banks and slopes

Powered by a 35hp water-cooled diesel engine, the ground-breaking SAFE-Trak 16-23 gives you unrivalled stability on road and railway embankments with extended ground clearance for getting across rough terrain and nearer to the job in hand.

The 160mm x 230mm letterbox-style infeed throat allows for quick and easy processing of wood and bulky brush. This reduces the need for reduction with the chainsaw, making it safer, simpler and faster to use; saving you and your team time and money.

The patented SAFE-Trak system incorporates two independently adjusted track mounting legs, allowing the operator to safely traverse slopes of up to 35°. With both track mounts fully extended a massive ground clearance of over 450mm enables effortless clearance of hidden obstacles.

This pioneering machine has two operating positions giving you the versatility to tackle a range of locations. When fully retracted, the tracks fit neatly under the chipper body allowing travel through gaps as little as 735mm permitting use in areas of restricted access. When fully extended, it allows for a wider working platform and greater stability.

The soft-ride rubber tracks reduce vibration on hard surfaces, and in combination with the twin hydraulic pumps allow speedier travel than most other machines in its class. The stand-on folding platform enables the operator to ride on the machine when tracking long distances.



SAFE Trak



452mm



160 230



Disc



Power: 120dB
Pressure: 94dB



6" • 160mm



1400kg



For your local GreenMech dealer call: **01789 400044** or visit **www.greenmech.co.uk**

Arborist 19-28

The reliable workhorse

Key features

- 190mm chipping capacity
- 50hp Isuzu diesel engine
- Disc-Blade chipping technology
- Twin hydraulic feed rollers
- No-Stress power control
- Standard spare wheel
- 280° turntable option
- 1200kg weight

Engineered to tackle the most demanding jobs

Designed for customers who need to process large volumes of timber, the GreenMech Arborist 19-28 wood chipper has proved to be a popular machine with rental companies and contractors who are geared to handle larger equipment.

Powered by a 50hp Yanmar water-cooled diesel engine, this 190mm category chipper has the added bonus of a 280mm wide letterbox-style infeed throat which means that bulky brush can be processed without the need of too much reduction with the chainsaw, saving time and money.

Equipped with GreenMech's state-of-the-art No-Stress controller, the twin hydraulic feed rollers effortlessly pull material through to the revolutionary Disc-Blade chipping system. At up to 7 tonnes per hour output, the Arborist 19-28 has a mighty appetite for work.

As standard, this machine is supplied with a fully road-compliant chassis and braking system, spare wheel and a convenient folding flap on the infeed chute which allows for safe storage of equipment. A 280° turntable facility is optional.



190 280





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SAFE-Trak 19-28

For safe working across banks up to 35°

Key features

- 190mm chipping capacity
- 50hp Kubota diesel engine
- Disc-Blade chipping technology
- Twin hydraulic feed rollers
- No-Stress power control
- Patented SAFE-Trak system
- 2000kg weight



Scan to watch me in action



SAFE Trak



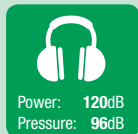
550mm



190 280



Disc



Power: 120dB
Pressure: 96dB



7" • 190mm



2000kg

The ultimate tracked chipper for highways and railway cuttings

The SAFE-Trak 19-28 is designed with GreenMech's award-winning patented track extension system, allowing massive ground clearance of up to 600mm enabling access across the most difficult terrain. This pioneering feature makes it a popular machine for de-veg contractors working on power line and railway track maintenance.

Also, by extending only one track at a time, embankments up to 35° can be traversed in complete safety, allowing the chipper to get to the material to be chipped. In addition, a twin pump system, delivering a flow of 90 litres per minute, gives swift tracking speeds of up to 6km per hour.

Fitted with a 50hp Kubota diesel engine and a 4 Disc-Bladed flywheel, the SAFE-Trak 19-28 is an impressive work-horse and comes with all the standard features expected of a GreenMech chipper. These include a 190mm x 280mm letterbox-style infeed throat and powerful twin hydraulic feed rollers that drag even the most awkward forked material effortlessly to the chipping system. In total, this gives the SAFE-Trak 19-28 a performance far in excess of a comparative chipper.

This ground-breaking machine is engineered with an all-electric control system including a reset button at the driving end of the machine for user comfort. For security, this can be hidden by the driving platform when the machine is not in use. This feature also allows for remote throttle control at the working end.

For additional user friendliness, GreenMech has included in the design a support leg to aid track belt replacement, a jerry can for emergency fuel and vibration isolation on the stand-on platform. This model also comes with the option of an electric winch.



Our guys love this machine!
It's very reliable and relentlessly tackles all tasks.

Yvonne Hayes, MD, Hayes Forestry Ltd, UK



For your local GreenMech dealer call: **01789 400044** or visit **www.greenmech.co.uk**

ChipMaster 220

Engineered for the toughest tasks

Key features

- 220mm chipping capacity
- 50hp Yanmar diesel engine
- Disc-Blade cutting technology
- Twin hydraulic feed rollers
- No-Stress power control
- Standard spare wheel
- 1440kg weight

Where high volume output is the name of the game

For tackling those really big jobs, you can rely on ChipMaster 220 with its substantial 220mm chipping capacity to get the job done. Engineered with a 50hp Yanmar water-cooled diesel engine and the Disc-Blade chipping system, this ultimate road tow chipper retains all the popular features of a GreenMech machine.

A substantial 1100mm x 800mm infeed chute with bottom control bar, coupled with an infeed throat opening of 230mm x 230mm enables branches to be easily and quickly processed. The spring-tensioned twin hydraulic feed rollers are controlled by the advanced electronic No-Stress system and powerfully crush woody material to give effective throughput management of up to 7 tonnes per hour.

A unique feature of the ChipMaster 220 is its manual clutch system. This system is used because of the weight and diameter of the flywheel and will ensure the machine can be de-clutched before operating. This design aspect creates less strain on the engine as the machine can be started and then the clutch can be separately engaged to power the flywheel.

The unique patented Disc-Blade chipping system will ensure a constant chip quality and gives dramatic proven cost savings over conventional straight blades. The ChipMaster 220 comes with road lighting and a spare wheel as standard.





For your local GreenMech dealer call: **01789 400044** or visit **www.greenmech.co.uk**

ChipMaster 220 TMP

Built for the biggest jobs

Key features

- 220mm chipping capacity
- Disc-Blade cutting technology
- Twin hydraulic feed rollers
- No-Stress power control
- 860kg weight

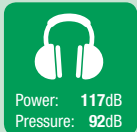


60-80hp

TRACTOR MOUNTED



Disc



Power: 117dB
Pressure: 92dB



9" • 220mm



860kg

High volume at an affordable price

The ChipMaster 220 TMP fits the 3-point linkage on tractors from 60 to 80hp and is powered by the tractor's PTO shaft. With its impressive chipping capacity of 220mm and a larger infeed chute of 1100mm x 900mm, this sturdy machine has all the excellent features of the ChipMaster range.

These include a generous 230mm x 230mm infeed throat and powerful twin horizontal feed rollers controlled by an electronic No-Stress system. The patented Disc-Blade chipping system will ensure a constant chip quality and reduce the volume of up to 7 tonnes of clean green waste per hour.

The ChipMaster 220 TMP has its own oil tank, so is not dependent on the tractor's hydraulic system. It does, however, require the use of a 12-volt electric supply on the tractor to power the No-Stress system.

This hydraulic chipper comes with a discharge chute that rotates by 280°, allowing the operator to direct the chip in the required direction. There is also the option of a bolt-on wheeled chassis and drawbar, enabling this machine to be used as a tractor-trailed model with smaller tractors.





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Technical Specification Guide

Explore your options . . .

	CS 100	CS 100 TMP	Arborist 130	Arborist 150	ArbTrak 150	Eco 150 TMP	EcoCombi 150
Capacity	100mm	100mm	130mm	150mm	150mm	150mm	150mm
Engine Make	B&S	n/a	B&S or Honda	Kubota	Kubota	n/a	Yanmar-Isuzu
Engine	16hp/18hp	n/a	23hp	26hp/34hp	34hp	n/a	35hp
Fuel	Petrol	n/a	Petrol	Diesel	Diesel	n/a	Diesel
Tractor Required	n/a	15 - 30hp	n/a	n/a	n/a	25 - 45hp	n/a
Chipping Flywheel	Drum Type	Drum Type	Disc Type	Disc Type	Disc Type	Disc Type	Disc Type
Flywheel Speed	n/a	n/a	1800rpm	1700rpm	1700rpm	2400rpm	2400rpm
Blades	2	2	4	4	4	2	4 / 22
Hydraulic Feed Rollers	n/a	n/a	Twin Vertical	Twin Vertical	Twin Vertical	Spring Tensioned Twin	Spring Tensioned Twin
Turntable	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Power Control	n/a	n/a	No-Stress	No-Stress	No-Stress	No-Stress	No-Stress
Fuel Capacity (engine)	7.5 L	n/a	27 L	27 L	27 L	n/a	45 L
Tyre Size (towed)	n/a	n/a	155/80/R13	155/80/R13	n/a	n/a	165R13
Spare Wheel	n/a	n/a	Optional	Optional	n/a	n/a	Standard
Tonnes per hour	2	2	3	3.75	4.7	4.5	4.5 / 2
Infeed Chute Aperture	600mm x 450mm	600mm x 450mm	970mm x 790mm	970mm x 790mm	970mm x 790mm	800mm x 700mm	800mm x 700mm
Infeed Throat Size	315mm x 160mm	315mm x 160mm	150mm x 230mm	150mm x 230mm	150mm x 230mm	150mm x 150mm	155mm x 155mm
Discharge Chute	Adjustable	Adjustable	280° Rotation	280° Rotation	280° Rotation	280° Rotation	280° Rotation
Hydraulic Oil Capacity	n/a	n/a	30 L	30 L	30 L	n/a	45 L
Clutch	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Hour Meter	n/a	n/a	Standard	Standard	Standard	n/a	Standard
Length (transport)	1725mm	804mm	3556mm	3556mm	3000mm	1060mm	4022mm
Width (transport)	760mm	1846mm	1290mm	1290mm	1171mm	1745mm	1585mm
Height	1468mm	1554mm	2335mm	2335mm	2380mm	2220mm	2170mm
Weight	195kg	195kg	670kg	748kg	1046kg	490kg	1244kg
Sound Power LWA	120dB(A)	118dB(A)	116dB(A)	115dB(A)	115dB(A)	117dB(A)	117dB(A)
Sound Pressure LPA	96dB(A)	94dB(A)	92dB(A)	92dB(A)	92dB(A)	93dB(A)	93dB(A)
Paint Colour	All machines come in GreenMech standard green or your own livery colour option						

QuadChip 160	QuadTrak 160	SAFE-Trak 16-23	Arborist 19-28	SAFE-Trak 19-28	ChipMaster 220	ChipMaster TMP 220	
160mm	160mm	160mm	190mm	190mm	220mm	220mm	Capacity
Kubota	Kubota	Yanmar-Isuzu	Isuzu	Kubota	Isuzu	n/a	Engine Make
34hp	34hp	35hp	50hp	50hp	50hp	n/a	Engine HP
Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	n/a	Fuel
n/a	n/a	n/a	n/a	n/a	n/a	60 - 80hp	Tractor Required
Disc Type	Disc Type	Disc Type	Disc Type	Disc Type	Disc Type	Disc Type	Chipping Flywheel
2400rpm	2400rpm	2400rpm	1500rpm	1400rpm	1565rpm	1565rpm	Flywheel Speed
2	2	4	4	4	6	6	Blades
Twin Vertical	Twin Vertical	Spring Tensioned Twin	Spring Tensioned Twin	Spring Tensioned Twin	Spring Tensioned Twin	Spring Tensioned Twin	Hydraulic Feed Rollers
Standard	Standard	n/a	Option	n/a	n/a	n/a	Turntable
No-Stress	No-Stress	No-Stress	No-Stress	No-Stress	No-Stress	No-Stress	Power Control
25 L	25 L	30 L	46 L	60 L	44 L	n/a	Fuel Capacity (engine)
155/80/R13	n/a	n/a	175R13	n/a	175R13	n/a	Tyre Size (towed)
Optional	Optional	n/a	Standard	n/a	Standard	n/a	Spare Wheel
4.7	4.7	4.7	7	7	7	7	Tonnes per hour
1100mm x 800mm	1100mm x 800mm	920mm x 820mm	1200mm x 840mm	1200mm x 840mm	1100mm x 800mm	1100mm x 800mm	Infeed Chute Aperture
160mm x 230mm	160mm x 230mm	160mm x 230mm	190mm x 280mm	190mm x 280mm	230mm x 230mm	230mm x 230mm	Infeed Throat Size
280° Rotation	280° Rotation	280° Rotation	280° Rotation	280° Rotation	280° Rotation	280° Rotation	Discharge Chute
23 L	23 L	40 L	50 L	50 L	44 L	n/a	Hydraulic Oil Capacity
n/a	n/a	n/a	n/a	n/a	Manual	n/a	Clutch
Standard	Standard	Standard	Standard	Standard	Standard	Standard	Hour Meter
3211mm	2368mm	3065mm	4067mm	3346mm	4034mm	2200mm	Length (transport)
1502mm	1366mm	735mm - 1090mm	1429mm	1450mm	1440mm	1340mm	Width (transport)
2545mm	2487mm	2410mm	2587mm	2571mm	2500mm	2450mm	Height
749kg	1100kg	1400kg	1300kg	2000kg	1414kg	860kg	Weight
116dB(A)	116dB(A)	120dB(A)	120dB(A)	120dB(A)	120dB(A)	117dB(A)	Sound Power LWA
92dB(A)	92dB(A)	94dB(A)	96dB(A)	96dB(A)	94dB(A)	92dB(A)	Sound Pressure LPA
All machines come in GreenMech standard green or your own livery colour option							Paint Colour

For your local GreenMech dealer call: **01789 400044** or visit **www.greenmech.co.uk**

Chippers vs Shredders

Principles of chipping

The most widely used wood chippers are the conventional flywheel-type which have two, three or four straight knives bolted to a flywheel. Rotating at high speed, the knives pass close to a shear bar or anvil, which acts as a bed knife to chip against.

For efficient chipping, it is essential to have sharp knives and, providing contaminated material is not put through the machine, knives will require sharpening every 25 to 30 hours. Two powerful infeed rollers are desirable to ensure difficult material is pulled into the machine and forced against the knives.

Some chippers have problems with green waste, wet conifer and sinewy material, so a powerful air blast is vital to avoid blockages, and to expel the chipped material out through the discharge chute to the desired location. When having a demonstration, we recommend that you test the machine on all the types of material you are likely to require chipping.

GreenMech's Disc-Blade technology

The Disc-Blade chipping system uses 100mm diameter high-grade steel circular Disc-Blades. Their curved cutting edge slices the wood, making them less susceptible to damage and they are also 1.5dB quieter than standard straight blades.

Disc-Blade technology has the advantage in that each blade can be rotated to the next sharp section when the cutting edge has worn. This can be done twice before re-sharpening is needed, thus dramatically reducing operating costs and downtime.

Principles of shredding

Among the most widely used shredding principles is the hammer mill, which uses a series of metal straps arranged on a shaft rotating at high speed. The material is hammered against a curved screen through which the material is forced. The holes in the screen are usually less than 600mm wide.

Flail-type shredders, which are generally used on wider machines, have a high-speed rotor to which are mounted flails of various shapes and sizes, depending on the manufacturer. Material is loaded onto a hopper and conveyed into the flails which shred the material. In some cases, it can also be forced through a screen and either deposited on the ground or conveyed upwards into a lorry or skip. Flail-type shredders probably require up to 300 per cent more horse power per ton of material than chippers.

Tub grinders were developed in the USA to reduce the volume of construction site waste. Most use a heavy rotor with rigidly-mounted hardened-steel projections which grind the material against heavy, variable-size screens. Material is loaded into a tub above the rotor and typically, they use between 300 to 600hp. All forms of organic green waste material can be processed.

Disc-Shred

The patented Disc-Blade shredding system developed by GreenMech, improves performance, reduces the power requirement and costs. It consists of a series of Disc-Blades on an auger-type shaft which rotates at high speed inside a drum.

The Disc-Blades, being angled to the rotor, both shred and convey the material towards and through a screen into the rear of the chipper flywheel and out through the discharge chute. As Disc-Blades can also be rotated twice as their edges need to be re-sharpened, these in essence give you three blades in one.



Service & Support

World-wide dealer network

With abundant dealer locations around the world, the ever-expanding GreenMech network offers an unrivalled quality of service and expertise for the purchase of both new and pre-owned models, as well as second-to-none after sales.

Our authorised dealerships rely on trained professionals who all share the same dedication to give you the technical support and service you require over the entire lifetime of your GreenMech wood chipper.

Many of our dealers have a range of machines to hire so please get in touch to find out your nearest dealer who offers rental. To locate your nearest dealer please use the location finder at www.greenmech.co.uk/dealers or give us a call on **01789 400044**.

GreenMech sales and support

Our UK-based sales and support team works in partnership with our appointed dealer network to ensure that you have all the support you need when it comes to purchasing and owning a GreenMech. From arranging demonstrations to technical back-up, you can rest assured that all queries will be handled swiftly and efficiently on your behalf.

Warranty

We are pleased to be able to offer a two-year warranty as standard on all hydraulic feed chipper purchases. In order that we can uphold our guarantee, please ensure that you register your new GreenMech via your local appointed dealer.

Finance

At GreenMech we are well aware that sometimes it's not just about what you buy, but also about how you buy it. For this reason we have put together a package of finance options that are geared to help maximise your investment and optimise your cash flow.

Whether you want to ultimately own your machine or are simply looking for a fixed monthly fee with no ownership, GreenMech have the answer. More and more people are using finance as a means to get exactly what they want when they need it. With low interest rates and GreenMech subsidies* now is a good time to review your options.

Payment terms can be from 1 to 7 years and payment holidays can be included so that you can continue to use your machine in the quieter times without paying. GreenMech Finance is managed and run by Ian Bridges Finance and Leasing. To find out more about your choices please get in contact with GreenMech today.

**Terms and conditions apply; as with all finance options, all transactions are subject to being underwritten by a finance company.*

Your authorised GreenMech dealer is:



Please get in contact for further support on GreenMech products

Tel: + 44 (0)1789 400044
Email: sales@greenmech.co.uk
Visit: www.greenmech.co.uk

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www.greenmech.co.uk

GreenMech Ltd, The Mill Industrial Park
Kings Coughton, Alcester, Warwickshire B49 5QG