



WELCOME

For more than 40 years Redexim has been at the forefront of research and development in the professional turf maintenance sector. With a proud history of supplying professional equipment to leading sporting venues around the world, from World Cup pitches and Olympic stadia to championship golf courses, Redexim equipment plays a vital part in the maintenance of these facilities.

Redexim originally introduced the iconic Verti-Drain®, deep tine aerator to the market, revolutionising the approach to professional natural turf care. As markets and trends evolve, Redexim has seen a requirement for machinery to maintain synthetic turf surfaces. Realising this demand Redexim has utilised their development and manufacturing skill set to create a range of products dedicated to maintaining synthetic turf facilities worldwide. After 10 years of testing and development Redexim now offers a broad range of machinery to clean, brush, de-compact, remove and install synthetic turf. Machines like the Verti-Top® are setting industry standards by ensuring surfaces are safe while ensuring longevity expectations are met.

Verti-Drain®

Based in the Netherlands with main offices in Australia, China, America and the United Kingdom, Redexim boasts distributors in over 100 countries, ensuring first class customer service and excellent product support.

IT IS THE POLICY OF REDEXIM®

To provide our customers with robust and reliable equipment built to meet the needs of the professional user. It is also our aim to develop an ongoing relationship with our customers and, wherever possible, will always make our staff available to discuss particular requirements. We would be happy to make arrangements for practical demonstrations of any item of equipment through our dealer network.

CONTACT US FOR A DEMONSTRATION

Our commitment is to fully satisfy the needs of our customers. For immediate assistance contact us at: sales@charterhouse-tm.co.uk

CONTENTS

	Welcome	2
	Brushing and de-compaction	4
	Verti-Broom	5
	Verti-Brush	6
	Base Rake	6
	Verti-Comb	7
	Court-Top	8
	Speed-Brush	8
	Verti-Groom	9
	Steel Dragmat	9
	Rubber Dragmat	9
	RTC	10
	Cleaning	11
Y	Verti-Clean	11
	Speed-Clean	11
	Verti-Top 1200	12
	Verti-Top 1800	12
	Verti-Top Tow-Behind	13
	Verti-Top Walk-Behind	13
	Renovation	14
, ,	Extreme Clean	14
	Side-Brush	14
	Testing	14
	Ball Roll Ramp + Ball Rebound Tester	14
	Infill Depth Tester	14
	Eliminator	15
	Infilling	16
	твэ50	16
	SP950	16
	Rink 1010	17
	Rink 1210	17
	Rink HS620	18



BRUSHING AND DE-COMPACTION

Brushing is one of the single most important tasks to be carried out on synthetic turf. While most synthetic surfaces are sold and installed as 'maintenance free' this is certainly not the case and without effective regular brushing the fibre will fall flat. This allows footfall to wear the side of the fibre and subsequently break off, drastically reducing the life of the surface. Brushing the surface will ensure the fibre stands vertically wearing from the top down at approximately 1mm per year. The brushing process will also move the

infill material into situ to support the fibre. This process will also keep the infill fluid and dynamic which disturbs any ingress of weeds or moss while reducing the likelihood of the compaction while maintaining consistent playing characteristics. Brushing also preens the surface, whilst trapping larger items of dirt and debris in the fibres ensuring the surface always looks its best. The range of Redexim brushes can be pulled by prime movers, from tractors, buggies and ATVs to the hand pulled Verti-Broom 100.

BRUSHING AND DE-COMPACTION VERTI-BROOM

For brushing and preening of synthetic turf, nothing beats the proven Verti-Broom (models 100, 185 & 240). The triangular shape allows the bristles to 'bite' into the surface, lifting fibres and re-distributing infill. The Verti-Broom can be towed from any of its three corners allowing the wear to be spread evenly over the brush.



The hand pulled Verti-Broom 100 weighs 38kg and has a working width of 100cm.



Model	Verti-Broom 100	Verti-Broom 185	Verti-Broom 240
Working width	1.0m (39.5")	1.85m (73")	2.4m (94")
Weight	38kg (83lbs)	60kg (132lbs)	80kg (176lbs)
Tractor required		10hp	10hp



BRUSHING AND DE-COMPACTION BASE RAKE & VERTI-BRUSH

The Base Rake is ideal for the de-compaction of heavy use areas. The unit is available with the twin brushes, tines alone or brushes and tines. The depth of the tines can be easily adjusted while the optional tow bar system allows the Base Rake to be towed by a multitude of prime movers.





Base Rake	
Working width	1.45m
Weight	76kg
Tractor required	16hp w/450 kg
Options	Tow Bar

The brushes lift fibre while the tines de-compact infill. The rear brush levels and re-distributes





The Verti-Brush is designed to move large amounts of infill around whilst working this material into the surface. Particularly suited to a newly installed surface the five hydraulically driven brushes rotate in a horizontal action quickly levelling infill in one pass.



Hydraulic drive allows operational speed to be maintained while travel speed adjusted

Multi-direction pivoting wheels allow the machine to work in different directions

Verti-Brush	
Working width	1.5m
Weight	170kg
Tractor required	13hp w/double acy spool valve

BRUSHING AND DE-COMPACTION VERTI-COMB



The Verti-Comb has set the standard for brushing synthetic turf. The arrangement of bristles ensures the carpet fibres are moved in multiple directions as the brush passes over the surface. This ensures an even more effective action. Available as a 1.8m or 4m (winged) unit the Verti-Comb can also be fitted with tines or a magnet bar to aid de-compaction or collect metallic foreign bodies.



Verti-Comb	1800	4000
Working width	1.8m	4m
Weight	104kg	220kg
Tractor required	18hp w/ 200kg	25hp w/ 450kg
Options	Magnetic Kit / Steel Pins / Tow bar	



The wings on the Verti-Comb 4000 easily fold to allow access or to aid transport



The hydraulic folding option allows the operator to fold the unit from the tractor seat

Infill is brought to the surface and left in situ to support carpet fibre



BRUSHING AND DE-COMPACTION SPEED-BRUSH & COURT-TOP

The Speed-Brush is a towable land driven, twin rotary brush. The brushes rotate against the direction of travel lifting synthetic turf fibres and decompacting infill. The rear brush levels and preens the surface leaving an aesthetically pleasing finish. The pressure each brush applies to the surface can be adjusted along with the angle of the brush to aid the lateral movement of infill. Available with either a stiff brush for maintenance or a soft brush for installation this flexible tool has proved itself time and time again.





Speed-Brush	
Working width	1.4m
Weight	181kg
Tractor required	10hp w/12v Electrics
Options	Soft/Stiff Bristle





The Court-Top utilises two rows of brushes with a levelling plate integrated in-between, the firmer bristles featured on the front row de-compact infill. The firmer bristles are followed by the levelling plate to remove undulations before the rear brush ensures the surface is left smooth and ready for play.



Court-Top	1200	1500
Working width	1.2m	1.5m
Weight	85kg	105kg
Tractor required	12hp	15hp

BRUSHING AND DE-COMPACTION VERTI-GROOM & DRAGMAT



The Verti-Groom uses a combination of tines and brushes to de-compact infill while standing up fibres, the brush unit floats beneath the rear arms and can be tilted to adjust the aggression exerted. The unit has a working width of 200cm and can be configured in a number of ways, with multiple rows of tines and 3mm or 5mm tine options. The Verti-Groom can be mounted on the rear of a three point linkage tractor as standard or towed through a clevis pin or tow ball with the optional tow bar.



The brushes lift and level infill behind the Verti-Groom unit

3mm tines are suitable for delicate surfaces and light de-compaction

Floating brush unit allows the bristles to re-erect fibre

5mm tines are suitable for more aggressive de-compaction and use on natural turf surfaces



Verti-Groom		
Working width	2m	
Weight	15kg	
Tractor required	14hp +	
Options	3mm/5mm tines Tow Bar Brush Unit Extra rows of brushes	

Dragmat		
90x120cm	Steel	10kg (22lbs)
120x180cm	Steel	18kg (40lbs)
180x240cm	Steel	35kg (77lbs)
240x240cm	Steel	47kg (103lbs)
150x100cm	Rubber	18kg (39lbs)

The Dragmat can be utilised to work infill material into the carpet pile and assist with the levelling of undulations; particularly effective on new surfaces. The rubber dragmat is recommended for 3G rubber crumb surfaces while the steel dragmat will give best results on sand filled systems.







BRUSHING AND DE-COMPACTION RTC



The RTC has been developed with regular brushing in mind, the tractor and brush combination allows the operator to quickly and effectively brush surfaces ensuring that regular maintenance can be carried out with ease. The RTC brushes fold to allow storage and access through gaps as narrow as 90cm. While folded out the unit covers an impressive 200cm breed. The brush unit can be raised clear of the ground for transport from the operators seat while the same control is used to adjust the pressure applied to surface through the bristles. Powered by a 24hp twin cylinder engine and driven by hydrostatic transmission the RTC can also be used to tow other tools such as the Redexim Speed-Clean or Verti-Clean.

RTC	
Working width	200cm
Storage/Access	90cm
Weight	250kg
Engine	24hp - twin cylinder



CLEANING VERTI-CLEAN & SPEED-CLEAN



Verti-Clean	Land Drive	РТО
Working width	150cm	150cm
Weight	104kg	115kg
Tractor required	12hp	12hp w/pto
Options	Interchangeable sieves Magnet bar Tow bar Rake section	

The Verti-Clean collects surface debris and detritus at high speed. The land driven rotary brush flicks unwanted material from the surface of the carpet onto a sieve. Should any infill be collected at this point, it is separated and allowed to return to the surface while the unwanted material remains on the sieve for removal from the surface. The Verti-Clean is also available as a PTO driven model. This utilises the constant drive from a tractor to maintain the brush and sieve speed while travel speed is adjusted.



The bristles of the brush lightly touch the surface to flick material onto the sieve Can be towed by a multitude of prime movers

Different sieves are available to coincide with different infill types





The Speed-Clean is a land driven surface sweeper. The paddle brush system allows the Speed-Clean to lift the infill from the surface where it is separated from debris. The infill is returned to the surface and brushed in while the unwanted debris continues across the sieve to the collection bins on the rear of the unit. The tine section aids decompaction while the rear brush preens the surface to leave an aesthetically pleasing finish.



Speed-Clean	
Working width	165cm
Weight	200kg
Tractor required	18hp w/250kg lift

CLEANING VERTI-TOP





The Verti-Top continues to set the standard for the cleaning and maintenance of synthetic turf surfaces. The powered rotary brush sweeps to a predetermined depth in the carpet lifting the pile and extracting the top 1mm - 15mm of infill along with any foreign



material. The infill is lifted onto a shaking sieve where a vacuum draws the fines and dust from the infill. The sieve then separates the infill from the detritus, the infill is returned to the surface, while the detritus is collected in the hopper of the machine. The cleaned infill is brushed into the fibres of the carpet leaving a clean, level and aesthetically pleasing finish. The Verti-Top is available in either a 120cm or 180cm working width, both models featuring adjustable decompaction tines as standard and have interchangeable sieves for use on surfaces with different infill types. The depth is adjusted by screw spindles to allow pin-point precision when selecting the optimum working depth for the machine.

Verti-Top	1200	1800
Working width	120cm	180cm
Weight	385kg	433kg
Tractor required	20hp 25hp	
Options	Interchangeable sieves	



pass self contained machine

Single

Verti-Top can be operated from a 20hp tractor

Intensive action lifts infill and restores playing characteristics

Sieve separates infill from debris and detritus



CLEANING VERTI-TOP TB & WB



The Verti-Top Tow-Behind works on the same principal as the Verti-Top 1200 and 1800 but utilises a 6.5hp engine. This allows the machine to be towed by any vehicle without the requirement of a PTO to drive the machine. The Verti-Top Tow-Behind has a working width of 150cm and offers the same level of performance as all other Verti-Tops in the range.



The compact size of the machine allows the machines to access tight areas

The smallest of prime movers can tow the unit

An optional towed magnet ensures

any metallic objects are collected

A vacuum system and dust collection are standard



Verti-Top	Tow-Behind	Walk-Behind	
Working width	150cm	87cm	
Weight	300kg	150kg	
Engine	6.5hp 6.5hp		
Options	Interchangeable sieves		





The Verti-Top Walk-Behind has the same brush and sieve mechanism as the larger Verti-Tops but is designed to access and work in smaller areas. The machine can pass through a standard 100cm gateway and is particularly suited to tennis courts and fivea-side areas. The working depth is adjusted with a screw thread to allow pin-point precision when making changes to the working depth.







RENOVATION EXTREME CLEAN, SIDE-BRUSH & TESTING



The Extreme Clean has been designed to renovate filled carpets. The machine utilises horizontally rotating scrubbing brushes to breathe new life into compacted or previously neglected areas. The stiff bristles loosen infill and lift flattened fibres. The Extreme Clean is adjusted on four threaded spindles, this allows the working depth to be accurately adjusted and the pressure applied to the brush heads to be monitored.

Extreme Clean	1200	1800
Working width	120cm	180cm
Weight	225kg	300kg
Tractor required	18hp	25hp
Rotor brushes	5	7



The Side-Brush utilises the same scrubbing brush head system to decompact the hard to reach edge at pitches. Pivoting on a swivelling arm, with the ability to extend further the hydraulically driven head loosens infill while agitating dirt and debris.



Side-Brush	
Working width	114cm
Weight	110kg
Tractor required	18-35hp
Rotor brushes	1



Ball Roll Ramp + Ball Rebound Tester

The ball roll ramp indicates the level of resistance the surface gives to a ball in respect of it rolling across the surface. The ideal FIFA 2 star will give a ball roll of between 8-10m while FIFA 1 star will require a ball roll to not exceed 12m. If the ball exceeds this figure it is a good indication that additional decompaction and brushing may be required.

This device measures how far the ball rolls, and how high it bounces and gives an indication on what kind of maintenance is needed.





The Infill Depth Tester can be used to measure the quantity of infill in the carpet. The pins protrude to the carpet backing allowing a measurement of the infill depth to be taken. This tool is ideal to assist in the management of a facility and to take regular readings to check the infill quantity conforms to manufacturer's requirements.

RENOVATION ELIMINATOR



The Eliminator removes infill from the carpet. Utilising a rotary paddle brush system the machine sweeps into the surface, removes the infill and throws it forward onto a primary conveyor. The material is then transferred to a secondary conveyor where it is lifted upwards to be off loaded into a trailer or bag for removal from the surface. The working depth can be adjusted to compensate for the job in hand, whether it is partial removal for rejuvenation or total extraction for end of life processes.



Easily adjustable rear roller controls working depth, whilst paddle brush extracts infill

For a really deep clean, works in conjunction with the Extreme Clean

Left: Before. Right: After. All of the infill removed in one pass

Eliminator	
Working width	150cm
Weight	600kg
Working depth	>50mm
Tractor required	45hp w/ 2 x spools



INFILLING RINK TB950 & SP950



The Rink TB950 is a land driven top dresser. It can be towed by the smallest of prime movers. The feed belt and rotary brush are driven at a constant speed in cohesion with the travel speed. A lever allows for the spreading to be stopped while in transport and an adjustable shutter gate controls quantity of material distributed.



Simple metering for top dressing delivery.







TB950	
Working width	95cm
Weight	190kg
Tractor required	<10hp
Hopper capacity	0.33m³



The Rink SP950 is a self propelled variant of the TB950, the SP950 utilises a 6.5hp engine to propel itself as well as power the feed belt and rotary brush to evenly spread infill. The SP950 has 4 wheels under the hopper and two steering wheels to minimise ground pressure when working on unfilled surfaces.

SP950		
Working width	95cm	
Weight	280kg	
Engine	6.5hp	
Hopper capacity	0.33m ³	



INFILLING RINK 1010/1210 & 1210 MOUNTED





The Rink Top Dressers are available in a range of different options to suit individual requirements. The Rink 1005 is mounted onto a utility vehicle. This draws hydraulic power to run the belts and pump allowing the operator to control flow and shut on/off from the driving seat. The Rink range can be mounted on Kubota RTV, John Deere Pro-Gator, Toro Workman and Cushman trucks.

TB950	1005	1010	1210
Working width	1.5m	1.5m	1.8m
Weight	200kg	270kg	370kg
Tractor required	N/A	20hp	20hp
Hopper capacity	0.75m³	0.75m ³	1.0m ³
Options	Rake section Hopper extender Self propelled engine		

The Rink 1010 and 1210 are tractor drawn units and are ideal for filling new surfaces. The pivoting 4 wheels spread ground pressure protecting the surface. Both the Rink 1010 and 1210 can be fitted with a self-contained engine system allowing the unit to be towed by any prime mover (as a tractor with hydraulics is no longer required). The optional aluminium hopper extensions increase the capacity of the machine without increasing weight while the infill kits groom the carpet fibres prior to and immediately post the infill being applied to the surface giving a faster settlement rate. The Rink 1010 has a 0.75m³ hopper as standard, while the extension kit increases this to 1.25m³. The Rink 1210 has a 1.0m³ as standard, the extension kit increases this to 2.0m³ allowing rubber crumb to be loaded and spread in bulk.



Hydraulic ram, lifts and lowers the grooming rakes

Infill kit ensures infill is dispersed into carpet fibres

Rink 1010 offers compact infilling unit



INFILLING RINK HS620 / TESTIMONIAL



The Rink HS620 is designed to infill smaller areas and support maintenance top-ups. The hand propelled unit is land driven allowing infill to be distributed at a predetermined rate into the carpet pile.

The Rink HS620 Handspreader is especially useful to spread the topdressing material in difficult to reach areas or tight spots.

Rink HS620	
Operation	Manual
Working width	0.60m (24")
Spreading thickness	0.3mm to 10mm (0-0.4")
Weight (empty)	50kg (110lbs)
Hopper capacity	100 litres

ENDORSEMENTS

Alan Ferguson is Head of Grounds and Estate at St. George's Park; The National Football Centre of English football (The FA). Alan was previously Head Groundsman at Glasgow Rangers and Ipswich Town FC, where he won the Groundsman of the Year award five times in his respective league.

"As Head of Grounds and Estate at one of the world's top training venues a vital part of my job is to ensure we partner companies with a likeminded, forward thinking philosophy to match our own.

The team at Charterhouse Redexim more than meet this requirement and together I believe we have moved the maintenance of both synthetic and hybrid pitches on to the next level. The advent of the Redexim Charterhouse Carrier is testament to the positive out of the box thinking employed by the Redexim team and has allowed us to step up the frequency of our daily maintenance to meet the continued demand from the various teams from across the world who use our facilities.



I have felt for some time that, as turf managers, having the possibility and ability to reduce the weight exerted by machinery while working on the hybrid or synthetic fibre would significantly improve the playability of both surface types.

Visiting the design team at the Redexim HQ in Zeist in Holland only inspires you to think out of the box. Easily the best part of all my visits to Zeist is meeting with a creative and forward thinking group of guys. Redexim will be a key partner across all our turf programmes here at the FA for some time to come."

Alan Ferguson

Grounds and Estates Manager at St George's Park











To see the entire range of equipment download the latest copies of our brochures from **www.charterhouse-tm.co.uk** Follow the latest developments on

We pride ourselves that in conjunction with our local dealers we can provide an after sales service that is second to none.

Both Charterhouse and our dealer network are readily available to offer friendly, knowledgeable advice for choosing the correct tine or spare part required.

Redexim has a policy of continuous improvement for all its products to meet the needs of customers. Specifications and illustrations in this catalogue may therefore differ from equipment supplied.

Charterhouse



Redexim World Headquarters Redexim BV, Kwekerijweg 8, 3709 JA, Zeist, The Netherlands

Phone: (31) 30 6 933 227 Fax: (31) 30 6 933 228 E-mail: verti-drain@redexim.com www.redexim.com

erti **ART**

Charterhouse Turf Machinery Ltd Unit 9 Weydown Road Ind Est, Haslemere, Surrey GU27 1DW

Phone: +44 (0)1428 661222 Fax: +44 (0)1428 661218 sales@charterhouse-tm.co.uk www.charterhouse-tm.co.uk @ctmTURF Charterhouse Turf Machinery

edexim

Redexim North America 427W Outer Road Valley Park, MO 63088

Phone: 636.825.8300 PaulH@redeximna.com 636.326.4884 Fax: 636.825.8302

IOG

Redexim Australia & New Zealand PO Box 1064 Gwelup 6018

Phone: +61419310546 Lukrys@bigpond.net.au Fax: +61894480558

SAPCA

