

# SYNTHETIC SURFACES







# WELCOME

Redexim develops and manufactures machines for the maintenance of the turf on golfcourses, sportsfields, public areas and horse race tracks. It started for the company in 1978 with the invention of the Verti-Drain deep tine aeration machine, which was revolutionary at that time. Over time Redexim developed into a company manufacturing a wide range of specialized machines for the maintenance of the turf, such as overseeders, topdressers, sweepers, scarifiers, brushes and of course aerators. More recently, Redexim has been producing machines for sports fields made of artificial turf. Redexim has a distribution network over more than 100 countries, and has its own offices in the UK and the USA, aside from its headquarters in the Netherlands.





# Redexim Range of Synthetic Turf Maintenance Machines

A common misconception is that synthetic turf requires little maintenance, but regular attention is vital to ensure optimum playing performance and durability. This can be achieved with the Redexim range of synthetic turf care equipment.



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#### **Endorsements**

Alan Ferguson is Head of Grounds and Estate at St. George's Park; The National Football Centre of English football (The FA), and 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 like-minded, forward thinking philosophy to match our own.

The team at 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 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 Alan with the Verti-Top 1800 and the Verti-Comb 4000 he uses on his synthetic turf pitches.



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

Compaction will inevitably occur on filled synthetic surfaces, this will make the surface harder to play on, give unrealistic playing characteristics, become dangerous and will have an impact on the carpets lifespan. It is imperative to use spring tines (rakes and pins) and brushes to loosen the infill mix. This process keeps the fibres upright allowing them wear from the top down and playing characteristics maintained.

Model	Verti-Broom 185	Verti-Broom 240	Verti-Broom Walk behind	Verti-Brush	Verti-Comb 1800	Verti-Comb 4000
Working width	1.85m (73")	2.4m (94")	1.0m (39")	1.5m (59")	1.8m (71")	4.0m (157")
Weight	50kg (110lbs)	75kg (165lbs)	36kg (79lbs)	170kg (374lbs)	104kg (229lbs)	220kg (484lbs)
Tractor required	10hp	10hp	manual pulled	13hp with double acting valve + 10ltr min. at 70bar	18hp+200kg lift cap.	25hp+450kg lift cap.

Optional items: Verti-Broom: two transport wheels

Verti-Comb: Magnetic kit / Steel pins section front + rear / Drawbar + transport wheel kit (lift: mechanical or hydraulic or electrical)





Model 240 has a large working width of 2.4m

For brushing and striping of turf, nothing beats the proven Verti-Broom. The highly effective triangular arrangement of the brushes will straighten and groom each grass blade. The soft, long wearing brushes quickly and efficiently brush surface infill to an even and level finish.



Optional transport wheels can be added

The hand pulled Verti-Broom WB weighs 36kg and has a working width of 100cm.





The 5 counter rotating brushes turn at high speed.

The Verti-Brush quickly and effectively levels and distributes topdressing material with powerful hydraulic brushes. The 5 counter rotating brushes can easily reach to the base of the turf to loosen and evenly redistribute fill or can be applied to mix and level a new application.



The Verti-Comb is designed for brushing and decompacting large areas of turf quickly and efficiently. Foldable side wings can be added to the standard Verti-Comb 1800 model converting it into the model 4000 (4.0m working width).



Option: front or rear pins for decompaction, a magnetic strip for picking up steel debris, and a transport wheel kit with drawbar. The Verti-Comb 4000 is foldable resulting in a total width of 2.22m in transport position. \* = optional items

# brushes/dragmat



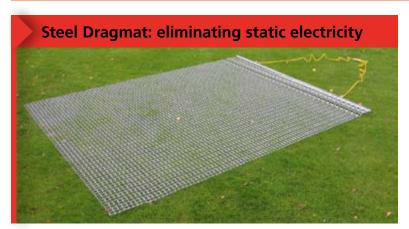
Model	Speed-Brush	Side-Brush
Working width	140cm (55")	114cm (45")
Weight	181kg (398lbs)	110kg (242lbs)
Tractor required	10HP with 12Volt + electric connection	18-35hp

**Optional items: Speed-Brush** Softer brushes

The Side-Brush contains a firm rotating brush, that decompacts the infill along the hard to reach sides and edges of the field.



The Speed-Brush is a towed brushing machine, containing two round brushes which rotate in the opposite direction of travel. Thus sand + infill is effectively brushed into the turf surface, and excessive Infill is transported over large distances to low areas. This process lifts the fibres and relocates infill to support these fibres.



Stainless steel scraper wire mats are being used to evenly distribute infill material, and to eliminate the static electricity in the fibres.

Model	Steel Dragmat
size	Weight
120x180cm 180x240cm 240x240cm	12kg (26lbs) 35kg (77lbs) 47kg (103lbs)





Model	Rubber Dragmat
size	Weight
150x100cm 300x100cm 300x150cm	18kg (40lbs) 34kg (75lbs) 51kg (112lbs)

The 15mm thick Rubber Dragmat is ideal to rub in sand and rubber infill. It can be hand-pulled, or towed behind a verhicle.



# brushes+springtines

Model	Verti-Groom	Verti-Groom Extended Version
Working width	2.0m (79")	2.0m (79")
Weight	150kg (330lbs)	223kg (491lbs)
Tractor required	14hp+200kg lift cap.	20hp+280kg lift cap.
Dimensions	50x200x90cm	125x200x90cm
Number of rakes/pins	45xØ5/66xØ3mm	45xØ5/66xØ3mm
Standard items:	Ø5mm rakes	Ø5mm rakes

tandard items: Ø5mm rakes Ø5mm rakes brush + rubbermat

**Optional items:** towed version incl. drawbar, magnet, beam with  $\emptyset 3$  or 5mm pins/rakes; rear brushkit frame.



# Verti-Groom Standard Ø5mm rakes

The Verti-Groom is equipped with fine and flexible steel rakes (3 rows of  $\varnothing$  5mm) or optional steel pins (2 rows of  $\varnothing$ 3mm) which gently loosen and break up compacted areas. They straighten and lift the turf fibres, leaving them plush and upright for a soft and level playing surface.



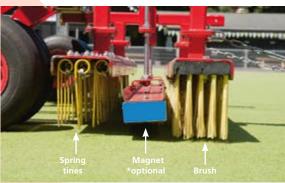


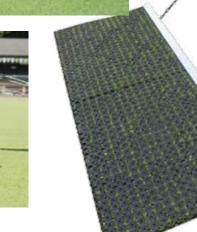
Optional-photo left: the mounting beam with rakes or pins can be exchanged for a beam containing a brush (L). Also a frame containing 3 brushes can be attached at the rear (R).

#### **Verti-Groom Extended Version**



The Verti-Groom Extended Version is the ideal decompaction machine and a combination of a beam with steel rakes, followed by a beam with a brush, while a rubber mat at the rear spreads the infill evenly. A magnetic beam can be added to pick up ferrous material.





# brushes+springtines



The Combi-Groom utilizes flexible steel pins (Ø3mm), mounted between 2 brushes and these decompact the infill.

Model	Combi-Groom
Working width	2.0m (79")
Weight	194kg (427lbs)
Tractor required	14hp+200kg lift cap.
Dimensions	201x130x90cm
Number of rakes/pins	45xØ5/66xØ3mm



The Combi-Groom can be equipped with Ø5mm Rakes, and a magnet (photo under).





The Base-Rake utilises flexible steel tines, mounted between 2 brushes and these decompact the infill. Weights can be added to improve penetration.



The Base-Rake with the optional Drawbar + transport wheelkit.

Model	Base-Rake	Verti-Rake Pro 200	Verti-Rake Pro 300	Verti-Rake Pro 450H
Working width	1.45m (57")	2.0m (79")	3.0m (118")	4.5m (177")
Weight	76kg (167lbs)	220kg (485lbs)	317kg (699lbs)	550kg (1213lbs)
Tractor required	16hp+450kg - lift cap.	10hp+225kg- lift cap.	20hp+280kg- lift cap.	25hp+430kg- lift cap.
Dimensions	60x150x85cm	175x200x90cm	175x295x90cm	175x295x165cm
Number of rakes/pins	100	168	240	360

Optional items: Base-Rake: Drawbar + transport wheelkit Verti-Rake Pro 200: Brushkit + towed version (mechanically) incl. drawbar



If more intensive decompaction is required than the Verti - Groom can offer, then the Verti - Rake should be used. The Verti - Rake decompacts the surface using Ø 6mm diameter spring loaded flexible tines.



Verti-Rake Pro 450H folded

CLEANING brushes

The Infill material used in synthetic turf must be kept level for a consistent playing field and the upper carpet fibres have to remain free of litter and organic material to avoid the accumulation of dirt and bacteria, as well as harmful materials such as glass or other debris.



The Speed-Clean picks up surface debris with a rotating brush, the debris is thrown on the vibrating sieve. The sieve filters infill material back on to the playing surface, while retaining the debris.

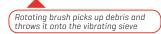
Model	Speed-Clean 1000	Speed-Clean 1700	
Working width	0,97m (65.7")	1.67m (66")	
Working depth	0-20mm (hll0.8")		
Speed	12km/h (7.4mph)		
Weight	165 Kg (365 lbs) 160kg		
Tractor required	15hp + 200kg lift capacity	18hp + 250kg lift capacity	
Dimensions	172x73x120cm	191x90x185cm	

**Optional items: Speed-Clean:** Rubber dragmat, springtines, magnet; towed version incl. drawbar and wheels

Spring tines can be added to loosen the infill.







CLEANING brushes



An optional drawbar and transport wheelkit can be added to the Speed-Clean, so that it can be pulled by almost any vehicle.

Speed-Clean 1000 has a total width of 1.2m, fitting through small entrances. It is available as a towed version (see photo's) and 3-point hitch version.



Model	Verti-Top Walk behind
Working width	0.87mm (34")
Weight	175kg (385lbs)
Capacity hopper	30ltr
Tractor required	self-driven with own 6½ hp engine
Dimensions	110x110x133cm



The Walk-behind Verti-top is self-driven and powered by a 6½ hp engine. It is ideal to clean small areas.



The width of the Verti-Top WB can be narrowed to 87cm enabling it to pass through small passways.

# **CLEANING**

# brushes+vacuum

Model	Verti-Top Vac1200	Verti-Top Vac1500	Verti-Top Vac1800	Verti-Top Vac Tow behind
Working width	1.2m (47")	1.5m (59")	1.8m (71")	1.45m (57")
Capacity hopper	64ltr	76ltr	96ltr	70ltr
Speed	Up to 5 km/h (1.8mph)	Up to 5 km/h (1.8mph)	Up to 5 km/h (1.8mph)	Up to 5 km/h (1.8mph)
Weight	385kg	420kg	433kg	300kg
Tractor required	20hp +420kg lift capacity	22hp + 500kg lift capacity	25hp + 500kg lift capacity	no; is pulled unit with 6½hp engine
Dimensions	158x140x90cm	158x140x90cm	158x140x90cm	140x170x100cm

# **Verti-Top Vac**

The Verti-Top Vac is a cleaning machine, in which a vacuum cleaning mechanism has been incorporated. While the vibrating mechanism is collecting the larger debris partials, the vacuum system removes the fine material, such as dust, hair and the like into a washable filter bag.







After only a few hundred meters, the dustbag already contains a few dense clumps of dirt, hair, trash and dust.



There are optional sifting screens (sieves) available for various infill sizes.



# CLEANING + DIVERSE

#### brushes+vacuum



The Tow-Behind Verti-Top Vac is equipped with a quiet and powerful 6½ hp engine. This machine can be used with any power unit – from a golf cart to a riding lawn mower.

The Tow Behind Verti-Top Vac utilises the same innovative cleaning technology as the tractor mount version by quickly and effectively removing debris from the surface while gently brushing and grooming the turf fibres. All material that is brought up is sifted out

on a vibrating shaker screen with the clean infill being returned to the turf and the debris sifted into two easy-to-empty bins.



The smallest of prime movers can tow the unit.



Model	Snow-Blade 272
Working width	2,72m (107")
Weight	182kg (401lbs)
Tractor required	25hp min. with front 3-point linkage
Standard item	A-frame Cat.1 included

The Snow-Blade 272 is the ideal snow remover for sports fields made of both synthetic and natural turf, fitting relatively small tractors. The blade is entirely galvanized, so that it will not corrode. The working height is accurately adjusted with the two spindles.



Verti-Spray
300 liter
adjustable chevis
90kg (198lbs)
400kg tow capacity

**Standard items:** boom sprayer / swath 6m + trigger spraygun 5m hose

The trailed Verti-Spray is an excellent tool for any turf spray application. Easily coupled to most tow vehicles, the 12 volt sprayer quickly disperses up to 300 liter disinfectants and other liquids such as static reducing mixes, or plain water to cool the playing surface.

#### **Ball Roll Tester + Ball Rebound Tester**



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 Ball Roll values for natural turf would vary between 4- and 10m, natural turf in ideal conditions will give values from 4- to 8m. The lower the value, the slower the pitch.\*

The Vertical Ball Rebound is measured by dropping a ball from 2 meters and measuring the rebound height. Natural turf will give values of between 50 and 100 cm, but an "ideal" natural turf will give values of between 60 and 85 cm.\*



#### Infill Thickness Tester

This is a measuring tool for determining the amount of infill in an artificial grass surface. It is important to measure this regularly, as a typical synthetic field loses 5-10% of its infill over a year.



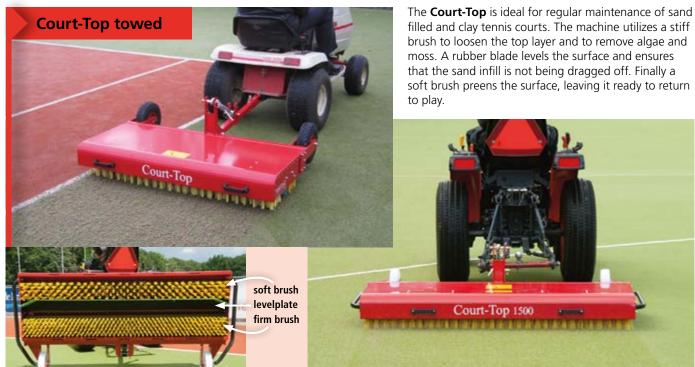
# FIELDHOCKEY + TENNIS

# brushing+decompacting

Maintenance machines	Court-Broom 150	Court-Top towed			Rubber Dragmat	
Working Width	1.5 m	1.2 m	1.5 m	1.5 m	3.0 m	3.0 m
Weight	41 kg	85 kg	105 kg	18 kg	34 kg	51 kg
Drive / Power Required	Manual or Pulled	Any tow vehicle			Manual or Pulled	



Regular brushing of the surface is essential to ensure the carpet is kept in payable condition and to prevent moss and algae. The fiber must remain upright and the infill fluid and dynamic to give optimum playing characteristic and support the fiber. The **Court-Broom** will do this and preen the surface ahead of any game.



### **Rubber Dragmat**

The **Rubber Dragmat** works infill material into the system, the pockets in the mat collect excess infill and draw it around the surface; redistributing it into any undulations and ensuring the surface is save and level.



# FIELDHOCKEY + TENNIS

# renovation+cleaning



Model	X-treme Clean 1200	X-treme Clean 1800	
Working width	1.2m (47")	1.8m (71")	
Weight	225kg (495lbs)	300kg (660lbs)	
Number of brush	6	9	
Tractor required	18hp	25hp	
Number of rotors	2	3	

The Extreme Clean renovates filled carpets. Horizontally rotating scrubbing brushes 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.





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
114cm
110kg
18-35hp
1

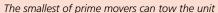
# cleaning options















Suitable for all surface types

RENOVATION infill removal

The Eliminator removes the infill-material from the turf by using an intensive rotating brush. A conveyor belt transports the material to a dumptruck or in a large bag which is carried alongside the Eliminator.







clean, works in conjunction with the

#### INFILLING/REFILLING

# infill spreaders

Infill Spreaders	Rink H620 Walk behind	Rink SP950 walk in front	Rink TB950 Tow Behind	Rink H1500 Tow behind
Spreading width	0.62 m	0.95 m	0.95 m	1.5 m
Spreading thickness	0.3 to 10 mm	0.3 to 10 mm	2 to 25 mm	2 to 25 mm
Weight	50 kg	280 kg	190 kg	190 kg
Hopper Capacity	0.1 m³	0.33 m³	0.33 m³	0.4 m³
Power	Hand propelled	6.5 hp Engine	tow Vehicle 22 hp	tow Vehicle 22 hp



The Rink Infill spreaders are ideal tools to spread infill over a tennis court surface (both clay and sand infill). A conveyor belt system moves infill to the exit of the machine, when the rotary brush applies the material to the carpet or surface. With adjustable working speeds and application rates, the machines are able to distribute infill very quickly.

The **Rink H620 Spreader** has proved to be very useful in the application of infill material in smaller areas.

The **Rink SP950** is a self-propelled spreader, powered by a 6.5hp engine, with a spreading with of 95 cm. This machine is invaluable for adding infill to tennis systems.

The **Rink H1500** is a wheel driven spreader, ensuring a consistent application rate. The H1500 can be pulled by almost every vehicle. The pin drum allows rubber as well as sand to be filled on artificial turf pitches. The rear brush option saves one working step and levels the surface.

The **Rink TB950** can be towed by any prime mover and is land driven to ensure an exact speed/application rate.









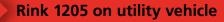
# INFILLING/REFILLING

# infill spreaders

Model Rink	SP1205 pulled	Utility Vehicle model 1205	1010	1210	1520	1622
	Self-propelled	for John Deere Progator/ Toro Workman	towed version	towed version	towed version	towed version
Spreading width	1.80m	1.80m (71")	1.50m (59")	1.80m (71")	1.40m (55")	2.0m (79")
Spreading thickness	0.3 to 10mm	0.3 to 10mm	0.3 to 10mm	0.3 to 10mm	0.3 to 40mm	0.3 to 40mm
Weight	490kg	300kg (660lbs)	270kg (594lbs)	370kg (814lbs)	950kg (2090lbs)	1062kg (2341lbs)
Hopper capacity level	0.60m³	1.0m³	0.75m³	1.0m <sup>3</sup>	2.0m <sup>3</sup>	2.2m³
Tractor size	self-propelled 18hp		20hp+:	20hp+:	25hp+:	35hp+:
	engine		double acting hydraulic valve and min. oil supply of:		of:	
			12I/ min@120bar	20l/ min@140bar	25l/min@140bar	25l/min@140bar

Optional items: Auxiliary tank and pump unit (Rink 1010, 1210, 1520) / Own 13hp engine (Rink 1010, 1210, 1520) / 4 pivoting wheels (Rink 1520) Dry sand plate (Rink 1204, 1205, 1005, 1010, 1210)

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. 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.





Toro Workman (under).

The Rink 1205 contains a hopper made of aluminium and they are being placed on utility vehicles. It covers the tyremarks of the vehicle due to its large working width of 1.8m.

#### Rink SP1205 walk-in front



The selfpropelled Rink SP1205 has a working width of 1.8m



A Special Infill kit consists of a custom seal kit and a rake, which pulls the fibres into a vertical position immediately behind the wheels of the spreader, so that the Infill material can drop down to the base of the mat.



If a 13hp engine is added the Rink 1010 can be pulled by virtually any vehicle.



Options: A Hopper Extension kit increases the hopper capacity to 1.27m<sup>3</sup>.

#### INFILLING/REFILLING

# infill spreaders

#### Bigbag spreaders ( > 2.0m<sup>3</sup>)



spreading.

The Rink 1210 is low to the ground, for easy refilling and ensuring the operator a good rear view.

Options on the Rink 1210 are the Hopper Extension kit (increasing the hopper size to 2.0m3), a Special Infill kit (to pull the fibres vertically) and a 13hp engine (a tractor is then not required)







The Rink 1520 can spread extremely accurate.



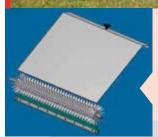
Optional: the Rink 1520 can be equipped with 4 small pivoting tyres.



The Rink 1622 is extra wide (2m working width) so that less passes are needed.







# Optional application for fine sand + gravel + red clay.

Hopper capacity

For fine sand, gravel and red clay the machine has to be equipped with a kit consisting of a brush cylinder, scraper and a compartment plate, instead of the existing scooped cylinder.

The hopper capacity then decreases to 60 liters.

100 liters

# **COMBINATION VEHICLES**

**Belly-Brush** 

Verti-Trac 24

# Verti-Trac

The Verti-Trac 24 is a tractor containing a 24hp Kawasaki engine to which a variety of machines and tools can be connected. Thus, all tasks necessary for the maintenance of artificial turf can be carried

pressure applied to surface through the bristles all from the operators seat. The Belly-Brush weights 54kg

(119lbs).

Model	Verti-Trac 24
Engine	24hp Kawasaki Twin Air cooled, 726CC
Transmission	Hydrostatic belt drive
Weight	203kg (448lbs)
Groundspeed	7.5km/h (4.5mph)
Dimensions	173x79x112cm (68x38x44")



# **Verti-Trac model 24-attachments**













# Clean 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.

# **NEW DEVELOPMENTS**







