



**ELIET®**  
Harmony in nature

# AERATION & TOP DRESSING

THE ESSENTIAL CARE FOR YOUR LAWN

**ECOCURE**







## MAINTAIN YOUR SPORTS FIELD WITH ONE MACHINE

Soccer is a celebration. Thousands of people play this sport, whether competitively or with friends for relaxation. Whether it is in the highest or lowest division, one wish that soccer players have in common is that they want to play on a nice field.

But reality is often different! Many athletes who step onto a soccer field today run a higher risk of muscle and joint injuries due to the poor condition of the sports field.

It can also be otherwise: essential lawn care is more than mowing alone. It is, for example, essential to monitor and manage soil hydrology and fertilization of the turf.

The Eliet Ecocure is a unit that connects to the back of your riding mower like a trailer and which can be used to **roll, aerate, top dress, scarify and spread sand** on your lawn. The Ecocure enables fast, efficient and inexpensive performance of a series of essential lawn treatments which a perfect sports field requires.



ELIET ECOCURE



# ECOCURE MAINTENANCE CALENDAR FOR SPORTS FIELDS

Players and spectators benefit from good sports fields. The quality of play is better and there is less chance of injuries. It is for this reason that it is extremely important to take good care of the turf during and also outside the season. With this calendar, Eliet gives you a tool to help you get started.



## OVERSEEDING

The grass on a soccer field has a rough time of it. Bare patches quickly arise all over the field. Overseeding is an affordable and efficient alternative for seeding a turf again. Besides the cost-saving aspect, it also has the advantage that the field can immediately be played on again. In addition, one achieves a visible result in less than a month's time. Eliet here offers two models that rank among the most cutting-edge self-propelled overseeders on the market.



ELIET OVERSEEDER

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## AERATION

A loose and airy top layer is crucial for a sports field, first of all because a soft top layer reduces the chance of injuries to the players. Furthermore, a loose and airy top layer ensures that the grass roots develop better in breadth as well as depth so that the grass is less easily torn out while playing.

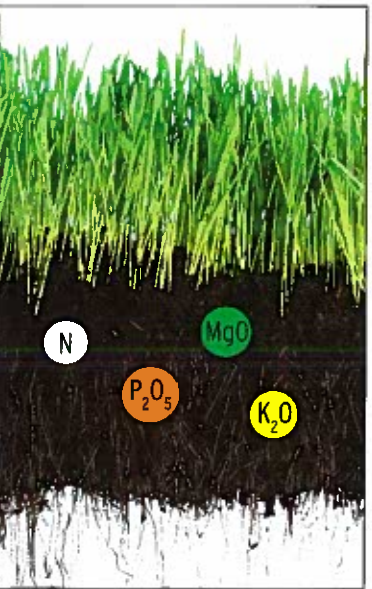
A sports field which is mowed short is extremely vulnerable to all weather conditions. A soccer field can only handle heavy rainfall if the drainage capacity of the soil is sufficiently

high; otherwise there is a risk of puddle formation or run-off. Only airy soil can absorb the water. Sustained drought also takes a heavy toll on the spacious area of grass on a soccer field. For grass to survive, it has to be able to absorb water from deeper underground. Here as well only an airy soil enables deeper root growth. With the Ecocure you can also turn every mowing session into an aeration treatment which immediately compensates for the effects of a match.



ELIET ECOCURE

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## FERTILIZING

A fertilizer which is adapted to continuous stress or to the requirements is the best precautionary measure for a durable, functional turf. In order to be able to meet these high demands, grasses must be able to grow quickly and therefore must have a continuous supply of nutrients. The quantities of required nutrients depend upon the intensity of use of the grass and the quality demands. The values indicated here should be adjusted according to the permeability of the soil and the rain.



ELIET ECOCURE

Nutrients in units/ha	N Nitrogen	P <sub>2</sub> O <sub>5</sub> Phosphate	K <sub>2</sub> O Potassium Oxide	MgO Magnesium & Trace elements
Sports fields				
- High demands	280	130	270	80
- Average demands	210	80	200	50
- Low demands	160	60	180	40

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## MOWING

Grasses are kept at a certain length by mowing in order to guarantee the value of playing technique for the various sports. Regular mowing is conducive to the density and general appearance of the turf because it improves sprouting and runner formation. Cylinder mowers give the best mowing quality if they are set properly because the grass is cut rather than sliced. Rotary mowers are also appropriate for mowing longer grass. But then the grass clippings need to be removed.

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## TOP DRESSING

A sporting club cannot select the soil of a field. A heavy soil, for instance, is less appropriate for a sporting terrain because it hinders grass growth and compacts more quickly which is also detrimental for drainage of the terrain. The soil can be loosened up by intensive aeration, but this should be combined with a filler such as sand which mixes with the top layer in order to alter the soil properties of the top layer. The Ecocure can aerate as well as top dress with sand in one pass.



The machine can also be used for spreading lime (1kg/m<sup>2</sup>) in order to neutralize the level of acidity of the soil where necessary. This is preferably applied when rain is anticipated so that the lime can quickly penetrate the soil.

By growing and mowing the grass, nutrients and organic substances gradually disappear from the soil, which brings the risk of structural deterioration. In order to keep concentrations of organic material at the desired level, top dressing with compost in spring and autumn is beneficial (5 L/m<sup>2</sup>). Compost contains high levels of organic material and slow-acting nutrients. Furthermore, it ensures a natural soil life which improves the draining capacity and airiness of the top layer. An additional advantage of compost is that during fertilization, nitrogen is retained longer so that it washes away less quickly.

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## IRRIGATION

Grasses consist mainly of water (approx. 80-90%). An excellent water supply is therefore needed in order to maintain the good condition and easy recovery of grass sports fields. The overall water needs of the grass depend upon its location, soil structure and type of grass. The average daily need for water is around 2.5 l/m<sup>2</sup>, but this changes according to temperature, what the grass needs and the intensity with which it is played upon.

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## ROLLING

An uneven terrain spoils the game for players as well as spectators. Unevenness is caused by subsidence when insufficient attention is given to the structure of the subsoil when laying the field. Another factor which causes an uneven terrain is intensive use of the field. Grass is kicked loose or pulled up by slide tackles, leaving pits and grooves behind. After a period of time, the weekly mowing with a heavy riding mower also causes rutting in those places where the wheels always travel. Regularly rolling the sports field irons these wounds and unevenness flat, and again ensures a level sports field on which the ball rolls rather than bounces. Furthermore, the field acquires a striped pattern so that it looks like a stadium of a top football club.



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# ECOCURE FEATURES

## TOW BAR

In order to ensure optimal performance of the Ecocure, the tow bar should be level to the ground. The Ecocure should thus be connected to the hitch of the riding mower with the correct tow bar height. That is why there is an extensive series of heights provided for the tow bar. The lever to activate the top dresser can be adjusted to bring it within reach of the sitting position of the driver.



## BRUSH

A belt conveyor is fitted to the base of the trailer's container. The back section is equipped with a twin dosing mechanism. The Ecocure can carry up to  $1/2\text{m}^3$  of sand and scatter this evenly across the lawn during the aeration process. A brush, which moves from side to side, immediately sweeps the sand into the turf. The amount of sand being scattered adjusts automatically to the speed at which the riding mower is being driven.



## PRESSURE DISTRIBUTION GRILLE

A container filled with material to be spread (e.g. sand) represents a significant weight. In order to reduce pressure and resistance on the belt conveyor, one can place a grille in the container which helps to restrain the weight.



## AERATION CYLINDER

Just behind the roller is an axle mounted with 32 spikes which prick through the top layer of the lawn's soil to a maximum depth of 8 cm. This aeration roller consists of two parts. When making turns, there is a differential action between the spikes in the inner and outer turn.



## DOSAGE OF MATERIAL TO BE SPREAD

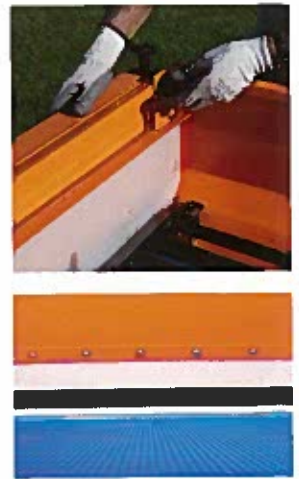
When top dressing a sports field it is essential that the filler is evenly and equally distributed and that the correct flow of spreading material can be set. One must select the appropriate dosage supply of the Ecocure in function of the characteristics of the material to be spread.

### A. Filling material with regular structure

With filling material such as sand, powdered lime, granulated lime, bloodmeal... One has particles of the same shape and size. In this case one selects the plastic guillotine slide to regulate the outflow opening.

### B. Filling material with irregular structure

With irregular material to be spread, such as compost, there is a risk that large particles will clog the throughput opening. One can regulate the flow by means of the back plate which can be adjusted in height. There is a cam roller underneath this plate which crushes larger particles and pushes them through so that there is always an even throughput.



## LOW MAINTENANCE COSTS

The Ecocure is drawn by a riding mower. All power trains branch off from the rotation of the roller by means of slowly rotating transmission (chains, gearwheels, belts) which hardly requires any maintenance.



## ROLLER

The purpose of the Ecocure's rubberized roller is to eliminate the unevenness of the lawn surface with the result being a turf as flat as a pool table. Furthermore, the roller provides an aesthetic striping pattern which gives the sports field a professional and groomed appearance.

## OPERATION

The aeration cylinder and the brush are operated electrically by means of a control button which can be placed on the riding mower. This is very handy for quickly raising it in order to take a 180° turn.



## GREEN LAWN GUARANTEE™



All too often one comes across private lawns in a miserable state. The cause of this is always attributable to little and limited maintenance. High-quality lawn care is essential for a healthy and dense lawn. Such care requires know-how and specialized machinery to enable application of the right techniques under the right circumstances.

Eliet believes that expert landscape contractors play an important role in this process. After making an adequate lawn analysis, the expert can proactively advise the lawn owner about an appropriate maintenance plan. Eliet is convinced that by following this work method, the contractor can even offer his customer a paid Green Lawn Guarantee™ that ensures a healthy and dense lawn throughout the year.



## TECHNICAL DATA

### PERFORMANCE

### ECOCURE

#### ROLLER

rolling surface width	900 mm
cylinder diameter	360 mm

#### AERATOR

aeration cylinder	shared cylinder, double bearing
diameter aeration cylinder	250 mm
number of perforations/m²	82
number of blades	30 slicing blades
max. aeration depth	80 mm
load on the aeration cylinder	adjustable with springs
switching on the aeration cylinder	electric-powered from the riding mower

#### TOPDRESSER

collector bin capacity	350 L
collector bin dimensions	1000 x 1000 x 350 mm
metering gate	Guillotine gate - adjustable
feed belt	abrasion-resistant plastic coating
support of feed belt	11 x rollers on bearings Ø 50 mm
feed belt drive	mechanic
operating the feed belt	standard : mechanical lever option: electric-powered from the mower

#### BRUSH

width	920 mm
lift brush	electric-powered from the riding mower

### DESIGN

dimensions	2000 x 1100 x 940 mm
weight	210 kg

### OPTIONS

MA 024 001 002 rubber coating of roller
MA 024 001 001 nylon roller scraper
MA 024 001 003 topdresser can be electrically powered from the riding mower

**ASK FOR YOUR  
DEMONSTRATION TODAY!**

# ELIET®

#### Eliet Europe nv

Phone +32 (0)56 77 70 88  
Fax +32 (0)56 77 52 13

info@eliet.eu  
www.eliet.eu

#### IMPORT UK PINNACLE POWER EQUIPMENT

Phone +44 1932788799  
Fax +44 1932784487

sales@pinnaclepower.co.uk  
www.pinnaclepower.co.uk

#### IMPORT USA ELIET USA inc.

Phone +1 (0)412 367 5185  
Fax +1 (0)412 774 1970

usinfo@elietmachines.com  
www.elietusa.com

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