

# The quickest overseeding solution, all year round

Your sports pitches are used day in, day out.

It therefore comes as no surprise that by the time the winter break comes along, parts of the pitches will have been damaged and by the time the end of the playing season has arrived the pitches have almost completely lost their grass cover, severely limiting the number of available playing hours.

SOS is the ideal solution, as it takes half the time to recover after overseeding. SOS can be used throughout the entire season, even when the soil temperature is low. And the result? After a short recovery period the playing season can be extended with additional playing hours!

## SOS, a new concept for sports pitches

SOS is an innovative turf grass product, characterised by its extremely rapid germination and establishment, even after overseeding under very low temperatures. SOS germinates and establishes much more quickly than pure perennial ryegrass. Pitches that were damaged due to heavy play can be renovated to the required degree of grass cover within a much shorter period of time. Thanks to SOS, there is a substantial reduction in the 'recovery period' after overseeding

- By almost 15 days, when overseeded during the growing season (after finishing the playing season)
- By half, when overseeded just after winter, even when the soil temperature is low.

SOS will provide dense grass cover the whole year through, with the result that each pitch remains playable for longer.



Super Over Seeding

BB-062010



Super Over Seeding

## Why choose SOS?

- SOS is the quickest solution for renovating sports pitches
- SOS reduces the recovery time
- SOS quickly establishes all year round (except at frost)
- SOS germinates at low soil temperatures
- SOS suppresses poa annua
- SOS provides a dense grass cover all year round
- SOS results in more playing hours
- SOS has a high rooting capability
- SOS provides a more even and comfortable pitch, so fewer injuries
- SOS enables improved ball behaviour for specific soccer skills
- SOS is the better alternative for artificial turf

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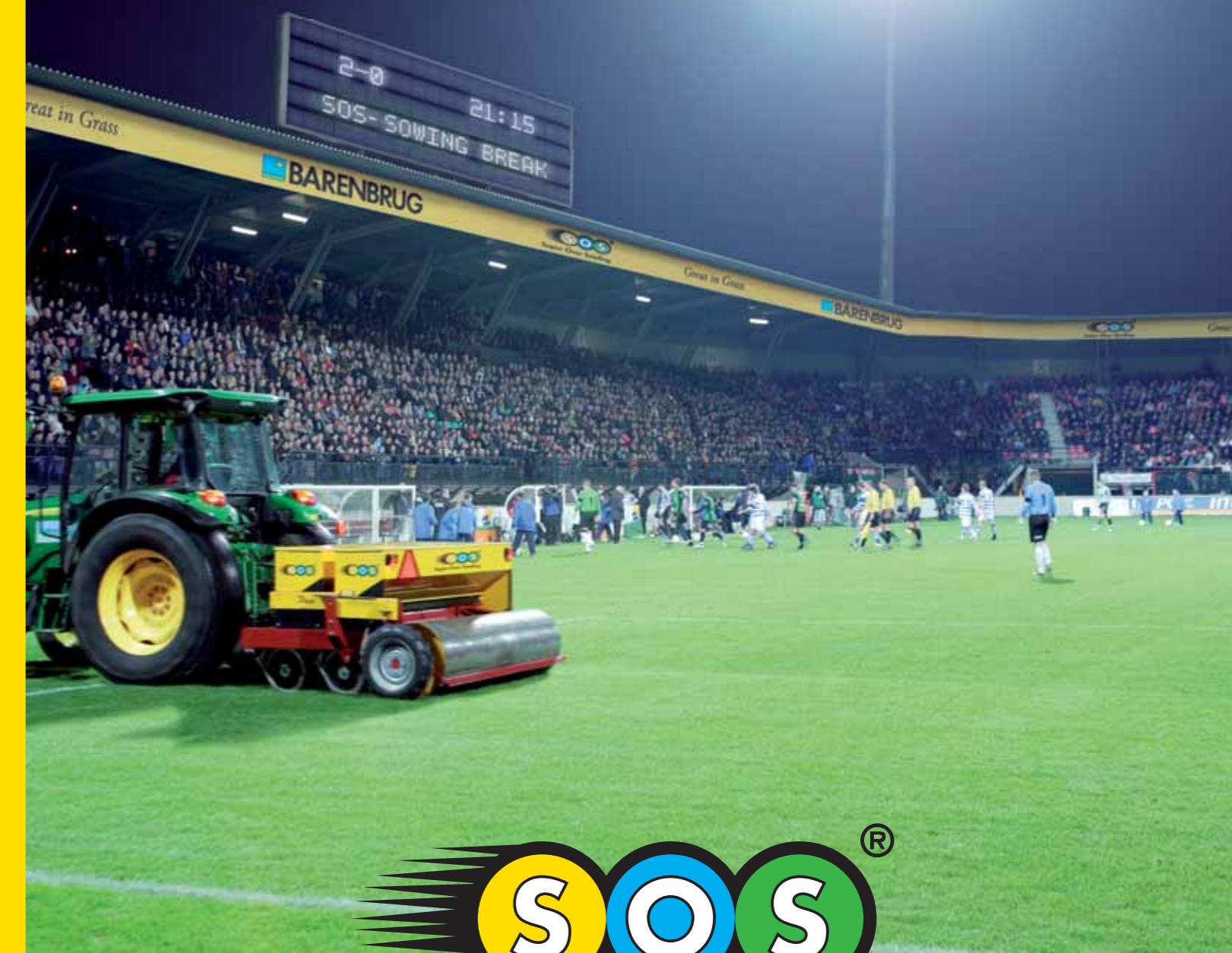
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# Grass on demand when time is running out

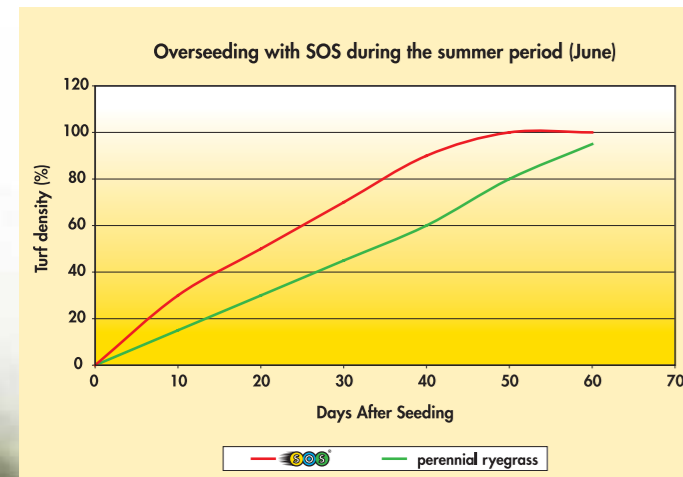


Super Over Seeding

## Quick germination with SOS!

Once the playing season is over, all sports pitches are in need of major renovation. However, busy competition schedules leave only limited time for this. Achieving and maintaining a high grass cover has become a challenge ...

SOS is the solution for reducing the recovery time of the pitch after renovation. Overseeding using SOS guarantees grass cover of at least 60% within one month - 15 days faster than with standard blends containing perennial rye grass!

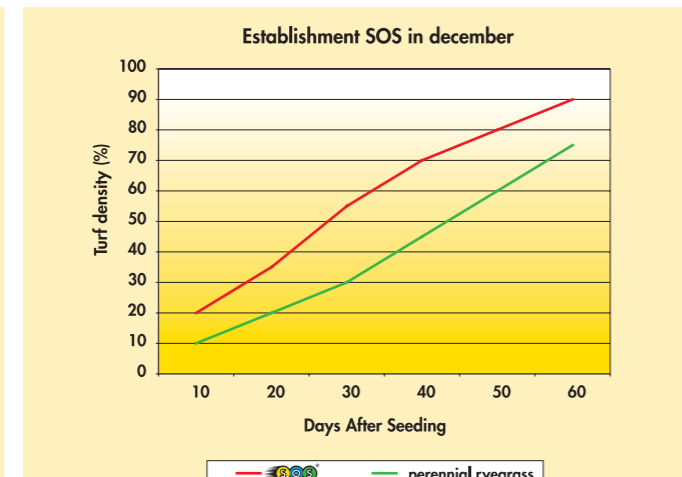


Overseeding using SOS reduces the time after sowing that is needed for the germination and establishment of grass cover by 15 days compared to perennial rye grass.

## Overseeding at lower temperature with SOS

The most heavily used pitches normally lose most of their grass plants in the middle of the winter. This means clubs need to improvise in order to keep on playing on suitable pitches. SOS puts an end to all of this, as overseeding is carried out on a continuous basis, already from the end of the winter period, thereby ensuring that your grass cover is maintained at a high level.

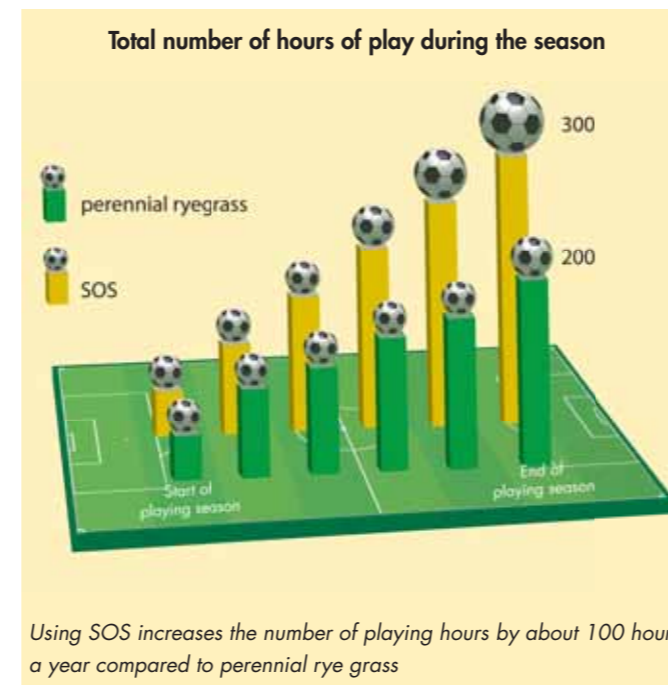
The following graph shows just how quickly SOS germinates and establishes itself when overseeded in January at a soil temperature of 6.2 °C. One month later, the grass cover is already above 60%.



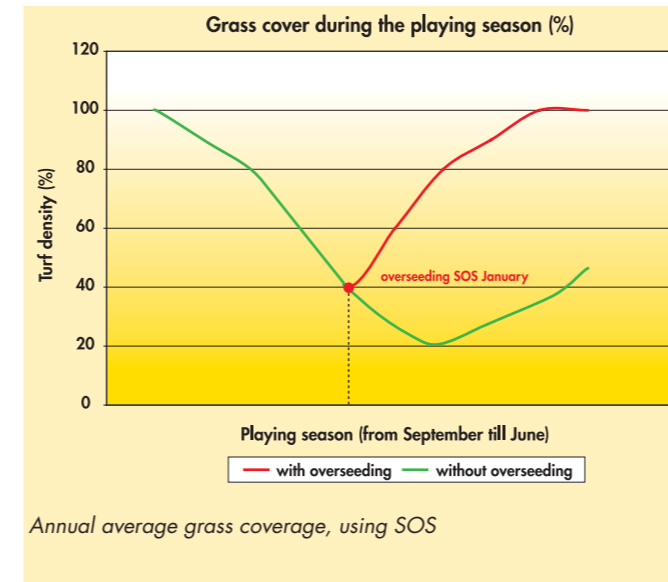
At low temperatures SOS establishes itself more than 20 days faster than perennial rye grass.

## SOS means more matches can be played

Thanks to SOS, overseeding is possible throughout the entire football season. SOS gives a continuously dense grass cover which also increases playability during the year. Pitches can be used more intensively than before. With SOS, the number of playing hours is drastically increased, in some cases even by around 100 additional hours a year!



Using SOS increases the number of playing hours by about 100 hours a year compared to perennial rye grass



Annual average grass coverage, using SOS



## SOS suppresses 'poa annua' (annual meadow grass)

Overseeding with SOS also offers a new means of suppressing 'poa annua' on sports pitches.

Unlike SOS, poa annua has shallow roots and is therefore susceptible to damage after heavy wear.

Intensive use easily results in bald spots. Poa annua is also lighter in colour, which means that the pitch will show signs of discolouration. The key feature of SOS is that it germinates and establishes at lower temperatures than poa annua, preventing it from even getting a chance to establish.

## Overseeding tips using SOS

### Sowing period & machinery

The product can be sown all year round. The major advantage of SOS is its quick solution for pitches subject to heavy duty and cold soil temperatures. Based on our research trials, we know that SOS already germinates at a minimum soil temperature of 6 degrees Celsius. SOS can be sown using any type of overseeding machine. Crossways overseeding is recommended as this ensures that the grass seed is distributed evenly.

### Sowing depth

Various tests in different countries showed us that not-too-deep sowing is the best for good germination. The recommendation is 8 mm.

### Sowing rate

The recommended sowing rate varies from 30 to 50 grammes, depending on the soil temperature and grass cover.

	Soil temperature	Quantity of grass seed required in grammes per m <sup>2</sup> when overseeding with SOS at various soil temperatures and grass cover percentages		
		Grass cover lower than 40%	Grass cover between 40 and 60%	Grass cover more than 60%
Winter	6 °C	50 g	45 g	40 g
	10 °C	45 g	40 g	35 g
Spring	15 °C	40 g	35 g	35 g
	20 °C	35 g	35 g	30 g
Summer	25 °C	35 g	35 g	30 g

### Irrigation

After seeding, it is essential to keep the top layer moist so as to accelerate the germination process. If irrigation is required, this should be continued until at least one week after the first shoots emerge.

### Fertilization

Once overseeding with SOS has taken place, you can apply initial fertilization according to the guideline (in kilogrammes per hectare). Please take your own situation into consideration before automatically following these guidelines.

	Nitrogen	Phosphate	Potassium
Sandy surface layer (max. 2.5% organic matter)	40	50	30
Rich(er) surface layer (min. 2.5% organic matter)	25	35	20

### Mowing

The grass can be mown once the new grass has established. The usual mowing height for sports pitches should be used. In the case of SOS, the minimum mowing height is 20mm.

## Production specifications for SOS

### Morphological characteristics

Growth habit	tufted annual and perennial
Height	35mm
Leaf width	similar to broader leaved perennial rye grass amenity cultivars
Shoot density	medium
Leaf colour	mid-green
Rooting capability	down to below 25 cm
Seeds per gramme	500
Disease tolerance	good
Thatch build up	very low

### Environmental conditions

pH	5.0 – 7.8
Soil type	any
Wear tolerance	excellent
Shade tolerance	good
Germination temperature	very low (6 degrees C)
Establishment	extremely fast

### Maintenance conditions

Average maintenance requirements	average
Minimum mowing height	20mm
Mowing frequency	high
Water requirements	medium/high under frequent mowing regimes
Nitrogen requirement	average (please refer to table for fertilization).

SOS requires additional input late autumn & early spring when actively growing

### Sowing

Oversowing rate	30-50g/m <sup>2</sup>
Sowing depth	no deeper than 15mm (broadcasting is possible with good irrigation)



## SOS even germinates when the soil temperature is low

Several temperature germination trials have demonstrated significant differences in percentage germination between different cultivars within the same species, including perennial ryegrass. SOS demonstrated its capability of germinating in very cool temperatures.

Where perennial rye grass did not germinate, SOS germinated very well in a refrigerated trial at a constant level of 4 degrees Celsius. This low temperature germination capability means that renovation windows can be greatly extended.

**SOS**<sup>®</sup>  
Super Over Seeding

### Amsterdam, March 2010

"If the temperature is below 10 degrees, we use SOS."

### Jan and Kees Jong

Groundsmen Amsterdam Arena

### Rotterdam, March 2009

"SOS has saved us a lot of money!"

### Remy de Mild

Groundsman De Kuip Rotterdam

