



Vredo Successful grassland rejuvenation



On the road to 2030 - the challenge

The dairy sector faces the challenge of producing more gallons of milk from the same acres. Surprisingly the countries which are producing the most litres of milk per cow are not yet leading in grass production! **Land is probably the biggest investment when it comes to producing milk**, but do you have quality milk-grass on your land, or, is it just green? **Not everything which is green will be white!** Did you know that the **average amount of good grass in a pasture is only 55% milk-grass** (English Ryegrass, Timothy, Italian Ryegrass, smooth meadow grass, clover, etc.) **The other plants are doing NOTHING apart from filling a cow's stomach!** These "bad" grass plants need to be replaced by good milk-grass. After all you will want to take full advantage of your most expensive means of production!

Positive results

Overseeding is a cost-effective way of grassland rejuvenation. Practical studies show that structural overseeding (annually) in the correct way (grass seed into the soil) gives 10% to 15% more yield. **For a farmer this means a net profit of around €200 / ha.** The costs of overseeding, the contractor and the seed are already subtracted from this figure*. Vredo has responded to this trend by developing wider machines which have higher capacities and feature the double disc system that actually sows grass seed directly into the soil. The impressive results of Vredo's system have been endorsed by several national and international studies in the past few decades (eg Practice Network - www.graslanddoorzaaien.nl). These studies have shown a 98% equal seed distribution and 96% germination of the grass seed!

Overseeding still improving & more important

There are three reasons why modern day overseeding is more successful than in the past (80s and 90s);

1. In the last two decades the knowledge surrounding grass has increased; we now know more about how grass grows; what its circle of life is and what process occurs when it's in a cow's stomach.
2. Due to improved soil knowledge we have become aware that a good soil structure must be retained and also how important it is to keep organic matter in the cultivation layer.
3. The Vredo's overseeding technique, which is already very refined, has been further developed in recent years and it is now equipped with a larger working width, improved following of ground undulations, accurate seed metering, accurate sowing depth and a newly developed packerroller which closes every seedslit even on rough terrain.

Vredo Overseeding principal

- Double V-shaped discs which make a small cut in the soil
- Seed is placed inbetween the discs
- The slit is closed by the compaction roller
- Optimal situation for germination: The seed is in contact with the soil and gets the optimum amount of light and air.
- The seed is protected from weather influences such as frost and birds.

The seeding element is regulated by a progressive helical spring in order to follow contours.

Individually installed seeding elements with only one pivot point follows each undulation

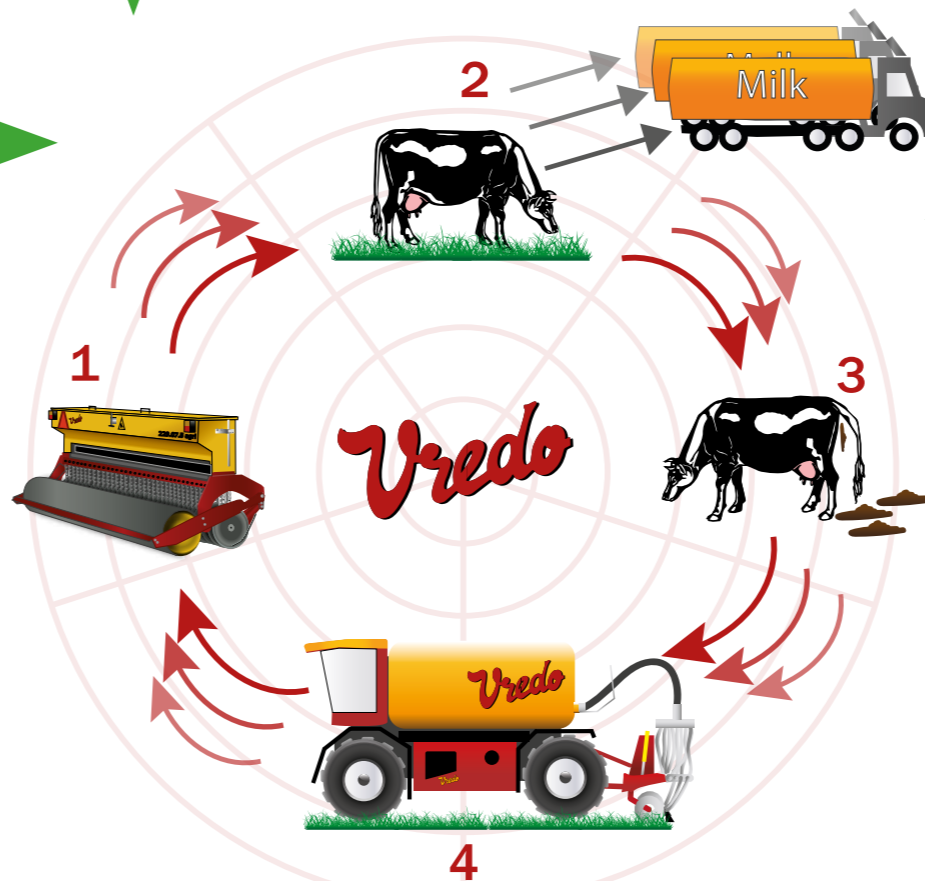
The sealed bearings are free from maintenance

Sharp discs are manufactured from the highest quality steel and the discs are self-sharpening.

The turf-guard ensures:
1. A sharp and tidy seeding slit
2. Clean discs on the outside
3. Adjustable optimum seeding depths

The combination of Double Discs and the spring and turf guard ensures an optimal seeding depth which means the most efficient usage of expensive seed.

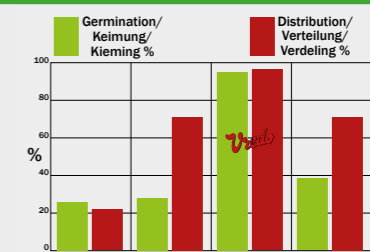
VREDO Agri Circulation



1. Plants absorb more phosphate, potassium and nitrogen which produce richer crops, therefore Vredo overseeding is required to deliver a thicker sward.
2. A qualitative and quantitative increase in yield means more production of milk per acre. **Improved phosphate efficiency means more livestock units per acre.**
3. More cows means more nutrient-rich slurry.
4. This nutrient source should be injected into the roots, not on top of the grass, therefore the Vredo slurry injector is indispensable. In addition, the open soil structure should not be compacted or damaged - the Vredo slurry Trac with its optimal weight distribution and small tyre footprint is a kind to your grass!

Energy Rate & Digestible Protein

Both values are in accordance with independent research are higher after overseeding with a VREDO overseeder.



A: Sowing by hand/Saen/Zaaien
B: Broadcast spreader/Düngerstreuer/Kunstmeststrooier
C: Vredo Double Disc/Doppelscheiben/Dubbele schijf
D: Tine harrow+broadcast spreader+roller/Egge+Saagtut Dosiering+Walze/Wiedeg+zaad dosering+roller

Investment	Per hectare	
Contractor + 150 hp Tractor + Vredo Agri Twin *	€42.50	£35.50
Grass seed 15 kg Lolium Perenne **	€78.75	£65.50
Total costs	= €121.25	£101.00
Yield	Per hectare	
+15% kgdm ha⁻¹ = 1500 kg x PRICE kgdm ***	= €330.00	£275.00
Profit	Per hectare	
Net profit	= €208.75	£174.00

* Example based on average UK prices. ** Calculated at £4.37 per kg. *** £0.18/€0.22 kg⁻¹
Information based on trials from: Innoseeds DLF 2013, K&G advies Holland 2013, Barenbrug BV 2012 & Landwirtschaftskammer (Chamber of Agriculture) Oldenburg 2005-2010.

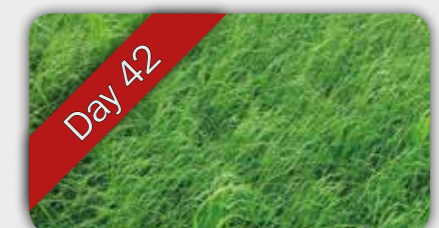
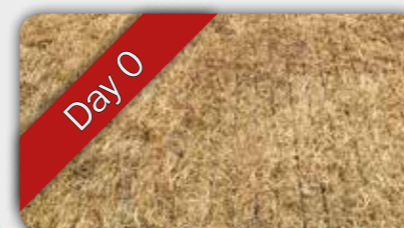
Did you know...?

Companies that buy lots of forage to (unaware) compensate the mediocre graslandmanagement), score, in average, less than the companies that can feed their cows with their own grass.

VREDO Double Discs System



VREDO grasresults



Experiences of Contractor...

Chris Gardner of Ashorne Agricultural Contractors looked at several different drills before opting for 5.8m Vredo Agri-Twin Overseeder. Vredo is already well-known in the UK amenity sector and its products are commonplace on everything from rugby pitches to golf courses. "But it's a relative newcomer to the UK-agriculture," explains Mr Gardner. "We had been looking at slot seeders for the last two years, as we were having more and more enquiries about them. But we needed to do our research before choosing which model." Mr Gardner looked initially at several (arable) drills but the row spacing was far too wide (12-15 cm). "Many of the drills we looked at had been derived from the arable sector, but the Vredo is a completely grass-orientated machine, with only 7.5 cm (2.9 inch) spacing" explains Mr Gardner. "The two V shaped discs cut a 5-15 mm groove. After the discs, seed is blown into the slot and a large ballasted flat roll follows that closes the slot back up." Each set of discs is individually sprung to follow the contours of varying terrains – a must on permanent pastures that aren't as flat as the average arable field. Cast packer ring rollers are available for undulating areas. "It's a waste of diesel to plough up grassland just to reseed it," he adds. "The Vredo needs a firm existing seedbed, and is ideal for stitching a new variety or different crop into an existing ley."



* Organic customers

"We wanted a folding machine rather than a fixed so as to be able to cover a large acreage," he explains. "It's also a good way of establishing clover in permanent pasture, which has been popular for our organic customers." "Because the seed is blown into the slot and re-covered, it's not susceptible to trampling or bird damage, and land drilled can continue to be grazed without a break."

* Drilling into stubble

Although it's possible to drill into stubble, you have to be careful. "It really depends on the ground conditions, as sometimes it will go and sometimes it won't. However, we have successfully planted clover into oat stubble and grass into stubble, as well as game crops. The outfit can manage in the region of 4-4,5ha/hr. It's mounted on a JCB Fastrac 3190, which is chipped to 200hp. "It needs a big tractor because of its weight. Once on the ground it doesn't need a lot to pull it." Many customers quote: "we never thought overseeding could be so successful!"

Vredo's Tips & Tricks

1. Make sure prior to overseeding the existing grass is mowed short
2. A dense / thatchy turf (often with Rough Meadow Grass) needs to be harrowed intensively.
3. Overseeding in a moist soil is an important key to success.
4. Ensure that the grassland in autumn is not too heavily fertilised and decrease the nitrogen application in a timely manner
5. Keep unused pastures sprayed during a long waiting time, which preferably includes a period of rain. Harrow it well prior to seeding or mow the dead grass and remove it.
6. Grass which is overseeded without a total spray off, should be grazed 2 weeks after seeding.
7. Make sure that the risk is spread: it's better to sow a little less grass seed periodically than a lot of all at once.
8. The genetic progress of grass seed is 0.4% per year. By investing in re-seeding the genetic predisposition of the sward increases to achieve more dry matter.
9. Plan just a light fertiliser/dung around the overseeding, to reduce competition from the existing grass.
10. Have patience! A full, young pasture with real milk grass will be available after approximately 3 silage cuts.



Vredo reps: Gerbert Kuijt & Pieter-Teunis Hoogland

Other Vredo Products



The VREDO Trac, specially made for the spreading of muck and slurry, provides work with higher capacity and ideal weight distribution. Low ground pressure maintains soil structure and good grass growth.



The VREDO Multifunctional Trac is a versatile vehicle which is primarily used for effective and safe mowing of verges on the highways. Built with a blower to dispose of the mowed material. Everything is done in one pass.



The VREDO slurry injector puts manure into the ground at the root zone without causing soil compaction. This grass gets the best absorption of nutrients through the root for optimum grass growth.



The VREDO Slicing Filter pumps, cuts, separates or reduces solids in a liquid stream. Pumps are protected to prevent blockages and the liquid becomes homogeneous as it travels through slurry tanks and biogas plants.

Vredo

The best in the field

Vredo Dodewaard B.V. is a healthy independent familie business that since 1976 has focused itself on developing, manufacturing, selling and servicing agricultural & green sector machines.

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