

James de Havilland takes a closer look at the intricacies of current machinery

The anatomy of...

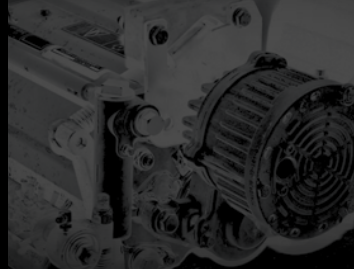
Vredo Super Compact Overseeders



Timing is key to overseeding success. Grass seed applied through any form of overseeding equipment should germinate just fine in the right conditions. The key to success, however, remains in ensuring the germinating seedling then survives. On sports turf that is allowed the luxury of a rest before it is played and tightly mown, overseeding can be carried out through a wider time frame. But year-round play makes overseeding golf greens a real challenge.

Step-by-step Analysis...

Vredo Super Compact Overseeders



As is so often the case, it can be dangerous to make sweeping generalisations, this applying particularly to the subject of overseeding. But when it comes to accurately placing fresh seed into an existing green, there is generally a consensus when it comes to timing; the optimum period will typically be between late August and then on through September. The job can also be carried out in October, but the later into the autumn the job is done the higher the risk of frost or late season fungal attack.



The steel flat fingers that run alongside the cutting discs help ensure a clean slice is cut into fine turf, and also help ensure an even depth is maintained across the full width of the machine.



Viewed from the side, the depth of slit can be clearly gauged by the amount of disc protruding through the fingers. The toothed wheel drives the metering unit.



Metered seed is drip between the silt-cutting discs via tubes. Note inter-disc scrapers, the chain supports allowing the scraper to move out of the way and subsequently eject an object as the disc space opens up.



Pictured on the assembly bench at the Vredo factory, the workings of the metering drive can be seen. A key design aim is to ensure low seed rates of small seed, to include Bent grass, can be accurately maintained.

It is also fair to say there are those who prefer to overseed in conjunction with sand slitting or other aeration methods, adding seed at the same time as the sand allowing two jobs to be done at once. Others prefer a direct overseed, with an emphasis upon minimal visual impact and allowing a green to be put back into play almost as soon as the equipment leaves the green. As always there will be a play off between getting the job done and minimising disruption.

If the latter is the goal, the choice of 'straight' overseeding equipment on offer will include the Vredo models offered by Campey Turf Care Systems.

A reason for taking a look at the Super Compact model featured here is that it has been purpose developed to suit overseeding golf greens and that the first models have now been in use in the UK long enough to be considered.

The Vredo Super Compact overseeder was originally developed for use on golf greens and tees though in practice users suggest the tool can also be used for patch repair on fairways, particularly landing zones subject to divot damage.

As to the actual Super Compact unit, its design follows the established Vredo seeding principle; a pair of angled discs cut a V-shaped slit into the turf into which metered seed is placed.

The idea behind the system is that the roller at the rear of the unit seals the slits. So although an overseeded green can be played on immediately the job is completed, the closed slit also helps to seal in moisture. This helps to provide good seed to soil contact, with users suggesting this results in good germination rates. Vredo suggest germination can be as high as 95%.

The Super Compact is offered in trailed and mounted versions, the build of the unit allowing the chosen model to be converted



Although shown in a ryegrass winter sports turf sward, the slit cut by the seeder is 'closed' by the unit's roller. On a golf green, the slits typically only show during an early morning dew.



The flutes of the metering unit are partially covered by a flap, the aperture of which is adjusted to seed the seed and desired application rate.



between the two. In trailed form, weights are added to help ensure the discs penetrate the turf, the aim being to allow trailed units to be operated behind a light tractor that may not have the lift capacity for the seeder in its mounted form.

The idea is to allow overseeding to be undertaken with as light a tractor as possible, front weights on the tractor possibly compromising the operation on some greens.

By offering the Super Compact in trailed form, overseeding can possibly take place with a lighter tractor, reducing the risk of compromising the green, particularly when overseeding in ideal damp conditions – check this and the paragraph below – this states it's ideal in damp conditions.

Although the operating principle of the Vredo Super Compact is easy enough to understand - metered seed drops via tubes between the cutting discs, the resultant slit being closed by a rear roller – actually setting up the unit can take a while to get right. A key point is to ensure the unit runs level and that a close eye is kept on the resultant finish.

The narrowest 0.80 and lightest Vredo Super Compact is ideally suited to mounting on a tractor with a modest 510kg lift capacity, the narrow width allowing good contour following.

How long it will take to overseed a green will of course relate to the green's size, but operators of the wider 1.20 models suggest a

green can be completed in around 20 minutes, making it feasible to complete 18 holes in a day.

With regard to conditions, the Vredo needs to work on a dry surface – this says it needs dry surfaces – this needs checking, with morning dew being enough to potentially upset the ability of the machine to leave a good finish.

Sowing depths can of course be varied but a slit depth of between 3 to 4mm is typically seen as being ideal. At 35mm spacing, a single one-way pass is also normally about right, a counter pass the next

season helping where a variety or species change is a priority.

With regard to prices, mounted models of the Super Compact are priced from £14,750, a trailed 1.60m Super Compact listing at £27,625. ex VAT.

This is a considerable investment but one that should be viewed in relation to the potential life of the unit. Most golf courses would struggle to wear a machine out in 20 plus years. The Vredo Compact range starts at £10,025 for a Compact 210, up to £14,545 for a Compact 222.

Shown in a typical greens overseeding application, the 1.60m Vredo SUPERCompact is based around the existing mounted and trailed Compact series also includes narrower 0.80m and 1.20m alternatives. Staggered discs allow a row spacing of just 35mm. With respective hopper capacities of 90, 135 and 180 litres, the units can be operated at speeds as high as 9 to 10kph. Note weight pack over rear roll.



Steve Oultram, Golf Course Manager at Wilmslow Golf Club has been using a mounted Vredo SUPERCompact to mainly establish bent grass into the course's 18 greens but has also overseeded with some fescue seed. A key reason for choosing the Vredo was its minimal surface disturbance and its speed; all 18 greens were seeded in a period stretching from 6am to 3pm.

"My first aim is to get a good rate of germination," he says, adding. "Once the seed has germinated it needs to establish. By sowing in September we are able to mow the greens at a winter cutting height and have stopped verticutting and using wetting agents. This allows the young grass plants to establish over the autumn".