

SPREADING EQUIPMENT: SPREAD YOUR DRESSINGS EVENLY

By James de Havilland

When looking to buy a new top dresser, typical considerations will include choosing between a tractor or vehicle mounted designs, and trailed spreaders with or without their own integrated power pack. Once the ideal capacity has been established, the selection job may seem easy. But there are numerous other points to consider.

For what appears on the surface to be a really simple bit of kit, modern top dresser designs have enough design variation within them to make selecting the right one perhaps more involved than it may at first appear. As an example, some options can allow a machine to be swapped between direct drop to spreading via spinning discs. Several higher capacity trailed machines can be readily converted into a bulk loader, the addition of a rear conveyor allowing them to discharge directly into a smaller spreader, trailer, a bunker or even into a heap or windrow on the ground.

On trailed models, the variety of wheel and tyre options to consider varies; some designs favour a relatively narrow track but with wheels across the width of the dresser body. Others adopt wide flotation rubber with an outer edge well beyond the width of the hopper.

On smaller models, both mounted and trailed, there may be a choice of an integrated power unit. These 'self-contained' models can often be used in conjunction with equipment that would otherwise not have the power, hydraulic flow or PTO to drive a spreader but otherwise be ideally suited to top dressing and spreading duties.

There is then a choice between those designs with simple full width hopper and discharge systems. Simple to use and set up, it is easy to match each bout pass with this type of kit. As spread widths increase beyond the unit's width, productivity will climb. So will the need to match each pass to ensure spread accuracy. The appeal of a machine that can spread material to 8, 10, 12 or even 16m needs to be countered by the ability to accurately match bouts at these widths.

Next up are hopper capacities. It is all too easy to assume that a large trailed top dresser will be too big. A key issue is that there are no rules to say a nominal 3.0m³ capacity machine needs to be fully loaded. Loaded with 1.0m³ of material, a 'big' top dresser may offer a footprint that is less than a smaller machine with the same load on board.

This brings in the issue of tyre types and inflation pressures. Without getting into the complex territory of how much load a tyre can take at a certain pressure, a simple guide is that a tyre inflated to a given pressure should impart much the same pressure to the ground.

A bit of an over simplification, perhaps, but what this can mean is a big trailed spreader and tractor combination running on tyres inflated to 0.5 bar may well exert less pressure on the ground than a buggy with its rear tyres blown up to 3.5 bar to enable it to take a fully loaded mounted spreader.

If you are looking for a new top dresser, you have a huge choice. Entry level direct drop tractor mounted models with a 3.5m³ body and a nominal spread width of 1.5m will retail from under £5,000, utility vehicle equivalents listing between £6,500 and £7,500.

Spinning disc broadcast spreaders occupy a diverse range of machines, those designed to fit a utility vehicle retailing from £7,500 for a top specification machine. When it comes to trailed models, prices may well start at under £6,000 to large trailed units costing over £20K. It is pretty obvious that there is a huge choice of designs to consider.

To help, it can be useful to set out a few pre-purchase demands and preferences. These can include:

- Tractor or utility mounted versus trailed
- Vehicle driven or fitted with own power pack
- Direct drop or broadcast – or both
- Ability to spread range of top dressings
- Application rates and hopper capacity
- Versatility. Fertiliser as well as top dressing?
- Tyres sizes and inflation pressures
- Compatibility with existing equipment
- Projected workload
- Additional options offered to improve versatility
- Ease of operation and setting up
- Fitting and removal from tractor or vehicle
- Local support and budget

A top dresser may be simple, but these machines do differ in so many ways. It is the small details that can really help make one machine more suited to individual needs than others. Knowing what is needed is the first step in selecting the best tool for the job.

QUICK TIPS TO HELP SPREADING EASIER:

Spreading wet material. Some dressings may bridge within the hopper when wet. A simple check is to see if 'tunnels' can be pushed into the heap before loading. To help, load the hopper so the dressing is broken up as it is dropped into the body. Avoid overloading and keep transport speeds down. This will help reduce the load compacting upon itself in transit.

Keep the spinners spinning. Always start the spinners on broadcast models running before the floor conveyor. When shutting off, allow the spinners to run to clear of any material that may continue to fall from the conveyor.

Check material consistency. Variations between top dressing batches can influence how the material spreads. Check that the material is spread to the desired width and adjust as necessary.



Campey Turfcare Systems established the Dakota 'Turf Tender' top dresser range in the UK, with mounted and trailed units spanning 0.65m³ to 3.82 m³. Spinning disc models spread up to 10m, the Dakota set-up system making these machines popular with operators. As with all types, the choice of model will need to be related to the machine's intended applications and the equipment that will operate it.



Lloyds has expanded its previously three-model range to include the '6 cubic yard' Pequea Turf FX650 which will be supplied to order and a smaller 'half ton' GT-50 model below the existing GT-100. The smaller models come in trailed or mounted versions with the choice of an integral power pack. The latter has now been upgraded to enable it to cope with the heaviest of dressing materials. As with most suppliers, Lloyds can offer a range of options to suit specific needs, including a discharge conveyor for bulk handling applications.



The design of top dressing equipment may be similar in outline but not in detail. The Pro-Cast PC3 from Sportsground Machinery drives its discs via hydraulically powered shafts. This keeps the hydraulic motors well out of the way of spread material. Spread width and patterns will vary according to the quality and quantity of top dressing applied, but a model like this is versatile; it will cope with large volumes of materials but will also spread light and thin if required.



Taking a side by side look at Rink top dressers from Charterhouse Turf Machinery shows how the designs offer different approaches to wheel and tyre positioning. It can be wrong to assume a smaller and lighter machine will always have a lighter footprint. Mounted Rink models start at 1.0m³ capacity and spread to 1.5m, the large 3.8m³ DS3800 on the left offering spread widths from 2.0 to 15.0m. Material can be applied to a thickness of between 0.5 to 15mm.



Distributed in the UK by Turfmeh Machinery, the TYCROP ProPass 180 ultra low impact broadcast top dresser can be used as a large-area top dresser fitted with twin rear spinning discs or, with these removed and the optional swivelling cross conveyor fitted, used as a bulk loader for filling trailers or greens top dressers, bunker filling, tee construction and path resurfacing. The conveyor measuring 203mm (8in) wide by 1.65m (65in) long and will through an arc of 180 degrees. All Tycrop models feature a simplified instructions to adjust application rates

SUPPLIER LIST

The following is a guide only and may not include all companies that produce or sell top dressing equipment. Fertiliser broadcasting equipment suppliers are not listed.

Campey Turfcare Systems
Charterhouse Turf Machinery Ltd
John Deere Ltd
Lloyds & Co Letchworth Ltd
Ransomes Jacobsen Ltd
Sisis Equipment (Macclesfield) Ltd
Sportsgrounds Machinery
Toro Commercial Products
Trilo UK Ltd
Turfmech Machinery Ltd
Ultra Spreader International
Wiedenmann (UK) Ltd



'Full width' top dressers, such as the Toro Top Dresser, come in trailed and mounted variants, the former in its trailed 2500 version offering the flexibility to be used behind a range of machines. An even spread and easy bout marking are key advantages of this type of kit, with a potentially reduced risk of material bridging in the hopper; the top dressing has a shorter distance to travel to the point of discharge. The 0.70m³ Toro can be towed at speeds of up to 13kph, its ground drive system making it simple to maintain and switch between vehicles.



There is no fixed top dresser design rule book. Although the machines on offer fall into broadly similar groups, subtle design differences can make a given model a better choice for some applications. The key is to establish what is expected of the machine and checking it can deliver.



Versatility is a key to making the best use of equipment, the Turfco CR-10 from Ransomes Jacobsen not only offering spread widths from 4.6 to 12.2m but also the ability to bulk transport material from its 3.1m³ capacity hopper. Unlike a tipping trailer, the use of a conveyor to discharge material helps spread it and also allows the material to be discharged without compromising the edge of a bunker.



Although top dressing kit can be used to spread fertiliser, a simple ground driven broadcaster can sometimes make life easier, simply because it can be set up to apply a fixed application fertiliser rate and not need the settings on the main top dressing kit to be adjusted. A little bit of lateral thinking can save time and money.