

The second of a new series in which James de Havilland takes a closer look at the intricacies of current machinery

The anatomy of... a Top Dresser

New livery, new owner but same trusted design...



Back in October 2009, Toro acquired the golf and turf business operated by the Canadian TY-CROP company. Here we take a look at the first Toro top dresser produced since the acquisition, the utility mounted ProPass 200. This will be available through Toro dealers early this year.

Step-by-step Analysis...

Toro ProPass 200

The Toro ProPass 200 may not be different from its TY-CROP predecessor but that is no bad thing. The ProPass top dresser is well proven, rugged and not known for problems.

Why change a proven formula?



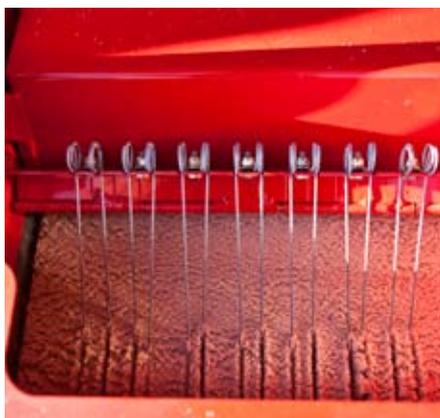
The rate of discharge from the hopper to the conveyor is controlled via an adjustable flap. Base application rate settings are provided by Toro, ease of set-up remaining a ProPass plus.



Twin carry handles make it easier to remove the spreading discs either for service or the fitting of a cross conveyor.



With the optional Wireless Controller, it is possible to fine tune the application rate as the unit is working. This can be useful when the top dressing material moisture levels have changed from when the machine was first set up.



Sprung steel fingers run over material exiting the hopper. They will help to break up any clods which can cause fluctuations in the application rates.



The hopper conveyor tension adjusters are easy to get at and are securely mounted. Note grease point and heavy-duty bearing. HSE regulations mean some of the lube points can only be accessed once a bolted on cover has been removed.

TY-CROP top dressers are a well established brand in the UK. Initially imported by Stafford based Turfmech, the TY-CROP top dresser series was more recently taken on by The Grass Group.

Toro now owns all the manufacturing right to the TY-CROP top dressers, but at least for the moment current Toro ProPass models are pretty much the same as their TY-CROP predecessors.

Introduced by TY-CROP in 2008, the mounted ProPass 200 we look at here is a development of the now discontinued TY-CROP ProPass 180.

The latter was listed as offering the same rated capacity of the current 200 model at 289kg. In fact the two top dressers are pretty much the same, the ProPass 200 having revised hopper extensions designed to ease loading.

The key change between a TY-CROP 200 and a new Toro version is pretty much down to branding.

So, Toro have just left the ProPass design as is? In a word yes. There was little wrong with the TY-CROP ProPass 200. The fact the 200 is a development of the established ProPass 180 model is also clear.

Apart from the hopper extension changes, there were a few other features incorporated into the 200 before its manufacture passed to Toro. Among these is the option of a Wireless Controller.

All ProPass models continue to be designed to allow a wide range of application rates, based around seven base settings. These essentially allow the selection of a light dusting through to a much heavier application rate; with the latter selected, the hopper will be emptied from full in around a minute.

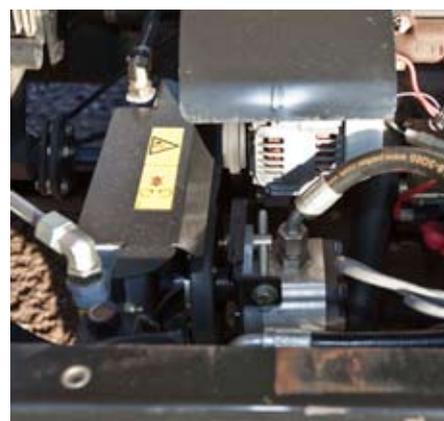
With the Wireless Controller, application settings can be stored



The rear disc carrier adjusts to allow the drop position to be adjusted according to the dressing being applied and the desired spread width. In position 1, this 'Sliding Drop Zone' provides the widest spread width of 9.1m, setting 4 the narrowest at 3.0m.



The hopper has smooth sides to help ensure the body empties fully. Existing ProPass users often fit a mesh grid over the hopper body to help break up any clumps as the unit is loaded.



The ProPass 200 needs an oil flow of 21 litres/min. This should not be a problem for more recent utility vehicles, but check if fitting a top dresser to an old machine.



An electronic control box is standard, and makes setting the conveyor and spinner speeds straightforward. The Wireless Controller does the same job, but can be operated remotely.



The TY-CROP ProPass 180 forms the template for the latest Toro ProPass 200. Existing TY-CROP users will have Toro parts support for earlier machines.

in a handset. When it comes to applying material, these settings can then be sent to the spreader, the settings adjusting to suit. If this seems something of a gimmick, stop and think how you apply materials.

Typically, you will take a look at how the dressing spreads out of the back of the machine, making sure the spread is what you want.

With the Wireless Control, it is easier to fine tune some key settings as the machine is working. So if the dressing is a bit damp, you can alter the conveyor or discs speeds to get the spread pattern you are after without having to stop the machine, changing a setting, and looking to see what happens. You can also store the settings you want to keep. The Controller has a claimed range of over 130m.

Basic machine

In broad outline, the ProPass 200 follows established top dresser design practice. The 0.54m³ hopper

(0.71m³ with a heaped load) has a hydraulically driven conveyor floor. This feeds dressing via an adjustable outlet to a pair of contra rotating spreading discs.

Spread width is dependent upon the speed of the discs, the settings of the vanes and the material being spread.

In the case of the utility mounted machine, the unit is supplied with a fitting kit to suit a broad range of vehicles. These allow the unit to slide on without the need for fitting tools.

An optional 11hp hydraulic power pack is available for use with vehicles that do not have a separate hydraulic outlet.

Other options include a 180 degree Cross Conveyor. This allows the hopper to be used as a bulk transport to fill smaller top dressers or to carry sand out to bunkers or for other work.

As an aside, the ProPass 200 is offered in a trailed version with a capacity of just over 905kg. This runs on a four wheel walking beam

axle that runs across the 1.7m width of the machine.

Existing TY-CROP ProPass 180 users will note a few other detail changes that came in with the 200 when it was introduced.

These include better colour coding for the setting decals and a revised wash out grid that is claimed to make the unit easier to clean out.

"We're delighted to add Toro ProPass material-handlers to our existing line of turf cultivation and application equipment" says Jeff Anguige, Lely UK's Toro UK sales manager.

"The products were previously branded TY-CROP and have a proven track record in global markets for many years.

"The range is the perfect complement to products such as the Topdresser 2500 and our ProCore aerators.

"We are now even better placed to provide a comprehensive offering to meet customers' turf maintenance needs."