



Professional Field Products

Photo: Altmann, Schieder, Schuller

An uncommon picture: cover crop seeding using the GP 300 spring tined harrow with seeder and rollers. **In our test, it worked perfectly.**

The GP 300 from APV combines harrow, roller and seeder for pasture management. In field tests, the GP 300 proved that it was a true professional, even when seeding cover crops.

We tested the 3-meter wide GP 300 Grassland Professional harrows with an attached PS 300 Pneumatic Seeder in a variety of ways, including for springtime field preparation, cover crop seeding and initial or overseeding of grasses.

Clean Design: The GP 300 offers two different mounting heights for the lower mounting. The upper mounting can be coupled either to a “fixed” mounting or to a slot position that affords flexibility in the mounting. The implement offers built-in hose brackets and the center frame serves as a storage compartment where spare parts, such as replacement tines, can be carried. The GP 300 is highly adjustable, using spring-loaded pin-and-hole systems:

- The leading leveling bar is adjustable in height and
- The two double-row tines are adjustable separately from each other.

The two front rows of heavy-duty harrow tines comb shallow weeds out of the soil, followed by two rows of narrower-gauge harrow tines. Each set of tines can be adjusted separately in small increments. The tine pressure and tension are set by changing the tine angle. A cable is

deployed through the coils of the spring tines to prevent loss of tines. Because the rear tines have a U-shaped profile that is open at the top, this set of tines catches a lot of dirt and also are difficult to clean. Perhaps APV will create a downward facing profile.



Each of the two rows of heavy gauge tines and two rows of narrower gauge tines lock into position to contribute to pasture maintenance.

The implement ends in either a Cambridge or toothed roller, as ordered. This roller is hydraulically adjusted, with a locking block and clips to ensure exact depth control. Our experience has shown that it is very important to take the time to make precise roller adjustments to achieve a good result in the field; doing so allows for adaptation of the roller to virtually any condition.

Universal Seeding Implement: The unit has an access ladder and platform for the PS 300 Seeder. In our opinion, the size of the hopper is more than sufficient. We tested the version with the electric fan, although the price list offers a hydraulic fan option as well.

For our test, APV provided three different metering rolls. These must be changed for different seeds from grasses to large-grained legumes.

Practical Detail: All calibration accessories are stored on the implement, including a calibration bag, collecting basins, a scale, the seed metering rolls, and the optional calibration button. We strongly recommend the calibration button for the time it saves: it eliminates the need to get in and out of the cab twice during each calibration process. Finally, the seeder has easy access for clearing any residual material.

For our test, APV also provided the new 6.2 Controller—replacing the previous 5.2 Controller—which features a large color screen. The new controller has better graphics; for example, the calibration process is more easily understood. This controller allows the seeding rate to be increased or reduced by up to 50% while the tractor is in motion. This feature is handy as the implement moves over thin or bare spots. The 6.2 Controller also allows for storage of many operating settings.

From our perspective, the operation of the GP 300 requires at least 100 HP and



The new GK Series can be used in a split, front-rear mounting.

Quick Look

- In our test, we wanted to know if the GP 300 can properly perform cover crop seeding.
- This implement is not a lightweight, especially noticeable on slopes.
- APV has introduced the GK 300.
- This new implement can be split and used as a front-rear combination implement.



The new 6.2 Controller with touch interface presents all seeding parameters clearly.

a tractor with significant front-end weight. Because of its massive design and added weight of the toothed roller, this implement is not a lightweight. Its mass should not be underestimated, especially on slopes.

APV has responded to this challenge: for extreme mountain terrain or use with small tractors, they offer an “alpine version”: the new GK Series is similar to the GP Series. On the GK, however, the harrows and roller can be separated, with the harrows mounted on the front of the tractor and the roller and seeder mounted on the back. This usage improves the weight distribution enormously.

Suitable for Cover Crop Seeding?

Back to the GP 300: its production appears to be well thought out and high quality. Only the stickers should have improved adhesion. The maintenance on the GP 300 is hardly worth mentioning: the rollers must be lubricated at three points.

In addition to its usual usage for grass and pasture maintenance, we also tested the GP 300 on cover crop seeding. Compared to the frequently used combination of cultivator with seed box, the GP 300's harrows provide a finer seedbed. Together with the trailing roller, the implement provided superior seed-to-soil contact and soil aeration—with all of the associated advantages—under dry conditions.

On the other hand, if the soil is sufficiently moist, the rate of seed application per area can be significantly reduced with the GP 300. We could not distinguish between a cultivator applying seed at

~0.4 bu/ac and the GP 300 applying at 0.1, 0.2 and 0.3 bu/ac. The potential for applying seed at a reduced rate improves the cost effectiveness of these seed applications. Note, however, that to improve soil coverage of larger grained legumes, the leveling plate might need to be placed further ahead of the harrows.

Another plus of cover crop seeding with the GP 300: the harrows pick up and redistribute residual organic materials (such as straw) without clogging. A further positive feature is the high-speed operation the GP 300 allows. We achieved good test performance at nearly 10 mph. Due to its weight, the APV implement runs very smoothly, even at high speeds.

With the GP 300 you can perform cover crop seeding as well as grass and pasture maintenance, thus increasing the utility of the implement. Because seeding can be performed at lower rates, the implement helps to pay for itself. The improved field preparation, including aeration, improves the quality of both maintained grass and cover crops.

top agrar Test Team: Gerhard Schieder, Georg Schuller and Lukas Weninger

DATA COMPASS

Technical Data

- ➦ Working Width: 9.8 ft
 - ⚖️ Weights, w/o PS Seeder (lbs):
w/ 15.4" Cambridge roller: 2,711.7
w/ 20.9" Cambridge roller: 3,593.5
w/ 16.1" toothed-ring roller: 3,593.5
 - 🔧 Mounting category: CAT 2 (mast height CAT 3)
 - 🌱 Tractor Requirements:
90 HP minimum w/ 15.4" roller
- Roller adjustment requires one (1) double-acting hydraulic

Features

- The GP 300 Pro Harrow has spring-mounted leveling plates to level uneven soil.
- Four rows of bent tines of different thicknesses provide superior soil prep for seeding.
- Minimum maintenance and limited repair parts required.

Items Included

- Spring-mounted leveling plates
- Model 6.2 graphic controller
- Seeder access platform
- 40 12mm tines & 56 8mm tines
- Heavy 15.4" or 20.9" Cambridge roller or 16.1" toothed-ring roller

This article was translated to English and highlighted by APV America Inc.