# APV GRASSLAND PRO HARROW GP

## GP 300 M1 / GP 600 M2 / GP 750 M2

### PERFECT EFFICIENCY IN RESEEDING




Version: 4.1 EN / Item no.: 00230-3-353

AMBITION. PASSION. VISION.

# GRASSLAND PRO HARROW GP

## GRASSLAND RENEWAL

Maintaining and renewing grassland is the cornerstone of high quality forage. With the Grassland Pro Harrow you are equipped for both a smooth and a very intensive cultivation of your land. The GP is the perfect machine for grassland renewal in intensive cultivation. The Grassland Pro Harrow is particularly attractive for larger farms, but also for inter-farm use. Thanks to its flexibility, the GP can be used more often during the year.

## THIS IS HOW THE GRASSLAND PRO HARROW WORKS

With the Grassland Pro Harrow, you complete all work steps of grassland maintenance with just one pass. It combines a harrow and roller in one. The spring-mounted levelling plate levels molehills and distributes the soil evenly. This „preliminary work“ allows the tines to work optimally, combing out weeds and tangles and aerating the turf. With the seeder you sow the optimal reseeding mixture for your conditions into the opened soil and the following roller presses the seed into the soil.

## THE MOST EFFICIENT METHOD OF RESEEDING

The Grassland Pro Harrow is characterised by four rows of tines. The 12 mm thick tines in the first two rows and the ability to let the weight of the roller act on the tines allow aggressive work to remove old grass or large amounts of weeds and unwanted vegetation.
Take advantage of the numerous tine adjustment options: from intensive to smooth. Thanks to the GP‘s wide range of settings, you are equipped for every application when using the machine across farms. From smooth overseeding to intensive grassland renovation, depending on the existing plant stock and customer requirements.

## MAKE USE OF THE MULTIPLE BENEFITS!

The Grassland Pro Harrow is the most efficient machine for reseeding in crop farming.

- Achieve a perfect result. The APV Grassland Pro Harrow impresses with its unique combination of two rows of 12 mm and two rows of 8 mm cranked spring tines.
- Versatile use from gentle cultivation to aggressive cultivation and use on the field.
- 100 % product competence: The Grassland Pro Harrow was developed and is also manufactured at the main site in Dallein (Austria):
  - All components are perfectly adjusted to each other
  - Benefit from the competent service provided by APV employees
- Combine the operations of levelling, pulling out, seeding[1], harrowing and rolling
- Also ideally suited for inter-farm use




[1] In combination with a Pneumatic Seeder PS from APV in the Full Edition.

# PERFECT EFFICIENCY

## GP 300 M1

The special feature of the Grassland Pro Harrow is the four rows of tines. It is suitable for gentle tillage, aeration and stimulation of growth. The ability to work extremely intensively makes the GP unique.
The tine thickness of 12 mm and the high tine pressure created by the weight of the roller make it the professional machine for reseeding, new seeding and meadow maintenance.

To use the Grassland Pro Harrow efficiently, we recommend combining it with a Pneumatic Seeder PS from APV (see Full Edition).

When fully equipped, the scope of delivery of the GP 300 M1 includes:

- Cambridge or toothed ring roller
- Spring-mounted levelling plate
- Warning signs and LED lighting
- Platform kit
- Pneumatic Seeder PS 300 M1 with electric fan
- Control Box 5.2
- Sensor set: GPSa sensor + linkage sensor top link

## GP 600 M2 / GP 750 M2

The Grassland Pro Harrow is ideal for large area meadow maintenance, reseeding and grass establishment. The unique combination of strong 12 mm tines and 8 mm tines ensures optimum tillage of the sward.
The GP 600 M2 / GP 750 M2 is also popular for inter-farm use and is equipped with a PS Pneumatic Seeder from APV for most efficient use.

When fully equipped, the scope of delivery of the GP 600 M2 / GP 750 M2 includes:

- Cambridge Roller (Ø 530 mm) or Toothed Ring Roller (Ø 410 mm or optionally Ø 550 mm)
- Spring-mounted levelling plate
- Warning signs and LED lighting
- Platform kit
- Pneumatic Seeder PS 300 M1 with electric fan
- Control Box 5.2
- Sensor set: PSa sensor + linkage sensor top link
- Equipment for use in public transport (LED lighting, air brake, harrow field cover, wheel covers, wheel chocks, parking brake, anti-theft device).
- Hydraulic transport lock
- Hydraulic fork adjustment
- Hydraulic drawbar
- Hydraulic chassis damping





| | GP 300 M1 | GP 600 M2 | GP 750 M2 |
|---|---|---|---|
| Working width | 3 m | 6 m | 7,5 m |
| Transport dimensions in m (HxWxD) | 2.30 x 3.00 x 2.36 | 3.20 x 3.00 x 5.70 | 3.95 x 3.00 x 6.40 |
| Weight (Cambridge Roller 390 mm), Full Edition | 1,355 kg | - | - |
| Weight (Cambridge Roller 530 mm), Full Edition | 1,665 kg | 5,200 kg | 5,800 kg |
| Weight (Toothed Ring Roller 410 mm), Full Edition | 1,765 kg | 5,200 kg | 5,800 kg |
| Weight (Toothed Ring Roller 550 mm), Full Edition | - | 5,200 kg | 5,800 kg |
| Axle load (Full Edition) | - | 3,500 kg | 3,900 kg |
| Drawbar load (Full Edition) | - | 1,700 kg | 1,900 kg |
| Line spacing | 75 mm (12 mm tines) / 50 mm (8 mm tines) | | |
| Number of tines | 2 rows of 20 tines (12 mm) each<br>2 rows of 30 tines (8 mm) each | 2 rows of 40 tines (12 mm) each<br>2 rows of 60 tines (8 mm) each | 2 rows of 50 tines (12 mm) each<br>2 rows of 76 tines (8 mm) each |
| Mounting category | CAT 2 (CAT 3 mast height) | CAT 3 N or K 80 ball coupling[1] | |
| Tractor performance | from 65 kW / 90 HP | from 88 kW / 120 HP | from 110 kW / 150 HP |
| Tyres | - | 500-50-17“ or 400-60-15.5“ | |
| Number of control units required | 1 double acting | 3 double acting | |
| Brake | - | 2 line pneumatic brake | |
| | | | |
| **Optional** | | | |
| Warning signs + LED lighting | x | x | x |
| Sensor set: GPSa sensor + linkage sensor top link | x | - | - |
| Sensor set: GPSa sensor + linkage sensor hydraulic system | x | x | x |
| Platform kit | x | x | x |
| Mounting kit for Pneumatic Seeder | x | x | x |
| Dispersion plate mounting 8 or 16 outlets | x | x | x |
| Mounting kit feeler wheels rear incl. change tools | - | x | - |
| Toolbox accessories[2] | x | x | x |
| Hydraulic tine adjustment | - | x | x |
| Hydropneumatic chassis damping | - | x | x |
| Hydraulic drawbar with K80 ball head hitch | - | x | x |
| Tine arrangement, optional | - | 3 rows 12 mm tines or 4 rows 8 mm tines<br>seed bar: max. 2 rows of 12 mm tines can be selected | |
| Seed bar for Grassland Pro Harrow | - | x | x |
| Mounting of Pneumatic Seeder | PS 120 M1 – PS 500 M2 | PS 200 M1 – PS 800 M1 | |

[1] Hydraulic drawbar required
[2] Only possible with rigid drawbar

# TECHNICAL PERFECTION

## LEVELLING PLATE

**Level grassland for optimal cultivation**
- The height of the spring-loaded levelling plate is conveniently adjusted via a hook (GP 300 M1) or via a crank (GP 600 M2 / GP 750 M2) and fixed via bolts in a perforated bar.
- The levelling plate is used to level molehills or other unevenness.

## SHAPE AND THICKNESS OF THE TINES

**Freely adjustable harrow results**
- The front two rows of tines (cranked 12 mm spring tines) rip up the turf and remove unwanted grasses, matting and moss.
- The rear two rows of tines (cranked 8 mm spring tines) separate the soil from the harrowed material, work seed into the soil and produce a fine soil fraction (soil contact for the seed).

## ADJUSTMENT OF THE TINES[1]

**Gentle or aggressive machining**
- The aggressiveness of the front tines is adjusted via the sliding block adjustment by means of pins (on GP 300 M1) or individually for each row by means of a perforated grid and spring-loaded lever (on GP 600 M2 / GP 750 M2). Hydraulic tine adjustment is available as an option for the stronger tines on the GP 600 M2 / GP 750 M2. The working pattern of the rear tine rows is adjusted by means of a perforated strip with bolts.

**Our recommendation:**
For aggressive tillage on hard surfaces, select a steep tine inclination. For light tillage, select a flat tine inclination, which gives the tine more freedom of movement.

## ROLLER ADJUSTMENT

**Fine adjustment of contact pressure**
- The depth control and the adjustment of the contact pressure of the tines are carried out via the lower links of the tractor and the trailing roller of the GP. Via the hydraulic cylinder on the roller, it can be conveniently adjusted while driving.

## POSSIBLE COMBINATIONS

**Combination with your Pneumatic Seeder**
- You can combine the APV Grassland Pro Harrow GP 300 M1 with the Pneumatic Seeders PS 120 M1 - PS 500 M2
- You can combine the APV GP 600 M2 / GP 750 M2 with the Pneumatic Seeders PS 200 M1 - PS 800 M1.









## APPLICATION AREAS

- Grassland maintenance and reseeding
- Grassland rehabilitation and renewal
- Regulation of weeds
- Stubble breaking and intercrop seeding in one operation
- Seedbed preparation
- Destruction of corn stubble after the silage corn harvest
- Sowing of different intercrops after harvesting of a main crop (also on cereal or corn stubble)

## BENEFITS WITH THE GP 600 M2 / GP 750 M2

- Compact like the tried-and-tested three-point linkage - powerful like a 6-m machine.
- The Grassland Pro Harrow has a fully sprung levelling plate to compensate for molehills or slight unevenness.
- This is followed by two rows of tines with cranked round spring tines in different thicknesses. This combination is unique in agricultural technology.
- 5-in-1 implement: levelling, pulling out, seeding, harrowing and rolling
- Can also be used in arable farming: intercropping, arable forage cultivation, seedbed preparation, destruction of corn stubble after corn harvesting
- Different roller types and various tine configurations are possible.




[1] For the removal of deep roots and large root balls, select a deep tine setting (=intensive harrowing) and for the removal of shallow roots and fine roots, select a shallow depth setting (=light harrowing).

# SEED BAR FOR GRASSLAND PRO HARROW

## GP 600 M2 / GP 750 M2

The Grassland Pro Harrow has already established itself as the professional in grassland reseeding. With the hydraulically adjustable seed bar, the Grassland Pro Harrow can be used even more universally on any farm. In principle, the seed bar is ideal for reseeding grassland. The combination: 12 mm tines, seed coulters and roller is unique. The tines tear up the soil, the coulters place the seed precisely in the ground and the roller presses the seed down to improve germination. This system can also be used for precise and accurate seeding of cover crops or grain.

## UNIQUE COMBINATION

The seed bar is a supplementary equipment for GP 600 M2 and GP 750 M2.

- 48 or 60 seed coulters with carbide tipping
- Hydraulic pressure adjustment of the slotted shoes
- Distribution Heads distribute the seed evenly to the seed coulters
- Bracket for Distribution Heads
- Air hoses plus components
- Rigging set for air hoses

## ADVANTAGES

- Targeted, precise seed placement
- Better germination ➞ better emergence
- Less seed consumption
- Compact design
- Optimum ground clearance during turning thanks to double cylinder system

## APPLICATIONS

- Grassland reseeding
- Cover crop seeding
- Grain seeding



## TECHNICAL DATA

| | GP 600 M2 | GP 750 M2 |
|---|---|---|
| Tine rows | 2 rows of 12 mm tines | |
| Number of seed coulters | 1 row with 48 seed coulters | 1 row with 60 seed coulters |
| Coulter spacing | 12,5 cm | |
| Distribution Heads | 2 x 24 Distribution Heads | 2 x 30 Distribution Heads |
| Seeding depth | up to 3 cm | |







# ACCESSORIES

## MOUNTING KIT FOR PS[1]

The mounting option for the PS is already integrated into the machine frame of the GP 300 M1 and GP 600 M2.






## PLATFORM KIT[1]

For convenient access to the seeder, a suitable platform kit is available as an accessory.






## DISPERSION PLATE ASSEMBLY[1]

The dispersion plates are mounted behind the red rows of tines. This ensures an optimum seed placement on the ground. The black tines work the seed lightly slightly into the soil before it is pressed down by the roller.






## REAR DEPTH CONTROL WHEELS

If the GP 600 M2 is used without a roller, the roller can be removed in a few simple steps and feeler wheels are used instead of the roller



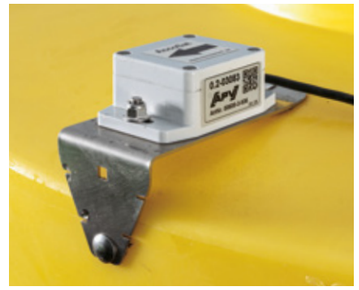

[1] Included in GP 300 M1 Full Edition



## SENSOR SET[1]

**Sensor set for speed and linkage**
For automatic stopping and starting of the seeding shaft, we offer the sensor linkage top link, which is mounted on one of the two top link holes of the GP 300 M1. On the GP 600 M2 / GP 750 M2, a hydraulic sensor is screwed into the hydraulic line of the roller. The GPSa sensor available in the set is used for automatic control of the seeding shaft speed.





## WARNING SIGNS AND LED LIGHTING[1]

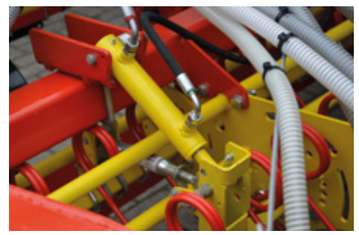
Warning signs with LED lighting are available as accessories for safe driving.






## HYDRAULIC TINE ADJUSTMENT

For even more precise and comfortable adjustment of the stronger tine rows.



## HYDRAULIC DRAWBAR

Required for the K80 drawbar hitch category.

## HYDROPNEUMATIC CHASSIS DAMPING

Especially for long distances to your meadows and fields, we recommend the hydropneumatic chassis damping for a comfortable ride!



[1] Included in GP 300 M1 Full Edition.

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