# APV GRASSLAND COMBI GK

## LIGHTWEIGHT AND MANOEUVRABLE - EVEN ON STEEP TERRAIN


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**AMBITION. PASSION. VISION.**

# GROWTH IS THE WAY.

## GROWING SINCE 1997

Jürgen Schöls is an agriculturalist at heart. In 1997, the passionate farmer and inventor built his first machine, a spreader. Ever since, he has been developing agricultural equipment "for professionals, by professionals". Jürgen Schöls, himself a Demeter-certified farmer, develops each machine in a lively exchange with users, before it is professionally enhanced by the design department.

As an innovative company, naturally APV desires to play an important role on the market with its products. Together with customers around the world, APV refines its products on an ongoing basis.


At the Dallein site in Waldviertel in Lower Austria, approximately 200 employees make a significant contributution towards preserving the environment and improving cultivation and soil tillage. At APV job security is a high priority. All activities are aligned to economic success and growth.



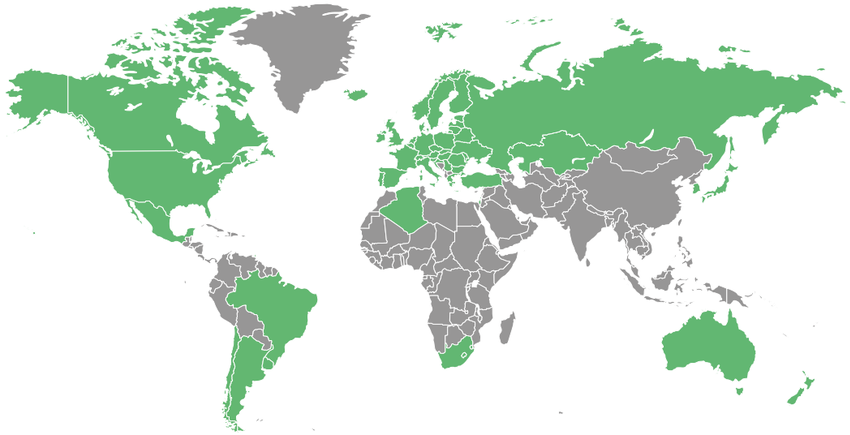




# AND THE GOAL.

## GROWTH KNOWS NO LIMITS

Over the years, the APV Team has fostered a consistent, unbroken drive for achievement; today the enterprise is a presence on the international market. There are APV locations and own sales subsidiaries in Poland, Romania, Russia, Germany, Brazil, Turkey and the USA. Our network of APV contract partners in over 50 countries assures that our customers enjoy the highest level of service competence.



## A PASSION FOR GROWTH

Today APV is an agile family-owned company that is proud of its employees. Many of our employees have been involved with agriculture since their infancy and know precisely what matters and what's important for farmers when it comes to modern implements. An abundance of positive feedback from many, many satisfied customers confirms this approach.

# GRASSLAND COMBI GK

## THE PRODUCT INNOVATION

APV offers an innovation in grassland maintenance that many livestock farms have always been wishing for: A grassland combination of harrow and roller that is lightweight and can also be divided. The GK consists of a two-row harrow with height-adjustable, spring-mounted levelling plate and a roller. Your advantage with APV: Harrow and roller can be used in combination at the rear.

However, you can also use the two implements separately at the front and rear using the front mounting accessory. The trailing roller convinces separately too, e.g. for applications in arable farming. The Grassland Combi is available in three working widths (2.5 m, 3 m and 4 m) and with 3 different roller types (Cambridge roller Ø 390 mm, Cambridge roller Ø 530 mm or toothed ring roller Ø 410 mm). Very often it is useful to carry out grass reseeding with APV seeders at the same time as grassland maintenance (Pneumatic Seeders or Multi-Metering System).

## FUNCTIONAL PRINCIPLE OF THE GRASSLAND COMBI

Coarse unevenness is removed with the levelling plate, then the two harrow rows with the 12 mm tines (optional 10 mm) create an optimal seedbed for possible reseeding and simultaneously harrow unwanted grasses and herbs out of the crop. With a mounted seeder, the seed is spread directly behind the harrow rows and in front of the roller. The last working step, pressing on the seed is then performed by the trailing roller.

## GRASSLAND ROLLERS GW 250 M1, GW 300 M1 AND GW 400 M1

For professional grassland and arable farms, Cambridge or toothed ring rollers from APV are the perfect equipment to specifically improve the soil contact and thus the seed germination. Both types of rollers are ideal for use in arable and grassland areas and create a good, crumbly seedbed structure and optimum reconsolidation. The Grassland Rollers can also be purchased separately.

## MEADOW HARROW WS 250 M1 AND WS 300 M1

The Meadow Harrow is the suitable implement for farms that already have a Grassland Roller on the farm. Two strong rows of tines (optionally 12 or 10 mm) tear up the turf and aerate the soil. There, the applied seed can germinate optimally and, if necessary, still be pressed to the soil with a Grassland Roller. Due to its low weight and compact design, the Meadow Harrow is particularly well suited for smaller compact tractors and two-axle mowers (e.g. Metrac).

# PERFECT EFFICIENCY

## GK 250 M1 / GK 300 M1

The Grassland Combi GK 250 M1 or GK 300 M1 is ideally suited for meadow maintenance, reseeding and new seeding of grassland and arable forage areas, both on level and steep terrain. Thanks to the unique combination of the strong 12 mm tines and the following roller, the turf is optimally cultivated, sown if necessary and rolled on immediately afterwards. The GK 250 M1 or GK 300 M1 is also popular for inter-farm use. In steep terrain or with smaller tractors, the GK offers the option of dividing the machine.

**Advantages:**

- Combination with the Grassland Roller (GW) to form the Grassland Combi (GK) possible without tools
- Easy front attachment possible without tools
- Hydraulic tine pressure adjustment in front attachment
- Independent aggressiveness adjustment of each harrow row
- Quick adjustment of the levelling plate by means of a crank handle
- Mounting of a Pneumatic Seeder or Multi-Metering System possible

Fully equipped, the scope of delivery of the GK 250 M1 and the GK 300 M1 includes:

- GK 250 M1 or GK 300 M1 with harrow (12 mm tines) and with Cambridge or toothed ring roller
- LED lighting
- Platform kit
- Levelling plate
- Mounting of dispersion plates
- Pneumatic Seeder PS 200 M1 with electric fan incl. Control Box 5.2
- Sensor set: GPSa sensor + linkage sensor top link

## GK 400 M1

The GK 400 M1 Grassland Combi expands the product range with a working width of 4 meters. The GK 400 M1 is particularly suitable for larger areas and inter-farm use.
This machine, which impresses with its compact and lightweight design, completes up to 5 work steps in a single pass, thus saving time and money. The machine consists of a levelling plate with two harrow rows and a following roller.
Harrow and roller can be used in combination and offers a wide range of adjustment possibilities.

**Advantages:**

- 2 rows of tines - compact design
- 10 mm or 12 mm tines possible
- Adjustment of the working depth of the harrow via hydraulic cylinder of the roller
- The weight of the roller has a positive effect on the work of the harrow: The harrow lies quietly and does not rock up
- Self-cleaning toothed ring roller
- Almost complete recompaction and pressing of the seed with toothed ring roller
- Optimum ground adaptation of the roller

In full equipment identical scope of delivery as GK 250 M1 and GK 300 M1.


| | GK 250 M1 | GK 300 M1 | GK 400 M1 |
|---|---|---|---|
| Working width | 2.4 m | 3 m | 4 m |
| Transport dimensions without PS in m (HxWxD) | 1.31 x 2.44 x 1.82 | 1.31 x 3.00 x 1.82 | 1.12 x 4.12 x 1.85 |
| Transport dimensions with PS in m (HxWxD) | 2.10 x 2.44 x 1.98 | 2.10 x 3.00 x 1.98 | 2.04 x 4.12 x 1.85 |
| Weight (Cambridge roller 390 mm), Full Edition | 990 kg | 1,100 kg | 1,440 kg |
| Weight (Cambridge roller 530 mm), Full Edition | 1,160 kg | 1,350 kg | 1,785 kg |
| Weight (Toothed ring roller 410 mm), Full Edition | 1,260 kg | 1,450 kg | 1,855 kg |
| Tine diameter | 10 mm or 12 mm | 10 mm or 12 mm | 10 mm or 12 mm |
| Line spacing | 75 mm | 75 mm | 75 mm |
| Number of tines | 33 pcs. | 41 pcs. | 55 pcs. |
| Mounting category | CAT 2 | CAT 2 | CAT 2 / CAT 3 (recommended) |
| Tractor power | 55 kW / 75 HP | 66 kW / 90 HP | 91 kW / 125 HP |
| A double-acting control unit is required for roller adjustment. | | | |
| **Optional** | | | |
| Accessories for front mounting of the meadow harrow for tractor and two-axle mower (Metrac) | x | x | |


# TECHNICAL INNOVATION

## HARROW ROWS

- The harrow has of 2 rows of cranked 12 mm (optional 10 mm) tines.
- Cranked tines create an elliptical movement on the soil. The steeper the position of the tines, the smaller the motion. The flatter the position of the tines, the larger the motion.
- Loss protection of the harrow tines

## LEVELLING PLATE

- The height-adjustable spring-mounted levelling plate eliminates rough unevenness in the grassland and thus does not put unnecessary stress on the tines.
- The height adjustment is very simple by means of a crank. The levelling plate is fixed with two bolts.

## ADJUSTING THE LEVELLING PLATE

- For easier adjustment, a crank is provided as standard. After removing the bolts, this crank can be used to easily raise and lower the levellng plate via toothing.

## AGGRESSIVENESS OF THE HARROW ROWS

- In addition to the depth, the aggressiveness of the tines to each other can also be changed on the GK series. To do this, simply reposition the bolts of the harrow rows in the hole pattern as required.
- The crank of the levelling plate can be used for easier twisting of the harrow rows.


## ADJUSTMENT OF THE ROLLER

- The roller is adjusted by retracting or extending the hydraulic cylinder. When this is fully retracted, the roller lifts off the ground and the entire weight of the roller shifts to the harrow tines. The contact pressure of the harrow rows is increased and the soil is worked more intensively. With the cylinder extended, the tine pressure is reduced, for less aggressive harrowing.

## WARNING SIGNS

- For a safe ride on the road, warning signs and lighting are included in the Full Edition.


## MOUNTING OF PS / MD ON GK-SERIES

- Our grassland combi GK 250 M1 or GK 300 M1 can be used with with the pneumatic seeders PS 120 M1 - PS 300 M1 or with the Multidosier MDP 100 M1 can be combined.
- The PS or MD can be mounted on two different positions (on roller or harrow). The pre-equipment for mounting the Pneumatic Seeders is included in the Full Edition.
- GK 400 M1: PS 200 M1 - PS 500 M2


# TECHNICAL INNOVATION

## MOUNTING OF THE DISPERSION PLATES

- The dispersion plates are fastened on a hollow profile at equal distances relative to each other.
- The dispersion plates are mounted on the roller as standard, but the hollow profile for mounting the dispersion plates can also be installed on the harrow.

## LINKAGE SENSOR TOP LINK

- For the automatic start and stop of the seeding shaft, we offer the linkage sensor top link for the Full Edition, which is mounted on one of the two top link holes of the GK.

## GPSA SENSOR

- A sensor set (included in the Full Edition) is available for automatic adjustment of the seeding shaft speed to the actual travel speed.

## PLATFORM KIT

- For convenient access to the seeder, there is a matching platform kit (included in the Full Edition) for both mounting positions.

## FRONT MOUNTING

- The front attachment for the harrow is available as an accessory. The top link rocker and feeler wheels can be mounted without tools just using bolts.
- The front attachment offers the possibility to adjust the contact pressure of the tines while driving via the hydraulic cylinder. (Here, the roller cylinder, which is not needed in the split state, can be used).

## DIVIDED AND COMBINED OPERATION

- On steep terrain or with smaller tractors, there is the option of dividing the machine.
- All working tools can be used individually or in different combinations.

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