



Trailed sprayers for vineyards and orchards
PDF 2 / GEO M 2 / GEO 2 / ANTIS M 2 / ANTIS 2





Contents

04-05	Basic principles of spraying in vineyards and orchards
06-07	A common design: stability and manoeuvrability
08-09	PDF 2: Spraying made simple

10-13	GEO M 2 and ANTIS M 2: efficiency
14-17	GEO 2 and ANTIS 2: excellence
18-19	Technical data

PDF 2

GEO M 2

GEO 2

ANTIS M 2

ANTIS 2

Trailed sprayers for vineyards and orchards

PROTECT YOUR VINES AND ORCHARDS WITH KUHN SPRAYERS!

IN VINEYARDS AND ORCHARDS, SPRAYERS PLAY A CRUCIAL ROLE. THEY DISTRIBUTE TREATMENT PRODUCTS EVENLY OVER THE CROP, ENSURING EFFECTIVE PROTECTION AGAINST PESTS AND DISEASES. DESIGNED FOR DURABILITY AND EASE OF USE, SPRAYERS ARE ESSENTIAL FOR MAINTAINING THE HEALTH AND QUALITY OF CROPS THROUGHOUT THE SEASON.



EASY TO OPERATE

Kuhn sprayers stand out for their user-friendly design, featuring simplified controls, adjustable spraying, and easy maintenance.

ENHANCED EFFICIENCY

Kuhn sprayers guarantee uniform application of plant protection products, maximizing crop protection while minimizing waste.

ADAPTABLE TO A VARIETY OF CROPS

KUHN sprayers offer versatile accessories to meet the specific needs of vineyard and orchard crops.

BASIC PRINCIPLES OF SPRAYING IN VINEYARDS AND ORCHARDS

Spraying in vineyards and orchards involves applying plant protection products in small droplets to the plants. These droplets are created by the nozzles, then carried by the airflow generated by the fan.



THE IMPORTANCE OF AIR VOLUME

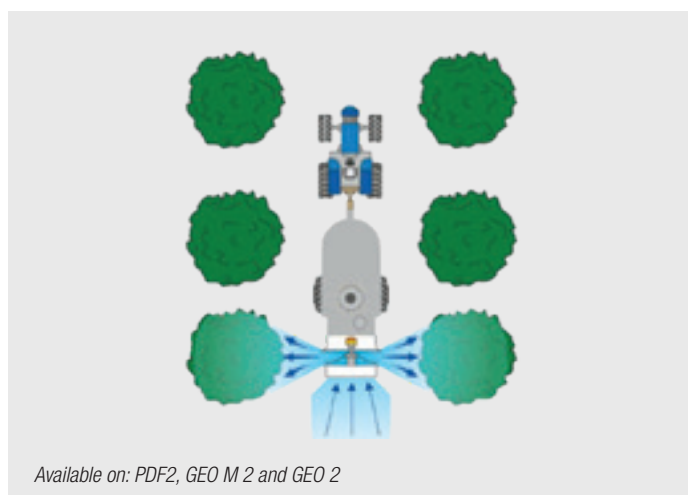
The airflow created by the fan picks up the droplets formed by the nozzles and circulates through the branches and leaves, ensuring deeper penetration of the droplets.

A sufficient volume of air ensures even spray coverage on the plants, providing complete protection against pests and diseases.

The air volume can be adjusted to suit the specific needs of your crops. Increasing the air volume expands the spraying width, the spraying height and boosts working speed for maximum performance.

TWO AIR SUCTION TYPES AVAILABLE

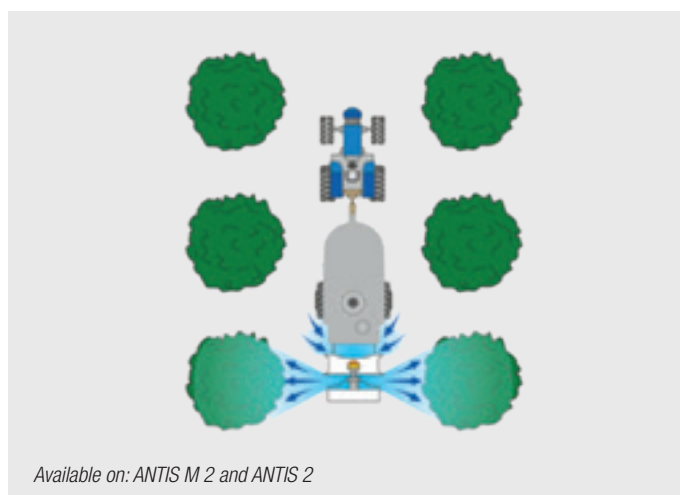
Spraying in vineyards and orchards relies on two main air suction techniques: front suction and rear suction. Each of these methods has distinct characteristics that affect the effectiveness and precision of treatments.



Rear Air Suction: Work output

Rear air suction draws air from behind the sprayer, providing high airflow capacity that generates a large volume of air (up to 75,200 m³/h).

This feature enhances the distribution of the sprayed product, ensuring wider and higher coverage as well as increased work output. This system is particularly beneficial on sprayers with round fan, where it helps to maximize performance.



Front Air Suction: Protection and Efficiency

Front air suction helps protect the operator from exposure to the products being applied. If any product drifts toward the front of the sprayer, it is sucked in by the fan.

This system also minimizes the risk of sucking up ground debris like leaves or cut grass. As a result, there's no risk of fan blockage, ensuring consistent airflow and air volume throughout the operation.

TWO FANS VERSIONS AVAILABLE

KUHN sprayers are available with two types of fans: either round or V-shape. Each design is tailored to specific needs, delivering maximum efficiency for all your spraying applications. Choose the right fan for your requirements and achieve optimal results!



Round fans for efficiency and versatility

Round fans offer powerful airflow, allowing you to spray from a greater distance and effectively reach tall crops and trees. Their versatility and high performance make them perfect for covering large areas and handling a variety of tree types.

V-shape fans for precise applications

V-shaped fans are designed for close-range operation around trees. They direct airflow straight to the plants, ensuring precise and homogeneous coverage. Perfect for applications that require targeted treatment, they help minimize product loss and improve overall efficiency.



A COMMON DESIGN ENSURING STABILITY AND MANOEUVRABILITY

KUHN sprayers are built on a common design that ensures stability and easy handling. Each machine features a balanced 3-in-1 tank, a robust frame, wheels suited to various conditions, a versatile axle, and three types of drawbars for optimal manoeuvrability.

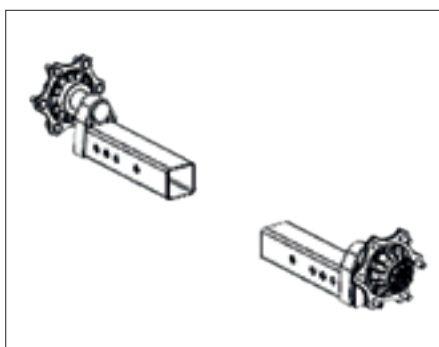
STAY BALANCED!

The 3-in-1 tank is designed for optimum ergonomics and outstanding stability. The three polyethylene tanks (main tank **(1)**, clean water tank **(2)** and hand-washing tank **(3)**) are symmetrical and fit together seamlessly. This design ensures balanced operation, whether in transport or during use. Stability is maintained, regardless of tank volumes.



Robust and durable frame

The products used in sprayers can be highly corrosive, and even small traces of rust can damage the frame. With its galvanized coating, the frame is fully protected against corrosion, delivering enhanced durability and reliability for your work in vineyards and orchards.



Adjustable Half-Axes for Maximum Stability and Flexibility

The two half-axes allow you to adjust the track width for narrow inter-row spacing or widen it for enhanced stability on uneven or sloping terrain.

The half-axes can be turned over, offering two different positions. In the lower position, they ensure maximum stability. In the upper position, they increase ground clearance by up to 20 cm.



Wheels for all conditions

The wheels on KUHN's vineyard and orchard sprayers offer maximum flexibility. On dry ground, «standard» wheels are perfect. For wet or soft soils prone to sinking, wide or low-pressure wheels are recommended. These wheels reduce ground pressure, minimizing compaction between rows. What's more, wide wheels enhance machine stability on sloping terrain.



Manoeuvrability Options

Three types of drawbar are available on KUHN sprayers:

- (1) The straight drawbar is ideal for fields without space constraints at row ends, and offers excellent stability.
- (2) The articulated drawbar has two positions: transport and work. In the transport position, it locks in place, offering the same features as the straight drawbar. In work position, it allows tighter turns with a rearward pivot point, combining both stability and manoeuvrability.
- (3) The pivoting drawbar, mounted on the tractor's lift arms, shifts the pivot point rearward to make tight turns easier. Its simple mechanical design ensures exceptional manoeuvrability.

Choose the model that's right for you

KUHN sprayers offer three model options to suit specific requirements:

- (A) **PDF 2:** A streamlined model with only the essential components for spraying, providing a cost-effective solution.
- (B) **GEO M 2 / ANTIS M 2:** This model offers enhanced protection for the valves and bypass, with valves conveniently grouped at the front for easier access.
- (C) **GEO 2 / ANTIS 2:** With full coverage and an under tank protection plate, this premium model delivers superior durability and performance.



OPTIMISED SPRAYING MADE EASY

The PDF 2 sprayers are KUHN's entry-level models for vineyards and orchards. They feature a tank capacity ranging from 1,000 to 2,000 litres and a rear-air suction fan (round or V-shape) with a diameter of 750 or 850 mm. These features make them simple and efficient machines, ideal for meeting your essential needs.



R-75, R-85 and V-85 fans

The fans on the PDF 2 sprayer are made of galvanized steel. A range of accessories is available for these fans:

- Clutch
- Air straightener
- Upper deflectors.



SOLUTIONS FOR EASIER OPERATIONS

Discover our solutions that make your day-to-day operations easier. With a streamlined design, an easy-to-use loading station and a spray regulation system, the PDF 2 sprayer is engineered to enhance both your efficiency and comfort.

JUST THE ESSENTIALS!

KUHN's PDF 2 sprayers are designed with a simplified protective housing, including only the essential components for spraying.



Easy filling and maintenance

The PDF 2 sprayer features a loading station with just 4 valves for straightforward operation. This user-friendly design ensures quick and efficient use. What's more, the pump is positioned at the front of the machine for easy access, streamlining maintenance tasks.

Choose the simplicity of manual regulation with electric section control

The manual regulation adjusts the flow rate according to the engine speed. The operator can adjust the pressure with a dial, and there is an in-cab control unit to open and close each section electronically.

OPTIMISED SPRAYING OPERATIONS

The GEO M 2 and ANTIS M 2 sprayers are mid-range models in KUHN's vineyards and orchards sprayers range. With tank capacities ranging from 1,000 to 2,000 litres, these sprayers are designed to deliver optimal performance at every stage of operations.



Essential Protection

The GEO M 2 and ANTIS M 2 sprayers are engineered with an intermediate level of equipment while maintaining full functionality. These models include a protective housing on the right side of the machine, ensuring that key components are well shielded from potential damage.



Simplify Your Operations with electric regulation

Equipped with an electric regulation system, these sprayers automatically adjust the flow rate in line with engine speed. Users benefit from a straightforward control unit that makes it easy to adjust pressure and open and close the sections right from the cab.

EFFORTLESS PREPARATION

The GEO M 2 and ANTIS M 2 sprayers are designed with an optimized loading station that simplifies the filling process, making it faster and more efficient. With user-friendly maintenance features, including simplified mixing and rinsing, these sprayers help ensure that every step of your spraying operation is seamless.

OPTIMIZED FILLING AND EASY MAINTENANCE

The sprayers feature a loading station, equipped with four centralized valves conveniently placed at the front of the machine for easy access and efficient operation. Additionally, the front-mounted pump on these models is designed for easy maintenance, minimizing downtime.



Efficient Mixing with the mixing basket

The integrated mixing basket system dissolves or dilutes the products smoothly as they are added, ensuring a perfectly uniform mix in the tank. You even have the option to install a can rinser inside the mixing basket for rinsing out empty containers.



Clog-Free Spraying

The sprayers are equipped with a comprehensive three-stage filtration system:

- Fill filtration
- Suction filtration
- Discharge filtration.

EFFORTLESS PERFORMANCE

Two rear air suction fans are available for the GEO M 2 sprayer. Both have a diameter of 900 mm and are equipped with nozzles on adjustable nozzle holders.



R-90 and R-90-S Fans

The GEO M 2 sprayer is fitted with a 900 mm round fan, available in both single and double outlets configurations. Made in galvanized steel, the fan includes:

- Clutch
- Air straightener
- Upper deflectors
- A two-speed gearbox with neutral.

An additional air outlet

The R-90-S double outlet fan takes efficiency up a notch by generating an impressive airflow of up to 62,500 m³/h. This increased airflow capability allows for higher spray heights, greater distances, and faster application speeds. For even greater output, a second row of nozzles can be added to the fan.

PATENTED

Adjustable Nozzles for Precision Spraying

GEO M 2 sprayers come with adjustable nozzle holders that allow you to direct the airflow and nozzles precisely where needed. The nozzle holders are designed to accommodate two different nozzles, optimizing your spraying options. When the nozzles are not required, such as when they are positioned too low for the vegetation, they can be easily shut off.

CUSTOMIZABLE SPRAYING

The ANTIS M 2 sprayers are designed for precise and efficient product application. They are available with either round or V-shape front air suction fans, with 820 mm or 920 mm in diameter.



R-82 and R-92 Fans

The ANTIS M 2 sprayer's round fans are constructed from galvanized steel and come equipped with:

- Clutch
- Air straightener
- Upper deflectors
- A two-speed gearbox with neutral.

V-82 and V-92 Fans

The V-shape fans available for the ANTIS M 2 sprayer are made from durable galvanized steel and feature rear-positioned stainless steel piping. These fans are equipped with:

- Clutch
- Air straightener
- Upper deflectors
- A two-speed gearbox with neutral.

Adjustable Airflow

The ANTIS M 2 sprayer features a two-speed gearbox that lets you adjust the amount of airflow to achieve optimal spraying for the developmental stage of your trees. With integrated air deflectors and air straightener, you can ensure a consistent and precise air flow directed right at the target.

Additionally, the clutch mechanism protects the fan from any sudden jerks.

GEO 2 1002 | 1502 | 2002 **ANTIS 2** 1002 | 1502 | 2002

EXCELLENCE IN EVERY DETAIL

The GEO 2 and ANTIS 2 sprayers are built to the highest standards, featuring a premium finish and ensuring consistent and even distribution of crop protection products. Every aspect of these sprayers is thoughtfully designed for intuitive, efficient, and effective operation.



Comprehensive Protection

The GEO 2 and ANTIS 2 sprayers are equipped with full protective housing and an under-tank protection plate. This design keeps essential components safe from branches, leaves, dust, and other potential harm.



Maximize Precision with electronic regulation system

Our electronic regulation system automatically adjusts the spray rate based on the forward speed. This ensures uniform product application, minimizes waste, and reduces costs. This technology brings unmatched precision and saves you valuable time in the field. The machine with this regulation system can be equipped with BUSCAN or ISOBUS system.

USER-FRIENDLY AND STRESS-FREE OPERATION

The GEO 2 and ANTIS 2 sprayers are designed for straightforward, stress-free use at every stage. Featuring a fully equipped, ergonomic loading station, they make filling and preparation tasks smooth and efficient.

ERGONOMIC DESIGN FOR EASY USE

The loading station features centralized valves strategically placed at the front of the machine, making them quick and easy to reach. The storage compartment can be replaced with a chemical induction bowl if necessary.



Simple and Safe Product Induction

For a safer and more convenient filling process, the sprayers offer an optional chemical induction bowl. This eliminates the need to lift heavy containers over the tank opening, enhancing operator safety and comfort. The chemical induction bowl comes with a container rinsing system and built-in rinse nozzles for efficient product mixing and inductor rinsing.

Efficient Rinsing

To maximize effectiveness, the sprayers feature an optional tank rinsing system featuring rotating nozzles. This ensures no product residue remains in the tank before a new solution is added, avoids deposits on the tank walls, and prevents nozzles and pipes from clogging. The result is optimal performance and a longer lifespan for your equipment.

EXCEPTIONAL AIR VOLUME

The GEO 2 trailed sprayers come equipped with round rear air suction fan, available in 850 mm or 950 mm diameters (R-85-HF or R-95-HF). These fans deliver impressive performance in terms of air volume.

HIGH-FLOW FAN TECHNOLOGY

Our HF (High Flow) fans, featuring patented WAVE BLADES, are engineered for outstanding performance. The GEO 2 sprayers, available with either single or double air outlets, can reach spray heights of up to 12 m, cover distances of up to 16 m, and/or support faster application speeds.



Less power requirement

The specially designed turbine blades help:

- Minimize wind resistance,
- Reduce power consumption,
- Maximize air output.



High Air Volume

The patented « WAVE BLADES » design generates exceptional air volume, reaching up to 75,200 m³/h for best performances possible.



Reduced Noise Levels

Spraying operations can be loud, but our HF fan design significantly cuts down on noise (up to 30% quieter than standard). This helps protect the operator's hearing and makes for a more comfortable working environment.

THE IDEAL SPRAYER FOR PRECISE SPRAYING

ANTIS 2 sprayers are available with two fans types (round or V-shape) both offering front air suction options with diameters of 820, 850, or 920 mm to meet your precision spraying needs.



R-82 and R-92 Fans

Made from galvanized steel, the ANTIS 2 round fans come equipped with:

- Clutch
- Air straightener
- Upper deflectors
- A two-speed gearbox with neutral.



V-82, V-85, and V-92 Fans

The V-shape fans available for the ANTIS 2 sprayer are made from durable galvanized steel and feature rear-positioned stainless steel piping. These fans are equipped with:

- Clutch
- Air straightener
- Upper deflectors
- A two-speed gearbox with neutral.



Uniform and controlled airflow

The ANTIS 2 sprayer features a two-speed gearbox that lets you adjust the amount of airflow to achieve optimal spraying for the developmental stage of your trees. With integrated air deflectors and air straightener, you can ensure a consistent and precise air flow directed right at the target. Additionally, the clutch mechanism protects the fan from any sudden jerks.

Technical specifications

	PDF 2		GEO M 2
Main tank capacity (L)			
Clean water capacity (L)			
Fan type	Round: R-75 or R-85	V-shape: V-85	Round: R-90 or R-90-S
Fan diameter (mm)	750 or 850	850	900
Number of nozzles	12	16	12
Type of nozzles	Double flip-over nozzles		Single nozzles on adjustable nozzle holders
Pumps	Piston diaphragms L120		
Pressure adjustment	Manual, electric or electronic		
Drawbar			
Power requirement (hp)	50 to 60		70
Length (m)	3,75 (1002) - 4,05 (1502) - 4,20 (2002)		3,75 (1002) - 4,05 (1502) - 4,20 (2002)
Overall width (m)	1,25 (1002) - 1,45 (1502) - 1,60 (2002)		1,25 (1002) - 1,45 (1502) - 1,60 (2002)
Overall height (m)	1,35 (1002) - 1,45 (1502) - 1,55 (2002)	1,90 (1002) - 1,95 (1502) - 1,95 (2002)	1,35 (1002) - 1,45 (1502) - 1,55 (2002)
Unladen weight (kg)	650 (1002) - 760 (1502) - 830 (2002)	710 (1002) - 820 (1502) - 890 (2002)	700-730 (1002) - 830-860 (1502) - 900-930 (2002)
Standard tyres			
Approval for on-road travel limited to			



KUHN PARTS

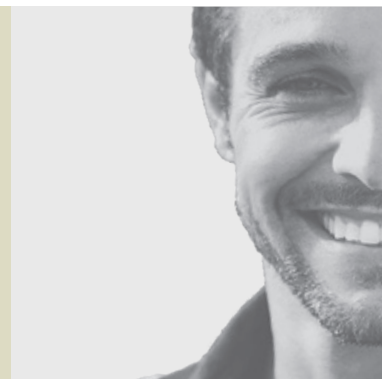


Designed and manufactured to rival time. KUHN foundries and forge as well as a high-level manufacturing process allow the production of spare parts to defy time. You can truly rely on our know-how and our genuine parts. Farmers benefit from our client support and logistics services via any KUHN PARTS warehouse, which provide quick and reliable repair solutions in cooperation with your nearest authorized KUHN dealer.

GEO 2		ANTIS M 2		ANTIS 2	
1 000 - 1 500 - 2 000					
102 (1002) - 124 (1502 - 2002)					
Round: R-85-HF or R-95-HF	Round: R-82 or R-92	V-shape: V-82 or V-92	Round: R-82 or R-92	V-shape: V-82 or V-85 or V-92	
850 or 950	820 or 920			820, 850 or 920	
14	14	18 or 24	14	18, 26 or 24	
Double flip-over nozzles					
Piston diaphragms L120, L160, BHS 120, BHS 150					
Manual, electric or electronic	Electric or electronic		Electric or electronic		
Straight drawbar, Articulated drawbar or Pivoting drawbar					
50 to 80	60 to 70				
3,75 (1002) - 4,05 (1502) - 4,20 (2002)	3,75 (1002) - 4,05 (1502) - 4,20 (2002)		3,75 (1002) - 4,05 (1502) - 4,20 (2002)		
1,25 (1002) - 1,45 (1502) - 1,60 (2002)	1,25 (1002) - 1,45 (1502) - 1,60 (2002)		1,25 (1002) - 1,45 (1502) - 1,60 (2002)		
1,40 (1002) - 1,45 (1502) - 1,55 (2002)	1,35 (1002) - 1,45 (1502) - 1,55 (2002)	1,85-2,30 (1002) - 2,00-2,40 (1502 - 2002)	1,35 (1002) - 1,45 (1502) - 1,55 (2002)	1,85-2,30 (1002) - 2,00-2,40 (1502 - 2002)	
670-700 (1002) - 800-830 (1502) - 870-900 (2002)	670-745 (1002) - 800-875 (1502) - 870-945 (2002)				
10.0/80-12 (1002) - 11.5/80-15.3 (1502 - 2002)					
European - 40 km/h without brakes					

KUHN SERVICES*

KUHN sos order - Express spare parts service, 24/7**
KUHN protect+ - The choice of professionals!
KUHN i tech - For ever quicker repairs!
KUHN finance - Invest rationally!



* Not all services are available in all countries. ** except January 1, May 1 and December 25

MyKUHNN

THE LINK TO MY SUCCESS

MyKUHNN is your online space. Sign up today and find out how MyKUHNN's exclusive services will help you manage your KUHN machinery and terminals more effectively. Log on with your computer, mobile phone or tablet computer to access spare parts catalogues, technical documentation and many connected services.



Discover the range of KUHN equipment for vineyards and orchards.



1. Power tillers - 2. Shredder - 3. Fertiliser spreader - 4. Vineyards and orchards sprayers

KUHN SAS - 4 Impasse des Fabriques - BP 50060 - F-67706 Saverne CEDEX - FRANCE
KUHN NORTH AMERICA, INC. - 1501 West Seventh Avenue - Brodhead, WI 53520 - USA
KUHN FARM MACHINERY PTY. LTD - 313-325 Foleys Road - Deer Park, VIC, 3023 - AUSTRALIA
KUHN FARM MACHINERY (U.K.) LTD - Stafford Park 7 - GB TELFORD/ SHROPS TF3 3BQ

To find your nearest KUHN dealer,
visit our website www.kuhn.com

Information given in this document is only for information purposes and is non-contractual. Our machines are in compliance with regulations in force in the country of delivery. In our literature, and for improved illustration of certain details, some safety devices may not be in operating position. When operating these machines, these devices **must** be in position in accordance with the requirements indicated in the operator's manuals and pre-delivery instructions. RESPECT THE ROAD REGULATIONS IN FORCE AS WELL AS the tractor gross vehicle weight rating, its lift capacity and maximum load per axle and tyres. The tractor front AXLE load must always comply with the regulations of the country of delivery (In Europe, it must reach minimum 20 % of the tractor net weight). We reserve the right to change any designs, specifications or materials listed without further notice. Machines and equipment in this document can be covered by at least one patent and/or registered design. Trademarks cited in this document may be registered in one or several countries.

To protect the environment, this leaflet is printed on chlorine-free paper.
Printed in France - GP0073EN - 04.25 - Copyright 2025 KUHN

