

DAMMANN®



*Pflanzenschutztechnik
Fahrzeugtechnik
Airporttechnik*

DAMMANN-trac

The special class of self-propelled sprayers





DAMMANN-trac DT 2800H S4 EcoDrive™
„The Fast Economical“ the new hydrostatically driven
DAMMANN-trac with intelligender motor control.



**Jetzt bis
5000 Liter**



DAMMANN-trac DT 2400H S4 „Highlander“ EcoDrive™
„The original, „The Flexible“ with adjustable track and height as you need for your crops. All changes can be done by hydraulic during slow driving.



DAMMANN-trac DT 3500H S4 EcoDrive™
„The Giant“ up to 12.000 l demounted mounted.

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Overview of the **DAMMANN-trac's**

	DT 2800H S4 EcoDrive™	DT 2400H S4 „Highlander“	DT 3500H S4
Engine power kW(hp)	210 kW (285 hp)	210 kW (285 hp)	230 kW (313 hp)
Type of engine	MTU 6R1000 (Mercedes Benz OM 936)	MTU 6R1000 (Mercedes Benz OM 936)	MTU 6R1000 (Mercedes Benz OM 936)
Exhaust type	EU level IV	EU level IV	EU level IV
Power unit	4 hydr. Wheel motors	4 hydr. Wheel motors	6 hydr. Wheel motors
Fuel tank	250 l	250 l	380 l
Ad Blue tank	25 l	25 l	40 l
Speed	0 - 40 km/h Option 50 km/h		
Ground clearance	1100 mm	1150 - 1900 mm	1050 mm
Standard wheels	380/90 R50 VF	380/90 R46	520/85 R42
Track width	1800-2250 mm (fix)	2250-3050 mm	2000-2250 mm (fix)
Steered axle	Front	Front and rear	First and third
Length	7950 mm	7950 mm	9500 mm
Width	2550 mm	2700 mm	2550 mm
High	3700 mm	3750 mm	3700 mm
Total weight	18 t	18 t	25 t
Hydraulic system	180 l/min Hydraulic pump with LS control block 2 double + 2 single control devices with 6 connectors, open circulation for a hydraulic motor 55 l / min (adjustable)	180 l/min Hydraulic pump with LS control block 2 double + 2 single control devices with 6 connectors, open circulation for a hydraulic motor 55 l / min (adjustable)	200 l/min Hydraulic pump with LS control block 2 double + 2 single control devices with 6 connectors, open circulation for a hydraulic motor 55 l / min (adjustable)
Boom weight from - to	24 - 42 m	24 - 36 m	30 - 42 m
Tank volume	5000 l 6000 l 7000 l	4000 l 5000 l	8000 l 10000 l 12000 l



NEW

The new DAMMANN-trac cabin

The new cab for the DAMMANN-trac offers a better view of the surroundings of the DAMMANN-trac through larger glass surfaces. In the interior, attention was paid to ergonomic operation of all switches and good visibility of the warning lights.

When designing the interior, great care has been taken at the workplace, so that the seat and the adjustable steering column have been ergonomically placed. The joystick and the most important controls are tightly packed and easy to operate for the driver. The positioning of the operating terminal, fitted to the driver's seat, for the sprayer is designed in such a way that the driver can easily operate it without any restrictions on the visibility. Also cup holders and storage compartments are easily accessible from the driver's seat.

- » Overpressure cabin with activated carbon filter and particulate filter of category 4, tested according to EN 15695-1 of 2009.
- » Good all-round view.
- » Optimum noise insulation.
- » Sliding door.
- » Slots.
- » Protected easy access service box.
- » Air-sprung driver's seat with headrest.
- » Right armrest incl. Joystick control for vehicle and body sprayer.
- » Pre-installation for camera system.
- » Radio with CD drive and Bluetooth connection for telephone.
- » Emergency seat.
- » Heat-insulating panes.
- » Ambient lighting.
- » Integrated heating and air conditioning.
- » Integrated vehicle job computer with data terminal.
- » LED work lights front and rear.

DAMMANN-trac DT 2800H EcoDrive™

The product range of the Dammann trac's is supplemented with the economic, quicker and more quiet hydrostatic self-propelled DAMMANN-trac DT 2800H EcoDrive™ Sonderklasse. It is equipped with new wheel motors, a hydraulic pump and an innovational intelligent control device for the drive. The control device controls the engine speed of the MTU 6R1000 Diesel engine. This ensures that only the required performance is used for the hydraulic propulsion.

Engine:	Manufacturer	MTU
	Type	6R1000
	Performance	210 kW (285 PS)
	Emission level	EU Level IV
Drive:	Manufacturer	Poclain
	Wheel motor Type	MHP
Fuel tank:	250 l	
AdBluetank:	25 l	
Speed:	50 km/h	
Ground clearance:	1100 mm	
Tyres:	380/90 R50 VF	
Track widths:	1850 - 2250 mm	
Controlled axles:	Front axle (Opt. Both axles)	
Length:	7850 mm	
Width:	2550 mm	
Height:	3700 mm	
Permitted total weight:	18 t	
Hydraulic device:	200 l/min adjustable pump with LS control block 2 DW + 2 EW control valves with 6 plug connections, open circulation for an oil engine 55 55 l/min (adjustable)	
Working widths:	24 - 42 m	
Tank capacity	4000 l, 5000 l, 6000 l and 7000 l	



2-step track width changing (optional)

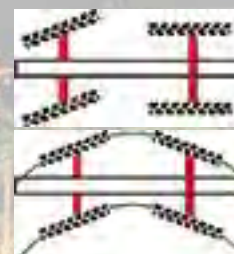
The option for the track width changing gives the driver the possibility to use the **DAMMANN-trac** in different crops. The track width can be changed during slow driving by pressing a button of the arm rest in the cabin. Possible track widths are 1800 - 2250 mm (tire-dependent), 2250 - 3000 mm (only in conjunction with all-wheel steering) and 2550 - 3300 mm (only in conjunction with all-wheel steering)

4 wheel drive steering (optional)

The 4WD steering for the DT 2500 H S 4 makes the **DAMMANN-trac** more manoeuvrable.

Standard with 2 WD steering

Smaller turn circle with 4WD steering.



NEW

DAMMANN-trac DT 3500H S4 EcoDrive™

The economical powerhouse by DAMMANN, the three-axle **DAMMANN-trac** DT 3500H S4 EcoDrive™ provides great power. With a tank volume up to 12,000 liters, the **DAMMANN-trac** DT 3500H S4 EcoDrive™ is ideal for working efficiently on large fields. It combines power of 6 hydraulic wheel motors with maneuverability through its two steered axles.

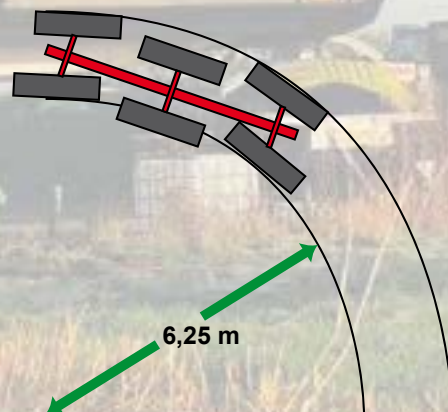
Engine:	Manufacturer	MTU
	Type	6R1000
	Performance	
	Emission level	EU Level IV
Drive:	Manufacturer	Poclain
	Wheel motor Type	MHP
Fuel tank:	380 l	
AdBlue tank:	40 l	
Speed:	40 km/h (Option 50 km/h)	
Ground clearance:	1050 mm	
Tyres:	520/85 R42	
Track widths:	2000 - 2250 mm	
Controlled axles:	First and third	
Length:	9500 mm	
Width:	2550 mm	
Height:	3700 mm	
Permitted total weight:	25 t	
Hydraulic device:	280 l/min adjustable pump with LS control block 2 DW + 2 EW control valves with 6 plug connections, open circulation for an oil engine 55 l/min (adjustable)	
Working widths:	30 - 42 m	
Tank capacity	8000 l, 10000 l und 12000 l	



The hydraulic pumps for drive and sprayer pumps are powered by a 230 kW (313 hp) engine from MTU. MTU's 6R1000 engine is electronically controlled according to load, depending on the hydraulic requirements. The engine is equipped with SCR catalytic converters and meet EU Stage IV and Tier IV final emissions.

Manoeuvrability with 3 axles

The **DAMMANN-trac** DT 3200 H has a circle turn of 6.25 meters using standard tyres (480/80 R38) with track width 2.25 meters. Due to tyres size and track the circle turn can change.



DAMMANN-trac

DAMMANN-trac DT 2400H S4 „Highlander“ EcoDrive™

„The frugal variable“, the Highlander which can adapt the track and the ground clearance to the stock. Its standard all-wheel steering also supports the maneuverability of this machine.

The Highlander was developed in order to be able to carry out crop protection and fertilization measures in high stocks. With his ground clearance up to 1900 mm, he is more than up to this task. Special crops such as corn and sunflowers can be treated right through to the harvest.

Engine:	Manufacturer	MTU
	Type	6R1000
	Performance	210 kW (282 PS)
	Emission level	EU Stufe IV
Drive:	Manufacturer	Poclain
	Wheel motor Type	MHP
Fuel tank:	250 Liter	
AdBluetank:	25 Liter	
Speed:	40 km/h (Option 50 km/h)	
Ground clearance:	1900 mm	
Tyres:	380/90 R46	
Track widths:	2250-3050 mm	
Controlled axles:	Front and rear	
Length:	7950 mm	
Width:	2700 mm	
Height:	3700 mm	
Permitted total weight:	18 t	
Hydraulic device:	180 l/min Hydraulic pump with LS control block 2 double + 2 single control devices with 6 connectors, open circulation for a hydraulic motor 55 l / min (adjustable)r)	
Working widths:	18 - 36 m	
Tank capacity	4000 l, und 5000 l	



Motorized is the DAMMANN-trac DT 2400H „Highlander“ with a MTU engine 6R1000 with 210 kW (285 hp), with EU Stage IV (Tier 4 final) exhaust gas, which drives the hydraulic pumps for the hydrostatic drive and the body-mounted equipment. The electronic engine management system takes on an innovative control unit that adapts the engine speed to the required hydraulic volume. In the basic configuration, the „Highlander“ has a maximum speed of 40 km / h, which can be optionally switched on to 50 km / h. For excellent ride comfort, the chassis is hydraulically suspended at the front axle and pneumatically at the rear axle.



Haulm fender (optional)

For the work in high crop the haulm fender has been developed. The haulm fender makes sure the crop will not be damaged during treatment.

Hill-Control (optional)

Hill-control is a system to drive secure in hilly and broken areas. The hill-control helps the Dammann-trac to stay in level. First plus is to have the balance point in the middle of the axles; second plus is that the tires are parallel to the growing direction of the crop. So the damage to the crop is minimized.

Hill control regulated every chassis suspension on its own, so it will be always vertical. Together with the option Distance control it is possible to use big working width and big tank capacity in difficult areas with a minimum of crop damage.

360° panoramic view

The new Touch ISOBUS terminals HD12pad and HD8pad widen your opportunities. You can connect a camera system with four 180° cameras to the terminal. The four video signals are cut together into one signal by a computer so that the driver has the overview of all sides of the DAMMANN-trac. Persons and obstacles are displayed on the terminal and blind spots are minimized.

The panoramic view with three cameras is available for the trailed sprayers as well.



Profi-class demountable sprayer for **DAMMANN-trac**

The established Profi-class sprayer of **DAMMANN** is the perfect complement to the **DAMMANN-trac's**. With tank capacity from 4000 to 12000 liters, it covers the entire **DAMMANN-trac** program. The Profi-class structures are accurately adjusted to the **DAMMANN-trac** so that they form a unit at work.

The sprayer can be adapted to any customer. Therefore, only a few examples of the options **DAMMANN** offers its customers will be shown, because each plant protection sprayer is built the way the customer needs it.



ISOBUS-Terminal

The sprayer Profi-Class is equipped with an ISOBUS job computer as a standard. The operation via a Universal ISOBUS terminal and the joystick is clear and easy.

The system can be upgraded with further apps, such as SECTION-Control, VARIO-Select

The interaction of pump, injector and induction centre

The robust self-priming piston diaphragm pump with the help of the injector creates a suction capacity of up to 1000 l / min. This allows filling in less than 5 minutes with a tank of 4400 liters. Thanks to its vacuum suction principle, the injector allows solids to be sucked in from the induction center into the tank; it draws in at 310 l / min from the rinsing center. The induction center holds 60 liters and is supplied with fresh water during filling. For rinsing and diluting a ring rinse is present, which generates a rotating liquid flow for the lump-free flushing of pesticides.

Through the complete flushing of the inner wall to below the edge with round flushing locks. Clumping with solids can be easily solved with the shock nozzle. To clean the PSM containers, a powerful canister cleaning nozzle is integrated into the induction center.

All valves are located centrally on the induction centre and ensure an easy handling of the sprayer Profi-Class.



Nocton

The special DAMMANN Nocton ensures consistent injection pressure. The Nocton ensures by pneumatic back pressure that in the lines always the same pressure is available, regardless of whether one or all nozzles are open.

Gel-Coated GFK tank

The DAMMANN tank is easily cleanable with the installed cleaning nozzles due to its special gel-coated surface and the established rectangular form with a deep outlet and 10 % safety reserve. The well-placed baffles ensure additional security when braking and avoid accidental weight shifting of the content. The fresh water tank integrated in the tank has a capacity that is enough for the cleaning of the whole device and is installed centrally.

Nozzle carrier and nozzle pipe

The Profi-Class is equipped with an electropneumatic tandem nozzle carrier and a 1/2" VA nozzle line.

The sprayer is equipped with a pressure pipe cleaning system. The spray liquid can be sprayed from every nozzle at the same time without delays.

The division of the sections is customized after the customer's needs. 5 to 14 sections are available and are included in the basic price, depending on the boom width.

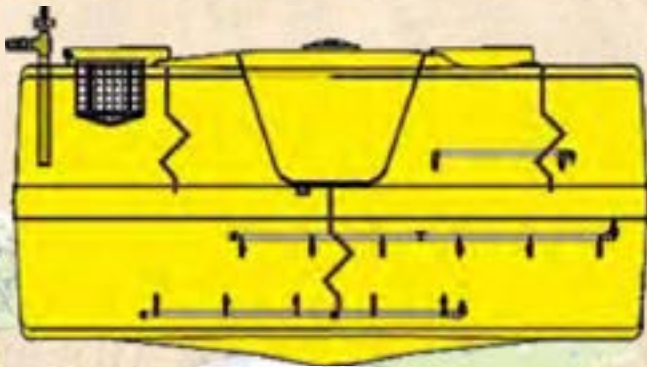
G boom

The specially formed G boom has been developed to protect the nozzles with its special shape. You can work in hilly terrain without problems due to the standard equipped slope control. The outer boom is of aluminium to reduce the weight and is equipped with a double collision safety device.

Lift mast

The stable lift mast ensures a continuous adjustment of the height without weight transfer due to its mounting behind the tank and the axle. All lines and hoses are mounted in a link chain routing in the lift mast.

The stable pendulum suspension ensures safe boom guidance in uneven terrain. It damps vertical and horizontal impacts on the boom and ensures an optimum control of the inventory.



NEW

ESZ-Keypad, Sprayer-Keypad and Sprayer-Keypad pro

The Keypads for the **DAMMANN-trac's**.

The new keypads make it easier to operate the sprayer. The keypads are positioned in the immediate vicinity of the indicator center so that the operator has the switching functions available outside the cab. This additional user-friendliness of the crop protection sprayer is available in three versions: the 4-key ESZ keypad, the 8-key sprayer keypad and the 12-key sprayer keypad.

The illuminated buttons are freely configurable, so desired switching options can be routed from the cabin to the flushing center. Thus, the raising and lowering of the indicator center, the work lighting, switching on the pump and other functions can be additionally switched on the flushing center.


NEW

DAMMANN Fluid Indicator

Display of pH and temperature

Influence of pH on pesticides Most crop protection agents work best in an acidic to slightly acidic spray mixture (pH 4-6). Many mediums are unstable from a pH greater than 7, because they are degraded by alkaline hydrolysis (saponification) (for example, phenmedipham, many pyrethroids, dimethoate, cap tan). The loss of effect is irreversible and, as soon as the pesticide is mixed with the water, it begins and lasts until the active ingredient has dried on the target surface. Depending on the active ingredient and pH, 50% of the active substance may be degraded after just a few minutes. In general, insecticides are more susceptible to alkaline hydrolysis than fungicides and herbicides.

Also the water treatment plays a role

The solubility of many pesticides and foliar fertilizers decreases with decreasing temperature. With warm water, the time required to dissolve a substance, especially saline components, is significantly shorter than with cold water.



Automated and level-controlled continuous internal cleaning CID

The automated and level controlled continuous internal cleaning CID from DAMMANN is a unique innovation in the field of crop protection technology. Internal cleaning is initiated automatically when the level sensor signals that the tank is empty. Likewise, the internal cleaning is interrupted if the level in the tank is too high. In addition, it ensures that there is enough fresh water for a final interior cleaning or for external cleaning. DAMMANN's CID shows outstanding cleaning results, which were certified by the Julius-Kühn-Institut.



NEW

- » Simple and thorough cleaning of the crop protection device.
- » Only if a cleaning can be carried out quickly, easily and efficiently on the field, it is also carried out properly.
- » Time savings.
- » Lower fresh water requirement.
- » Higher cleaning effect.
- » High level of user protection, as the driver starts the cleaning program from the cab and thus no passing through of treated areas takes place.
- » Easy handling prevents point entry of PSM into surface waters due to improper cleaning (environmental protection).
- » No premature dilution of the spray mixture due to operator error.
- » JKI tested.



Auch zum Putten braucht man ein ruhiges Grün



DCD Distance Control Dammann

The new fully automatic boom control from Dammann.

DCD is the first boom control that unifies two control elements into one to benefit from the advantages of both elements. DCD uses the hydraulics and pneumatics to control the boom. The hydraulics sets the boom into the desired position and the pneumatics is used for the repositioning of the boom into the right position. The boom position is controlled by four ultrasound sensors and an angle potentiometer. An additional gyroscope records the gravitational forces that occur when passing curves.

The handling of DCD is simple and quick. The controlling can be selected and adjusted at any time with only a few buttons. The working and clearance height is adjustable with centimeter precision in the terminal. The user doesn't have to adjust the boom manually into the desired position, this is operated by the terminal in the boom control.

Following controlling elements of the fully automatic boom control are selectable, depending on the equipment of the machine.

- ☐ Lifting / lowering of the boom
- ☐ Tilting of the boom
- ☐ Angling of the boom
- ☐ Lifting / lowering and tilting of the boom
- ☐ Lifting / lowering and angling of the boom



HD-NIGHT LUX (option)

LED spraying cone lighting „HD-Night LUX“ with obstacle finder.

Every switched on spraying cone is lighted by an LED light. This way the driver has the visual control of the function of the nozzles. The obstacle finder lights the obstacles, the remaining field is lighted slightly. This way the driver has a clear view of the obstacles and the field is not overexposed.



The rotating stirring and cleaning system - **RRW**

The **RRW** is the intelligent solution that is mounted in the tank. The stirring and cleaning system is mounted centrally on the lower part of the tank. This shaft is equipped with special nozzles that are used for stirring and cleaning the tank.

While stirring the shaft is swiveling from the left to the right. The swiveling height is adjusted to the filling level of the tank, which avoids foam formation.

In the process of cleaning the nozzle rotates 360 degrees and cleans the whole tank, as tests of the JKI have proven.



DAMMANN proControl III

The **proControl III** option is a system consisting of:

- » Fernsteuerung des ISOBUS-Terminals im Fahrzeug.
- » Fernsteuerung der Hähne an der Maschine.
- » Vorprogrammierter Arbeits- und Reinigungsabläufe.
- » TANK-Control II.

NEW

The option **proControl III** was developed to easily control recurring workflows. Workflows can be controlled from the **proControl III** terminal on the syringe as well as at the terminal in the cabin. The machine operator does not need to get out of the driver's cab to start the individual processes. Important controls on the ISOBUS terminal can also be switched via the remote control on the machine, such as pump and lighting.

In addition to the workflows such as spraying and filling, various cleaning processes are directly executable. A unique feature of the DAMMANN **proControl III** is that also cleans the rinsing center during the cleaning process. Thus, the complete interior cleaning of the Profi-Class body sprayer can be made out of the driver's cab.





The Dual-Air-System D-A-S (option)

The intelligent solution for the environmentally conscious economist.

The declared goal of Herbert Dammann GmbH is to support precise, economic and environmentally friendly plant protection. The 40 years long experience of constructing plant protection machines is visible in the new Dual-Air-System developed by Herbert Dammann GmbH. It is characterized by the double air routing in front of the nozzle and at the back of the nozzle which stabilizes the spraying jet. Arguments that speak for the Dual-Air-System:

- » Low drift when spraying low crops and bare soil
- » Bigger independence of the weather effects – time windows for operations are increased
- » Higher driving speed, which increases the area efficiency
- » Constant agent build-up in the crop
- » Better crop penetration, especially for special plantations, such as vegetables, salad or potatoes
- » The substance is sprayed onto the target surface even in higher crops due to the strong air jet.
- » Better agent build-up decreases the evaporation loss at high temperatures
- » Reduction of agent and water quantities



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