

# TWS 85.1

Large area spreader

Working widths 12 to 50 m



++ M-Drive ++ H-Drive ++ EMC ++ OptiPoint ++ ISOBUS ++ VariSpread ++

*Maximum working load meets highest precision*

# TWS 85.1

The TWS 85.1 large area spreader meets practical requirements for high strength, low ground pressure and maximum precision in an ideal way. The concept is based on the combination of a standard three-point fertiliser spreader with a high-volume transport trailer.

If high-precision fertilisation is required, the disc spreader with its three-point mounting system has proven itself as the technical standard. TWS consistently utilises the RAUCH innovations in fertiliser technology to achieve maximum spreading precision and efficiency.

## **EMC:**

Fully automatic mass flow measurement and control

## **VariSpread V4, V8, dynamic:**

Section control with four, eight or stepless sections switchable from one side to the other.

## **GPS-Control:**

Automatic headlands and section control.

Precise remote-controlled full and limited border spreading



**AXIS M 30.2 Q**

**AXIS M 30.2 EMC**

QUANTRON-A

Working width 12 – 42 m

## *Precision and efficiency*

Empty trips to load transfer points are reduced thanks to the high fertiliser loading capacity of 8,160 kg. Transport speeds of 40 km/h enable high transport efficiency. By specific AXIS spreader combination possibilities the TWS is tuned to the own farm conditions.





### ***AXIS H 30.2 EMC***

ISOBUS

Working width 12 – 42 m



### ***AXIS HT 50.2 EMC***

ISOBUS

Working width 12 – 50 m

## ***EMC - The decisive step ahead***

By means of classical three-point attachment, TWS enables application of mechanical or hydraulic fertiliser spreaders. In combination with innovative AXIS M 30.2 EMC, AXIS H 30.2 EMC or AXIS HT 50.2 EMC, TWS offers state-of-the-art control electronics with fully automatic EMC mass flow measurement and control for the highest standards.

In contrast to weighing technology with weigh cells, EMC enables continuous and fully automatic flow measurement and control separately on the right and left side during load transfer.

# TWS operation

## Fully automatic load transfer

All TWS functions are controlled via the TWS control unit with its large colour display.

The load transfer function is controlled fully automatically by the interaction of residual quantity sensors and the load transfer auger. The intelligent load transfer system facilitates a regular filling level event with different spreading quantities on the right and left side.

The spreader is controlled on a second QUANTRON-A terminal or ISOBUS universal terminal.

TWS control unit



AXIS M without ISOBUS



QUANTRON-A



GPS-Control

## Ease of use in perfection

**AXIS M EMC** can be controlled reliably and comfortably using the large colour display of the future-proof, electronic QUANTRON-A operating terminal.

**QUANTRON-A** controls the smart EMC automatic metering system based on the current forward speed.

**AXIS M EMC V4** with **VariSpread V4** allows switching four sections by simply pushing a button.

**AXIS M EMC V8** with **VariSpread V8** allows spreading with eight sections.

**VariSpread** optimises the spreading precision on wedge-shaped fields and headlands. **GPS-Control**, VariSpread and OptiPoint headlands control offer automation at high precision.

Using the **Plus/Minus switch**, the application rate can be specifically adjusted on one or both sides during operation.

With its serial RS 232 interface, QUANTRON-A is equipped for applications in **Precision Farming**.







## AXIS H/HT and AXIS M EMC with ISOBUS



CCI 100 ISOBUS universalterminal

## ISOBUS can be so simple



**CCI.Apps for perfect adjustment to the required application:**

**Series:**



**CCI.Convert**  
 Serial interface for connection of N sensors, for example (only in combination with CCI.Control)



**CCI.Tecu**  
 Tractor data



**Fertilizer Chart**  
 The fertiliser charts can be accessed at the CCI-Terminal

**Optional:**



**CCI.Control**  
 Documentation and order processing



**Parallel Tracking**  
 Parallel driving aid



**Section Control**  
 Automatic section control

## ISOBUS accessories



EGNOS A 101 DGPS receiver for application with Section Control or Parallel Tracking



Joystick operation: Everything under control and optimum ergonomics for fatigue-free working



QUANTRON-VT: The inexpensive alternative for everybody who does not use CCI.Apps.

**The RAUCH ISOBUS implement ECU technology is compatible with standard universal terminals: John Deere, Fendt, Müller Elektronik, Kverneland, Trimble, Claas, WTK, Topcon**

# TWS innovations

## EMC



- In contrast to weigh cell spreaders, **EMC** provides separate metering of the left and right-hand side. This increases the metering and distribution precision on both sides.
- **EMC** offers exact and reliable metering even at extreme vibrations.
- **EMC** also ensures high precision metering on extreme slopes
- The intelligent **EMC** metering slide control system also provides automatic removal of blockage and clogging - also on single sides.
- **EMC** offers precise measurement and control of different application rates on the right and left-hand side even during spreading using VariSpread on wedge-shaped fields.

## VariSpread V8



## without ISOBUS

All AXIS spreaders with QUANTRON-A and automatic CDA drop point adjustment are equipped with VariSpread V8 8-fold section control. Thanks to remote metering slide and drop point adjustment, four sections can be realised on each side.

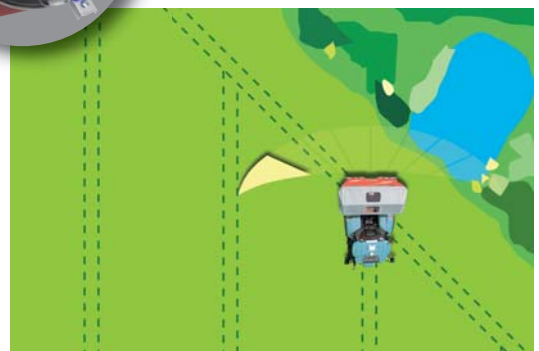


## VariSpread dynamic



## with ISOBUS

In combination with GPS-Control, the innovative VariSpread dynamic section control system offers fully automatic control from one side to the other. Working width and application rate are continuously adjusted. Thanks to powerful high-speed actuators, VariSpread dynamic enables almost stepless spreading of wedge-shaped fields at high forward speeds. This way, fertiliser can be spread precisely even in problematic areas of wedge-shaped headlands.







The safe access platform enables easy cleaning and maintenance.



The TWS hopper cover and the central metering slide are hydraulically remote-controlled for high operating comfort.



The hydraulic support stand supports convenient attachment and removal.



The external stainless steel auger with sensor monitoring provides good access even if the tank is filled.



An optional cover provides protection from dirt and humidity.

### *TWS overview*

- Maximum efficiency thanks to 8,160 kg payload and 40 km/h transport speed
- Maximum precision even with large working widths
- Stand-alone spreader operation thanks to its separate design
- Optional hydraulic or mechanic spreader drive
- Automatic fertiliser load transfer function with fully automatic right/left hand level compensation of the attached spreader.
- Easy-to-use and comfortable operation via QUANTRON-A control unit
- Electro-hydraulic remote-controlled hopper cover
- Easy cleaning and maintenance
- High-quality materials and workmanship

# TWS 85.1

Performance data	
Vehicle length (trailer unit – AXIS safety hoop guard)	6.97 m
Wheelbase (trailer unit - axle)	4.51 m
Axle flange size	2.00 m
Transport width (520/85 R42 with 2.0 m track and AXIS 50.2 HT)	2.79 m
Transport height (520/85 R42 standard wheel)	3.20 m
Hopper capacity (up to hopper top edge)	8,200 l
Filling height (up to hopper top edge)	2.80 m
Admissible total weight (with towing bar for top hitching)	12,000 kg
Admissible drawbar load (with towing bar for top hitching)	2,000 kg
Axle load	10,000 kg
Empty weight with AXIS 50 HT	3,840 kg
Payload	8,160 kg

Tractor requirements		
<b>TWS 85.1</b> Auger, slide, hopper cover		1 double-acting control valve Oil demand 40 l/min
<b>AXIS M 30.2 Q / M 30.2 EMC</b> TELIMAT T25	12 – 42 m	No control valves 1 single-acting control valve
<b>AXIS H 30.2 EMC</b>	12 – 42 m	Pressure line "P", return line "T", LS line "LS", oil demand 45 l/min
<b>AXIS HT 50.2 EMC</b> Cat. II	12 – 50 m	Pressure line "P", return line "T", LS line "LS", oil demand 65 l/min

## Standard equipment

- Hydraulic or mechanic spreader drive
- TWS operating terminal with intelligent load transfer automatics
- Stainless steel load transfer auger with hydraulic slide
- Remote-controlled hopper cover
- Feeder mesh, filling level sensors, large inspection windows
- Front LED lighting
- High-quality BPW axle with plastic mud guards
- Folding access ladder with working platform
- Hydraulic parking support
- Pneumatic dual-circuit braking system with spring assembly
- Powder-coated frame and hopper

## Optional equipment

- Hitch with trailing ball
- Hopper cover for attached spreader
- Conversion kit for H-drive constant power to Load Sensing



We reserve the right to make changes to improve our products.

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