Front Hopper - Seeding Bars

### TF 1500 BTF / BTFR COMBILINER VENTA CSC 6000



www.kuhn.com



be strong, be KUHN



# FROM VERSATILITY TO AUTONOMY



High-capacity front hopper TF 1500 is not only ideal for seeding crops and plant cover, it also serves as a fertiliser hopper, making a powerful combination.

#### AN ALL-ROUNDER HOPPER

Optimise your TF 1500 hopper by seeding with higherautonomy, combining seeding and fertilisation as well as seeding your cover crops. The TF 1500 hopper is compatible with BTF and BTFR seeding bars, COMBILINER VENTA CSC 6000 seeding combination, OPTIMER stubble cultivator, STRIGER strip till tool and MAXIMA AND PLANTER precision seed drills.

#### **QUALITY PLANTING**

BTF rigid seeding bars, BTFR foldable seeding bars and COMBILINER VENTA CSC 6000 seeding combination ensure optimum work output with great soil/seed contact to ensure the germination of your crops.

### Table of contents:



TF 1500	4
SEEDFLEX	6
BTF / BTFR	8
Combiliner VENTA CSC 6000	10
Equipment	12
Tramlining	13
Technical specifications	14

INCREASE YOUR DRILLING PERFORMANCE

Improved load balance between front and rear axle facilitates manoeuvring and reduces soil compaction. With a capacity of 2,000 L and transport width of 2.50 m, the TF 1500 hopper offers high autonomy, easy handling and a compact design.



### APPLICATION RATE PRECISION

The TF 1500 front hopper is equipped with a VENTA metering system known for its reliability and precision.

The high-capacity volumetric metering system is used to seed all types of seeds and fertiliser from 1 to 430 kg/ha. All central parts are made of stainless steel, no need for tools or dismantling for maintenance. Integrated and reliable electric control of the metering system ensures drilling precision even at high speed.



### MODULAR HITCH

Fitted to an integrated front-packer frame (1).

The carrying frame includes four directional packer wheels, 700 mm in diameter.

- they consolidate the soil between the tractor wheels for optimum soil/seed contact,

- they limit compaction caused by the front wheels of the tractor. The wheels positioned under the hopper makes the machine more compact.

For more stability, up to 800 kg of extra balance weights may be added.

Adapted to the tractor using a carrying frame **(2)**. It comes with 200 kg of standard weights. It can be used when seeding conditions do not require the soil to be consolidated. To improve tractor/machine balance, up to 1,400 kg of extra balance weights may be added to the carrying frame.

#### **AN INTELLIGENT HOPPER**

The QUANTRON S-2 control box provides complete seed management including:

- electronic drill management,
- manual or automatic application rate modulation using GPS for great field starts,
- storage of data and seed calibration settings for 200 fields,
- work counter,
- symmetrical or asymmetrical tramlining of 2 to 12 passages, before and after germination.





BTF 1000

BTFR 1000 (

**COMBILINER VENTA CSC 6000** 

# SEEDFLEX: THE CENTREPIECE OF YOUR SEED DRILL

Remember that 50 % of your harvest is already determined during seeding. The SEEDFLEX seeding bar will manage this operation to your satisfaction, even at high speeds. With its widely offset double discs, each pair mounted on a parallelogram, your seeding will be fast and accurate.

# WHAT'S GREAT ABOUT THE SEEDFLEX COULTER BAR:

•

- exceptional seeding precision,

- easy passage in the most diverse soil conditions,
- highly efficient in ploughed and min-tilled land,
- coulter pressure that ensures outstanding seeding-unit stability,

- no maintenance required.



**TO FIND OUT MORE** about SEEDFLEX advantages, scan this code with your smartphone.







## Seeding depth respected, even at high speeds:

 seeding unit mounted on parallelogram,
 depth control wheel for each row.



## Improved penetration in all soils:

- double discs offset for clean furrow opening,
- small disc-opening angle to avoid soil spray and facilitate furrow closing.

#### EXCUSIVE

# Easier passage in clayey soils and through plant debris:

- 35 cm offset between the two coulter bars.

#### Better soil/seed contact:

depth control and press wheels control seeding depth, row by row, and ensure dynamic seed germination. BTF BTFR

# HIGH PERFOMANCE COMBINATIONS

## BTF AND BTFR FORM WELL-BALLANCED COMBINATIONS WITH THE TF 1500 HOPPER

Designed for drilling combinations with power harrows, the rigid BTF and folding BTFR seeding bars work just as well in ploughed land as min-tilled.

In combination with a front hopper, the tractor's rear-axle load is reduced resulting in better tractor/machine balance. You also get SEEDFLEX technology or seeding units with Suffolk coulters that ensure exceptionally high-quality seeding.

WORKING WIDTH (M)	RIGID SEEDING BAR	FOLDABLE SEEDING BAR	RIGID SEEDING BAR	FOLDABLE SEEDING BAR			
	Seeding units wit	h Suffolk coulters	SEEDFLEX seeding units				
3.00	BTF 302	-	BTF 3000	-			
4.00	BTF 402	BTFR 402	BTF 4000	BTFR 4000			
4.50	BTF 452	BTFR 452	-	BTFR 4500			
5.00	-	BTFR 502	-	BTFR 5000			
The second of the second	A LE AND A TOTAL	RE CART MAREN					

TF 1500 compatible





#### **ULTRA-SIMPLE ADJUSTMENTS**

Seeding depth is adjusted with a turnbuckle that connects the 3-point linkage to the coulter bar.



#### **GREATER CLEARANCE - EASIER SEEDING**

The seeding bar is connected to the power harrow via a doubleacting high-capacity hitch system. This increases clearance and ensures:

- easier manoeuvring,
- easy release for use with a precision seed drill,the possibility of tilling without drilling.

# AT THE END OF THE DAY HIGH OUTPUT AND



## SEEDING COMBINATION AND INDEPENDENT SEED DRILL

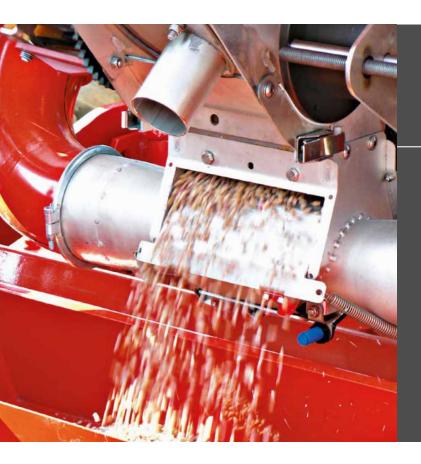
The coulter bar on the COMBILINER VENTA CSC 6000 is fully guided by the roller. This provides many advantages:

- Stability and ground adaptation even in stony conditions,
- The power harrow can disengage easily should it hit an obstacle,
- No need to readjust the coulter bar settings when changing the working depth of the harrow,
- The coulter bar has a hydraulic lift system making it possible to work solo with the power harrow.

High coulter clearance in lift position is a safety feature for manoeuvres.



# **SEEDING QUALITY ARE WHAT COUNT**



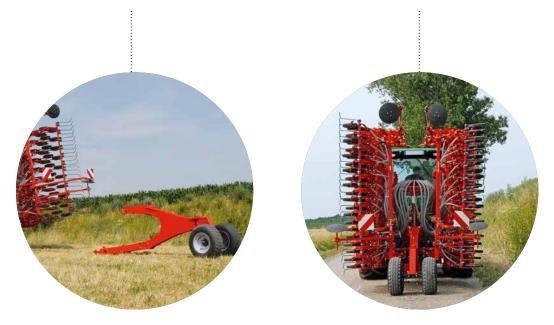
## RELIABILITY AND PRECISION

The VENTA centralised metering system by volumetric fluting is renowned for its simple design and precise metering of seeds of any size.

It manages application rates from 1 to 430 kg/ha and a single setting is all that is necessary to change seed type (or fertiliser). Just shift a plate to change from work position to calibration. Resistant to jolting and vibrations, output is respected when calibrated to a fixed setting and there is less risk of clogging.

## EASY HANDLING

The removable transport frame carries the weight of the combination during road travel. Maximum authorised load on the rear axle and the tractor's gross weight rating are respected. It is equipped with large-diameter pivoting twin wheels and is easy to remove with its semi-automatic linkage system, so it can be left at the end of the field to lighten the load while working. For road transport, the hydraulic top link is set to float position to ensure smooth driving, even on bumpy roads.



#### COMBILINER VENTA CSC 6000

# **AT YOUR FINGERTIPS**



#### EASY SETTINGS

Adapt the settings of the seed drill to working conditions precisely and easily from your tractor seat. Both seeding depth and coulter pressure can be adjusted hydraulically from the tractor cab. Two cylinders with spacers **(1)** serve as setting points for nominal seeding depth and coulter pressure.

#### YOUR COMFORT IS IMPORTANT TO US

COMBILINER VENTA CSC 6000 is equipped with the KLH 104 (2) circuit selector as standard. It controls:

- folding/unfolding of the combination,
- coulter bar lift,
- coulter bar height adjustment,
- hydraulic top link.

A double acting hydraulic valve is all that is required to control the four functions.

### KUHN SOS Order Express spare parts service 24/7

You urgently need spare parts? With KUHN SOS ORDER benefit from express delivery seven days a week, 365 days a year. Thus, you can minimize machine downtime considerably and increase your work output.

### **KUHN** protect +

#### THE CHOICE OF PROFESSIONALS!

Benefit from 36 months in complete serenity because of KUHN's PROTECT + warranty. You can concentrate exclusively on your work and the performance of your machine. Because this is what you expect, when investing in high-tech machinery.

### KUHN i tech For ever quicker repairs!

An unexpected technical problem always occurs at the wrong time. Your KUHN dealer can support you quickly and effi ciently thanks to KUHN i tech. With this 24/7 online service, a quick and exact diagnosis is possible

### KUHN finance Invest rationally!

New machine necessary, financing unsure? Modernize your equipment and develop your farm with KUHN FINANCE, in total safety and according to your needs and demands. We offer custom-made finance solutions, adapted to your requirements.

# TRAMLINING MADE EASY

With the COMBILINER VENTA CSC 6000 drilling combination, tramline your seeds at any width; symmetrical rows 2x2, asymmetrical or with specific rhythms.

Model Working width of		Working width of sprayer / fertiliser spreader (m)																	
Model	seed drill (m)	12	15	16	18	20	21	24	25	27	28	30	32	35	36	40	42	45	48
VENTA CSC 6000	6.00	Х	х	Х	Х	Х	Х	Х		Х	Х	Х			х		Х	Х	Х

## HALF-WIDTH SHUT-OFF

The distribution head can be equipped with a practical electric half-width shut-off system for working at field borders and points.

## THE BLOCKAGE-WARNING SIGNAL

-More surface area worked by eliminating regular controls,

-the driver can concentrate on driving the machine,

-continuous monitoring throughout the seeding operation.

The presence of foreign bodies in the seeds has unfortunate consequences:

partial or total blockage of seed tubes, irregular crop emergence, potential yield loss...

The KLS control box monitors seed flow via sensors mounted on each tube. When an incident occurs, the in-cab terminal alerts the driver with a warning tone and displays the faulty row on the screen. This control box can be fitted to the COMBILINER VENTA CSC 6000 as well as to BTF and BTFR seeding bars as an option.



#### **Technical specifications**

		COMBILINER VENTA CSC 6000						
Working width (m)		6.00						
Transport width (m)		2.99						
Hopper capacity (I)		with TF 1500:1,500 (2,000 with extension)						
Linkage		cat. 3 or 4N						
Max. authorised tractor power (k	<w hp)<="" td=""><td colspan="6">256 / 350</td></w>	256 / 350						
Main drive shaft		Waterscheid P series (low maintenance)						
Power harrow		HR 6004 with DURAKUHN coated blades						
Hydraulic top link with safety val	lve	◆						
Transport system		with semi-automatic linkage						
Transport wheel dimensions		10/75-15.3 (2x)						
Brakes*		-						
Speed signal		tractor radar signal						
Blower drive		via tractor hydraulic LS circuit or independent VARIO drive (800 - 1,000min <sup>-1</sup> )						
Metering unit		1 central fluted metering unit						
Application rate (kg/ha)		1 to 430						
Seeding unit		SEEDFLEX: double disc coulters mounted on parallelograms with 35 cm offset and carbide disc scrapers						
Number of rows		40						
Spacing between rows (cm)		15						
Seeding depth adjustment		hydraulic						
Max. coulter pressure (kg)		45						
Coulter pressure adjustment		hydraulic						
Hydraulic coulter bar lift		◆						
Inner disc scrapers		← (with carbide plate)						
Tractor wheel-track eradicators		<> (with T-bolt or Non-Stop safety)						
Covering harrow*		◆						
Side markers with safety*								
Rollers		MAXIPACKER or STEELLINER						
Lighting and signalling*		◆						
Electronic equipment*		QUANTRON S-2 on TF 1500						
KLS 128 (seed flow monitoring)		\$						
KLS 104 (hydraulic selector)		◆						
Necessary tractor hydraulic equipment		with TF 1500: 2x DA						
Weight opprov. (kg)	with MAXIPACKER roller	5,250						
Weight approx. (kg)	with STEELLINER roller	5,400						

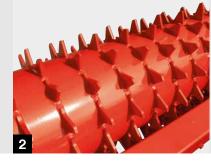
◆ Standard ◇ Option - Not available \*Basic machine equipment can vary according to country of destination

#### ROLLERS



#### **1. STEELLINER ROLLER**

- very good rotation and carrying capacity,improved clod crushing
- good soil structure, even in
- difficult and wet seeding conditions.



#### 2. MAXIPACKER ROLLER

- less rolling resistance, requires less
- traction power, - less subject to sinking in light soils,
- for light and clayey-silt soils.

15

		TF 1500					
Transport width (m)		2.50					
Hopper capacity (I)		1,500 (2,000 with extension)					
Hopper mount		on weight carrying frame or front packer frame with 700 mm wheel					
Corning from weight (kg)	Weight carrying frame	300					
Carrying frame weight (kg)	Front packer frame	340					
Filling height in relation to ground - platform (m)		1.35 - 1.25					
Electronic equipment		QUANTRON S-2: 2 x 2 row shut-off, flow control, application rate adjustment, recording calibrated seeds, low hopper level, distribution monitoring, blower monitoring, daily surface area counter					

Technical specifications				Seeding bars			
	BTF 302 - 402 - 452	BTFR 402 - 452 - 502	BTF 3000 - 4000	BTFR 4000 - 4500 - 5000			
Working width (m)	3.00 - 4.00 - 4.50	4.00 - 4.50 - 5.00	3.00 - 4.00	4.00 - 4.50 - 5.00			
Transport width (m)	3.00 - 4.00 - 4.50	3.00	3.00 - 4.00	3.00			
Number of rows	24 - 28/32 - 36	32 - 36 - 40	20/24 - 28/32	27/32 - 30/36 - 33/40			
Spacing between rows (cm)	12.5 - 14.3/12.5 - 12.5	12.5	15/12.5 - 14.3/12.5	15/12.5			
Hydraulic coulter bar lift		•	•				
Seeding unit	Suffolk	coulters	SEEDFLEX: 35 cm double offset discs fitted with carbide disc scrapers mounted on parallelogram				
Press and depth control wheels	-			•			
Covering harrow*		•	•				
Side markers with safety*	(vertical folding)	(rear folding)	<ul> <li>(vertical folding)</li> </ul>	(rear folding)			
Electronic equipment	QUANTRON S-2 on TF 1500						
KLS 128 seed flow monitoring device	♦						
Necessary tractor hydraulic equipment	2 x DA + 2 x SA	1 x DA	2>	( DA			
Weight approx. (kg)	485 - 545 - 580	750 - 800 - 850	750 - 970	1,040 - 1,070 - 1,300			

### TF 1500

# A GREAT MANY COMBINATIONS

COMPATIBILITY	Front Hopper
_	
BTF / BTFR 302 to 502 (Suffolk coulters)	X
BTF / BTFR 3000 TO 5000 (SEEDFLEX)	X
COMBLINER VENTA CSC 6000	X
OPTIMER+	X
STRIGER	X
MAXIMA 2	X
PLANTER 3	X

### Check out the most complete range of seed drills on the market



1. mounted mechanical - 2. integrated mechanical - 3. with front hopper - 4. integrated pneumatic - 5. mounted seeding combination 6. mounted min-till - 7. trailed min-till - 8. precision seed drills

#### For more information about your nearest KUHN dealer, visit our website www.kuhn.com



www.kuhn.com

Visit us on our YouTube channels.

Your KUHN dealer

KUHN S.A.

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

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 assembly manuals. Respect the tractor gross vehicle weight rating, its lift capacity and maximum load per vale and tyres. The tractor front axel 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.

