

# Stubble Tined Cultivators



Delta Flex, Vibro Flex  
and Vibro Till



# Vibro Flex



Kongskilde Vibro Flex 2000/4200/4300/4000 are heavy-duty stubble cultivators to be used in different applications from primary to secondary tillage. The Vibro Flex stubble cultivators are available in working widths from 1,9-5,65 m.

## Stubble cultivation

Using Vibro Flex for stubble cultivation the following benefits are achieved:

- Incorporation of field residues into the soil for quick decomposition
- By a shallow cultivation weed seeds and lost seeds will start to germinate quickly
- Preparation of a seedbed for a following mulch-seeding operation
- Keeping the soil black will reduce slug problems as they have no feed
- Levelling out tracks from sprayers and slurry tankers
- Loosening of compact soil layers allows the crops to have better access to water and nutrients
- Prepare seedbed for intermediate crops

## VF 2000

The VF 2000 models consist of a heavy duty box section with 2 rows of tines suitable for the smaller tractor.

The range consists of 3 models. The VF 2007, 2009 and 2011 with respective working widths of 1.90, 2.45, and 3.00 metres.

Utilising the Kongskilde tine, a symmetric tine pattern and a high underneath beam clearance ensure excellent stubble cultivation.

All models are fitted with rubber wheel as standard.

## Front mounted

The Vibro Flex is also available as front mounted - thus allowing more than one operation to be carried out in a single pass.

The single framed VFF 2011 has a working and transport width of 3 m and is equipped with 11 VF tines.

Standard features on front mounted version include large castor-type wheels to ease steering of the tractor, and a special bracket incorporated in the top link to protect both tractor front lift and cultivator against overloading.



VF 2000 / 4200 / 4300 / 4000 Quick release drawbar.



VF 2000 Bolted on side extensions.



VF 4200 / 4300 / 4000 Rubber wheel 6.00 x 12" with spindle adjustment.



VF 2011 Front mounting enables implements to be used in combination.





### VF Tine

The VF tine with the 6.5 cm heavy duty reversible share is a multipurpose tine. It is used for stubble treatment, seedbed preparation and the mixing of soil and straw.

The top spring is constructed from 10 mm thick steel, which ensures maximum vibration.

The 6.5 cm heavy duty reversible share is suitable for most soil conditions.

The smooth bend in the tine stem ensures that the soil and the residue are correctly mixed.

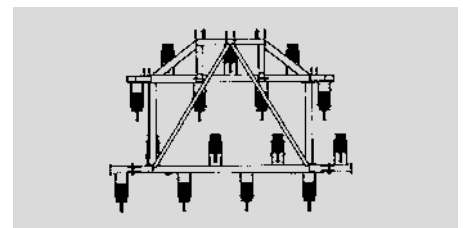
### VF 4200/4300 Series

The VF 4200 and the VF 4300 series stubble cultivators consist of a heavy duty box section and have 4 rows of tines. The tine spacing is 22.5 cm. The VF 4200 serie has a transport width of 2.15 metres and the VF 4300 serie has a transport width of 3.00 metres. The widest working width is 4.30 metres. Hydraulic cylinders are fitted to the larger models for folding the side extensions.

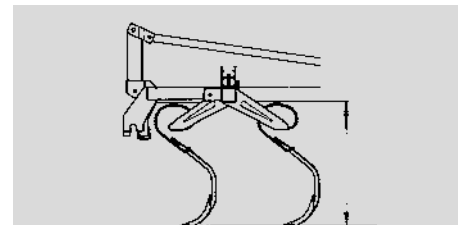
The side extensions, when folded, lie flat on the main frame. This ensures that no tines are protruding during transport. A quick release drawbar is fitted for convenience.

Depth control is achieved by the two rubber wheels fitted to the main frame. Due to their location within the front row of tines, blocking does not occur even with large quantities of straw. Adjustment for depth is by way of a spindle.

With four rows of the Kongskilde vibrating tines and the high underbeam clearance a very intensive mixing of soil with straw or plant residue is ensured.



VF 4200 / 4300 / 4000 Symmetric tine pattern with 22.5 cm between each tine.



VF 2000 / 4200 / 4300 / 4000 Frame clearance VF tine: 76 cm. Frame clearance VFM tine: 86 cm.



VF 2000 / 4200 / 4300 / 4000 Heavy duty box section frame.

VF 2000 / 4200 / 4300 / 4000  
VF tine with 6.5 cm heavy  
duty reversible share.







### VFM Tine

The Kongskilde VFM tine combined with the 11 cm heavy duty reversible share is a tine especially designed for handling and incorporating large amounts of straw and plant residue.

The tine consists of a top spring (made of 12 mm thick metal), a unique tine stem and a 11 cm heavy duty reversible share.

The unique stem has two bends. Due to this design soil is raised and plant residue is lowered. A mixing zone is established between them which results in both products being mixed together for a longer period of time.

### VF 4000 Series

This model range consists of two models. The VF 4021 and the VF 4025 with respective working widths of 4.75 metres and 5.65 metres.

The two models have as standard two hydraulic cylinders which ensure the side extensions to fold flat on the centre section. The largest machine still only has a 3.0 m transport width. Depth control is attained by the use of 4 wheels but can also be adjusted by means of a spindle.

## Options

### Rotaflex

The fine marks made by the powerful Vibro Flex tines are very effective against soil erosion but very uncomfortable for the tractor driver when working in the opposite direction. The rotaflex which can be fitted behind every Vibro Flex is specially designed to remove these fine marks thus leaving a level surface. In addition to this the rotaflex mixes soil, straw and stubble.

To enable the machine to accommodate with different soil contours, the wings can move independently to the centre frame.

The quick release drawbar ensures convenience in attaching the machine to a tractor.

With the large wheels positioned at the front of the machine in connection with 4 rows of tines, the possibility of blocking is removed and the flow of material through the machine is improved.

### Pulled type

Both models are available as a pull type. The drawbar is fitted in the place of the standard 3-point hitch. However, a special wheel arrangement is fitted for road transport and depth control.



VF 4200 / 4300 / 4000 Folding with double acting cylinders.





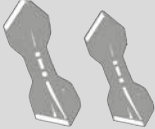




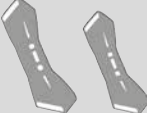
VF 4200 / 4300 / 4000  
Flat folding side extensions.



VF 4200 / 4300 / 4000 Rubber wheel 24 x 8.00 - 14.5 with spindle adjustment.

The rotaflex is built from individual spring loaded elements. Pressure adjustment is done by individual spindles. Every element is self cleaning. All the elements are bolted on a frame which, in turn, is mounted on the Vibro Flex main frame and side wings. When the Vibro Flex is folded, the rotaflex is automatically folded as well.



			VF 2000	VF 4200	VF 4300	VF 4000
FUVF Furrow Leveller		For levelling tine marks. The individual spring loaded elements can handle large amounts of residue and are self cleaning.	●	●	●	●
Grass Share		1 cm standard share. For cutting through grass land and for breaking up hard soil.	●	●	●	●
Multi Purpose Share		6.5 cm standard reversible share or 6.5 cm heavy duty reversible share. For breaking up soil and mixing soil with stubble.	●	●	●	●
Goosefoot Share		26 cm standard share or 26 cm heavy duty share. For a complete undercutting of weed roots.	●	●	●	●
Trailed Equipment		Conversion kit from a three point hitch machine to a trailed machine.			●	●
Mixing Share		Combination of heavy duty goosefoot and mulching share. For complete undercutting and mixing of soil with stubble.	●	●	●	●
Goosefoot Share		14 cm standard share. For undercutting of weed roots.	●	●	●	●
Mulching Share		Black 11 cm standard reversible share or 11 cm heavy duty reversible share. For cultivating in large quantities of straw on stubble.	●	●	●	●
Quick release drawbar. Cat. III			●	●	●	●
Front mounting kit.			●			
Steel wheel 450 x 100.			●			

## Technical Data

Model	Tine	Working width cm	Transport width cm	Number of tines	Tine spacing cm	Number of wheels	Type of wheels	Type of folding	Weight kg	Power demand (HP)	
										Light soil	Heavy soil
VF 4313	VF	300	300	13	22.5	2	6,00x12	-	670	65	95
VF 4315	VF	340	345	15	22.5	2	6,00x12	-	735	75	110
VF 4315	VF	340	300	15	22.5	2	6,00x12	Manuel	750	75	110
VF 4319	VF	430	300	19	22.5	2	6,00x12	Hydrau.	940	95	140
VF 4313	VFM	300	300	13	22.5	2	24x8.00 - 14.5	-	710	65	100
VF 4315	VFM	340	345	15	22.5	2	24x8.00 - 14.5	-	775	75	115
VF 4315	VFM	340	300	15	22.5	2	24x8.00 - 14.5	Manuel	790	75	115
VF 4319	VFM	430	300	19	22.5	2	24x8.00 - 14.5	Hydrau.	990	95	145



# Stubble cultivation



## What is obtained by correct stubble cultivation?

### **Incorporation of straw and field residues**

- Quick decomposition due to the mixing of both straw and plant residues with the soil
- Utilizing the moisture in the soil just after harvest
- Establish an optimal climate for microbes to work in

### **Establishment of a stale seedbed for germination of weed seeds**

- Shallow cultivation directly after harvest will encourage lost seeds and weed seeds to germinate
- Seedbed preparation for establishing intermediate crops such as mustard, oil radish etc.
- No slug nutrition

### **Preparation of a seedbed in mulch tillage systems**

- Creation of a seedbed before the drilling operation
- Breaking down the soil pan allows moisture and nutrients access to the root zone.
- Cultivation depth in relation to the amount of residues on the field

### **Level out wheel marks**

- Working depth can be adjusted to suit particular depth of wheel tracks
- Improved seed placement and germination is obtained
- Improved boom stability during spraying increases capacity
- Reduced tractor operator fatigue

### **Weed control**

- Dry out weeds by pulling them to the soil surface
- Possible to set the working depth according to which type of weed seeds are to be eliminated



# Common platform



## Common platform offers flexibility

### Main advantages:

- Reliable heavy duty construction
- Blockage-free operation through large frame clearance and tine spacing
- Safe access for wearing part replacement when wings folded to vertical
- Wing pressure system allows machine to follow field contours
- Simple adjustment of the working depth by pin/hole system
- Changing the working depth has no effect on the levelling system settings after basic adjustment
- Transport wheels at the rear for safe road transport
- Reduced soil compaction on headlands through wide profile transport tyres
- Modular frame construction allows later conversion from mounted to trailed version
- The common platform allows working depths up to 25 cm

### Specification (fully mounted)

- Rigid versions in 2,5 – 3,0 - 3,5 - 4,0 m
- Hydraulic folding in 2 sections for 4,0 - 5,0 – 6,0 m versions (Vibro Flex 7400), 4,0 – 5,0 m versions (Delta Flex)

- Under frame clearance of 800 mm
- 100x100 mm box sections
- Symmetrical tine pattern
- 2,5 m transport width for hydraulic folding versions
- Automatic hydraulic wing lock system
- Hydraulic pressure on the wings in work
- Category 3 attachment

### Specification (trailed)

- Foldable versions in 4,0 – 5,0 – 6,0 – 7,0 m
- Hydraulic folding in 2 sections
- Under frame clearance of 800 mm
- 100x100 mm box sections
- Symmetrical tine patterns
- 3,0 m transport width
- Automatic hydraulic wing lock system
- Hydraulic pressure on the wings during work
- Swivel hitch attachment Cat. 3 with telescopic drawbar
- Wide flotation tyres (15.0/55-17)
- Front wheels
- Category 2 / 3 attachment
- Wide low flotation tires (15.0/55-17)
- Front wheels



Safe road transport. VF 7440 H.



Automatic hydraulic wing lock system.



DF 4000 H



# Delta Flex



## Rigid tine stubble cultivator

### Main advantages:

- Rigid tines ensure an even working depth
- Working depths from 6 - 25 cm in one pass
- Fitted with wing shares a full cut across the entire working width is achieved
- Without wing shares fitted, deeper loosening down to 25 cm is possible in one pass
- Optimal mixing of straw and residues is the result of the special curved stems, which encourage a rolling soil action
- Release force of 400 kg on the tip of the point
- High release clearance of 25 cm
- Easy conversion from shearbolt to non-stop version

### Benefit for the user:

- Delta Flex is a heavy duty cultivator for conventional stubble cultivation and mulch tillage
- Possibility of shallow cultivation with a full width cut or deeper tillage up to 25 cm

- The special design of the Delta Flex tine ensures optimal cutting and mixing of soil and residues for a quick decomposition process

### Specification

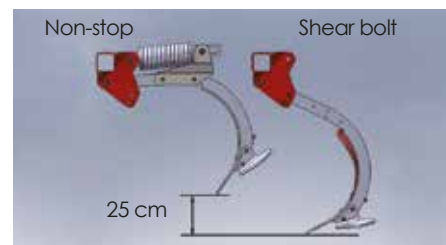
- 3 rows of rigid C-shaped tines
- Non-Stop or shearbolt tine overload system
- 310 mm tine spacing
- 80 mm point and 350mm wing shares
- Working depths from 6 – 25 cm in one pass
- High quality shares made from hardened boron steel
- Fully mounted version in 2,5 – 3,0 – 3,5 - 4,0 - 5,0 m working widths
- Trailed version in 4,0 – 5,0 – 6,0 - 7,0 m working widths
- Front wheels standard on widths from 4,0 – 7,0 m



C-shaped Delta Flex tine.



Optimal mixing of soil and residues.



High ground clearance during release of the stem.





# Vibro Flex 7400



## Vibrating tine stubble cultivator

### Main advantages:

- The constantly-vibrating Vibro Flex tines leave an open soil structure
- An extra crumbling effect is obtained, as the soil breaks up in the natural fracture lines
- 4 rows of tines for a more intensive mixing of field residues with soil in one pass
- Heavy duty VFM-spring with built-in backwards and sideways overload protection
- Constant working depth as share point always operates directly under the tine flex point
- Working depths from 6 – 15 cm in one pass and up to 25 cm in the following pass
- Wide range of heavy duty high quality shares

### Benefit for the user:

- All-round cultivator for both conventional stubble and mulch tillage operations
- Optimal cultivation and mixing in working depths up to 15 cm.
- Low horsepower requirements combined with fuel savings through use of vibrating tines
- Improved water passages both up and downwards
- Low maintenance requirements

### Specification

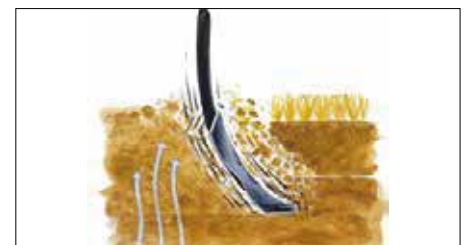
- 4 rows of genuine Kongskilde Vibro Flex Mixing tines
- 11 cm reversible ultra mulching shares or 26 cm wide mixing shares
- 230 mm tine spacing
- 800 mm frame clearance
- Symmetrical tine pattern
- Fully mounted version in 2,5 – 3,0 – 3,5 – 4,0 – 5,0 – 5,8 m working widths
- Trailed version in 4,0 – 5,0 – 5,8 – 7,0 m working widths
- Front wheels standard on widths from 5,0 – 7,0 m



Vibro Flex Mixing tine (VFM).



4 rows of tines for a more intensive mixing of soil and field residues.



Constantly-vibrating tines.



# Equipment for Delta Flex and Vibro Flex 7400



## Levellers

Intensive levelling of the soil after the cultivator tine section is the premium criterion for quality reconsolidation. For the Delta Flex and Vibro Flex 7400 ranges Kongskilde offers 2 options for levelling.

### Disc leveller

- Constant and blockage-free rotation.
- One-step depth adjustment together with the cultivation depth
- Frame connection via Kongskilde VTH spring, acting as suspension
- Further mixing of plant residues with soil for quicker decomposition.
- Mounted in sections, with 2 Ø460mm notched discs on each section.
- Spindle depth adjustment

### Hockey stick leveller

- Cheaper alternative to disc leveller.
- 2 hockey stick tines connected to VTH spring
- Levelling the soil after the cultivator tines enabling rear roller to leave a level surface.

## Rear rollers

For Delta Flex and Vibro Flex 7400 Kongskilde offers 3 types of rear roller. Consistent soil compaction after cultivation ensures a fast germination of weed seeds and lost grains. Good contact between soil and plant residues provides optimum conditions for quick decomposition.

## Max Pack

- Steel ring roller for firm reconsolidation.
- Perfect choice of roller for heavy soil conditions, where crushing of clods is also requested.
- Ø550 mm notched steel rings at 12,5 cm spacing.
- Compaction achieved not only on the top of the soil, but the angled shoulders of the rings also create some side-packing inside the soil.
- Load is distributed between the top and the lower soil layers.
- Recommended for trailed models.

## Vibro Pack

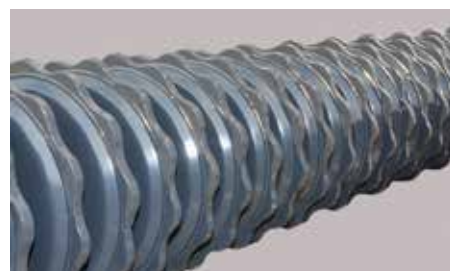
- Newly-developed Vibro Pack spring roller with unique function
- Utilizes the special technique and advantages of the vibrating Kongskilde cultivator springs.
- Versatile roller for use in medium to heavy soil types
- Besides packing, the Vibro Pack also creates a crumbling effect in the soil
- Special vibrating springs, offset to offer optimal compaction across working width and low rolling resistance.
- Flexibility in the springs ensures an even compaction across the full working width
- Packing in stripes at 12,5 cm Spacing, leaving the soil open for moisture absorption.



Disc leveller.



Hockey stick leveller.



Max Pack.



Vibro Pack.





DF 4000 H

#### Crumble roller

- Well-known Ø550 mm diameter crumble roller
- Good choice in most soil types, with special advantage of constant rotation.
- Cost-effective alternative to Max Pack and Vibro Pack rollers; in many cases a substantial packing and crumbling effect is achieved.

#### Shares

- Wide range of genuine high quality shares for Delta Flex and Vibro Flex 7400 to suit different applications.
- Made in hardened boron steel for a long lifetime.

#### Front wheels

- Heavy duty front wheels are standard on all trailed cultivators (except VF 4,0 m).
- Spindle adjustment.
- Provide support and prevent nose-diving

#### Front disc section (Vibro Flex 7400)

To cut and separate plant residues (maize, oil seed rape etc) an independent disc section can be used in front of the cultivator section.

- Notched discs chop residues, thereby improving the passage of material through the cultivator, as well as adding to mixing effect.
- Ø460 mm discs attached to the front frame by Kongskilde VFM springs, acting as suspension.
- Depth control independent from cultivator tines



Crumble roller.



Front wheel.

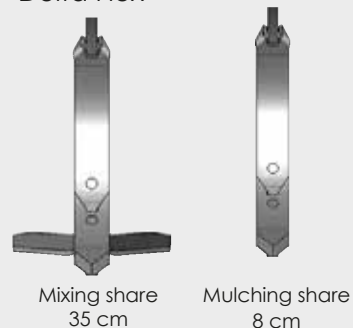


Front disc section - Vibro Flex 7400.

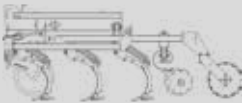




#### Vibro Flex 7400



#### Delta Flex



# Technical Data

Delta Flex	Model	Work Width	No. of tines	Tine spacing	Transport width	Cat.	Weight incl. crumble roller	Front wheels	Power requirements hp
	<b>Rigid</b>								
	DF 2500	2.5 m	7	33 cm	2.5 m	2	1450 kg	-	90 - 125
	DF 3000	3.0 m	9	33 cm	3.0 m	2	1650 kg	-	120 - 175
	DF 3500	3.5 m	11	31 cm	3.5 m	2	1875 kg	-	140 - 190
	DF 4000	4.0 m	13	31 cm	4.0 m	2	2100 kg	-	160 - 225
	<b>Hydr. folding</b>								
	DF 4000 H	4.0 m	13	31 cm	2.5 m	3	2300 kg	10.0/80-12	160- 225
	DF 5000 H	5.0 m	15	33 cm	2.5 m	3	2800 kg	10.0/80-12	200 - 275
	<b>Hydr. Folding trailed</b>								
	DF 4000 HT	4.0 m	13	31 cm	3.0 m	3	3200 kg	10.0/80-12	160 - 225
	DF 5000 HT	5.0 m	15	33 cm	3.0 m	3	3700 kg	10.0/80-12	200 - 275
	DF 6000 HT	6.0 m	19	31 cm	3.0 m	3	4100 kg	10.0/80-12	240 - 325
	DF 7000 HT	7.0 m	21	33 cm	3.0 m	3	4500 kg	10.0/80-12	280 - 375
Vibro Flex 7400	Model	Work Width	No. of tines	Tine spacing	Transport width	Cat.	Weight incl. crumble roller	Front wheels	Power requirements hp
	<b>Rigid</b>								
	VF 7425	2.5 m	11	23.5 cm	2.5 m	2	1300 kg	-	75 - 90
	VF 7430	3.0 m	13	23.5 cm	3.0 m	2	1500 kg	-	100 - 130
	VF 7435	3.5 m	15	23.5 cm	3.5 m	2	1650 kg	-	115 - 150
	VF 7440	4.0 m	17	23.5 cm	4.0 m	2	1850 kg	-	130 - 170
	<b>Hydr. folding</b>								
	VF 7440 H	4.0 m	17	23.5 cm	2.5 m	3	2050 kg	Optional	130 - 170
	VF 7450 H	5.0 m	21	23.5 cm	2.5 m	3	2500 kg	24x8.00-14.5 or 10.0/80-12	160 - 210
	VF 7460 H	5.8 m	25	23.5 cm	2.5 m	3	2800 kg	24x8.00-14.5 or 10.0/80-12	200 - 250
	<b>Hydr. Folding trailed</b>								
	VF 7440 HT	4.0 m	17	23.5 cm	3.0 m	3	3000 kg	Optional	130 - 170
	VF 7450 HT	5.0 m	21	23.5 cm	3.0 m	3	3.000 kg	10.0/80-12	160 - 210
	VF 7460 HT	5.8 m	25	23.5 cm	3.0 m	3	3700 kg	10.0/80-12	200 - 250
	VF 7470 HT	7.0 m	29	23.5 cm	3.0 m	3	4100 kg	10.0/80-12	240 - 290
	<b>Hydr. folding trailed with front discs</b>								
	VF 7440 HT FD	4.0 m	17	23.5 cm	3.0 m	3	3380 kg	-	140-180
	VF 7450 HT FD	5.0 m	21	23.5 cm	3.0 m	3	3890 kg	Optional in size 24x8.00-14.5	170-220
	VF 7460 HT FD	5.8 m	25	23.5 cm	3.0 m	3	4240 kg	Optional in size 24x8.00-14.5	210-260
	VF 7470 HT FD	7.0 m	29	23.5 cm	3.0 m	3	4750 kg	Optional in size 24x8.00-14.5	250-300



# Vibro Till



The Kongskilde Vibro Till is a mounted cultivator that can perform both stubble cultivation and seedbed preparation.

## A cultivator chassis

With a chassis common to the mounted Vibro Seeder and tube sections identical to the trailed Vibro Till, the Vibro Till

- A central frame supports two folding parts and the entire machine.
- Folds into 2 parts for a transport width of 3 m.
- 4 rows of teeth with a spacing between rows of 630mm
- Large clearance for work in the presence of large quantities of residue.
- 630 mm of undercarriage clearance.
- The hydraulic system of the extensions allows it to follow the terrain.
- Plant residues are incorporated by the teeth without blocking or clumping effect.
- Better penetration into the ground, due to the design of the KONGSKILDE VTH vibrating tine.



### KONGSKILDE VTH Teeth

- 150mm between teeth.
- As standard with an 11 cm ploughshare for deeper work.
- An 18cm ploughshare allows for optimal re-growing for a total re-cut of the worked width.
- In difficult conditions, the robustness of the VTH tooth secures mixing and penetration of the share.
- A narrow carbide share is available for the KONGSKILDE VTH tine.
- 3D safety in stony conditions.
- Other optional plowshares for even greater versatility.



4 rows of teeth facilitate the passage of plant residues.

### Precision and quality of work

- Optimization of the symmetrical positioning of the teeth thanks to the fact that there are no wheels inside the chassis.
- Can be equipped with 6 or more wheels for better precision of working depth.
- The wheel arrangement on the outside of the machine provides a smooth flow of soil.
- The roller controls the working depth, optionally wheels can be added for greater working precision.
- In wet conditions, the Vibro Till can have wheel scrapers as accessories (option).
- In stony conditions, it is possible (optional) to fit polyurethane wheels.

### Folds into two parts

- Transport width of 3.00m for easy movement.
- Good visibility to the rear of the folded machine.
- Compact size for a small footprint.



Low pressure wheels ensure precise working depth.



Folding the chassis into two parts allows a transport width of 3 m.



# Technical Data

	VT 500	VT 600
Working width (m)	5	6
Transport width (m)	3	3
Transport height (m) *50 cm ground-tool raised	3*	3,5*
Number of teeth: Spacing 15 cm	32	40
Wheels	0 or 6 wheels 18x950-8	0 or 6 wheels 18x950-8
Machine weight alone (kg)	2000	2300
Power required (ch)	130-150	150-170

## Wide choice of rear equipment

- Herse 3 rangées Dia. 10 mm ou 14mm
- T niveleur en combinaison avec rouleau cage ou Vibro Pack.
- Combinaison herse dents FL avec rouleau semi-pneumatique.

## Wide choice of rear equipment

- 3-row harrow Dia. 10 mm or 14 mm.
- T leveler in combination with cage roller or Vibro Pack.
- FL tooth harrow combination with semi-pneumatic roller.



3-row harrow Dia. 10 mm or 14 mm.



Cage roller with leveler T.



Vibro Pack with T leveler.



Single FL harrow with semi-pneumatic roller.



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