# Swift Cultus Opus TopDown

Excellent results at depth



**VÄDERSTAD** 



# Where farming starts

Together with farmers all over the world, we have spent the last three generations creating machines that make any farmland find its full potential. The high quality Väderstad planters, seed drills and tillage equipment give farmers a head start by covering more ground in shorter time without losing perfection.

Together we make you an even more successful farmer.





Väderstad offer four cultivator families for deeper cultivation - Swift, Cultus, Opus and TopDown.

Depending on the model, the maximum working depth is from 20 to 40cm. The cultivators share the same key cultivating principles, but provide different solutions to suit the requirements on each farm.







#### Complete range for deep cultivation

#### Tine according to depth

Swift has a vibrating tine working down to 20cm, reducing draught requirement and wear part costs. Cultus has a tine with spring suspension and 450kg release force, keeping depth down to 25cm. Opus and TopDown has hydraulically suspended tines with 700kg release force, maintaining working depth down to 30cm in all conditions. Equipped with DeepLoosening points the working depth increases to 40cm.

#### Designed for versatility

To meet differing farming needs, the machines can be fitted with a wide range of points and shins. Each tine is constructed as a modular system, enabling quick change and in turn offering high versatility. With the right choice of points and shins you are able to optimise the working result on your fields, providing the best start possible for the next crop.







#### The unique MixIn shin

All Väderstad tine cultivators are equipped with the unique MixIn shin. The MixIn shin, which is seamlessly mounted towards the top of the point, drastically extends the mixing action of the machine.

#### Doubles the mixing effect

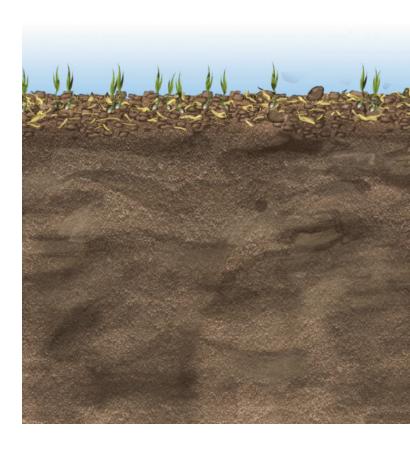
The MixIn shin throws the material forwards instead of upwards, which otherwise is the usual direction. This forces the material to pass the tine twice, doubling the mixing intensity both in depth and lengthwise.

#### Lengthwise distribution

The forward movement provides an intense lengthwise distribution of the crop residues. The mixing effect compensates for a limited straw distribution after a combine. This provides same conditions over the entire field, increasing the yield potential for the coming crop.

#### Depthwise mixing

By doubling the mixing effect, the MixIn shin provides superior mixing throughout the working depth of the machine. This means that the cultivator takes full advantage of each centimetre of its working depth. Compared to a traditional cultivator, this in many cases means that the working depth can be reduced without compromising the results. The MixIn shin saves diesel, while improving the mixing results on the field.



#### Great levelling effect

The intensive forward movement of soil levels uneven parts of the field, such as wheel tracks. By levelling in the same pass as the culitivating operation, the need for additional levelling passes on field is reduced.



#### Minimises clods

In heavy soil the throwing angle effectively breaks the soil flow and leaves it nicely crumbled. This improves the results, saving additional seedbed preparation.

#### Increased mixing with the same fuel cost

The MixIn shin is available in several widths. By equipping the machine with a wider shin than the selected point, the mixing effect is increased without altering the fuel cost.

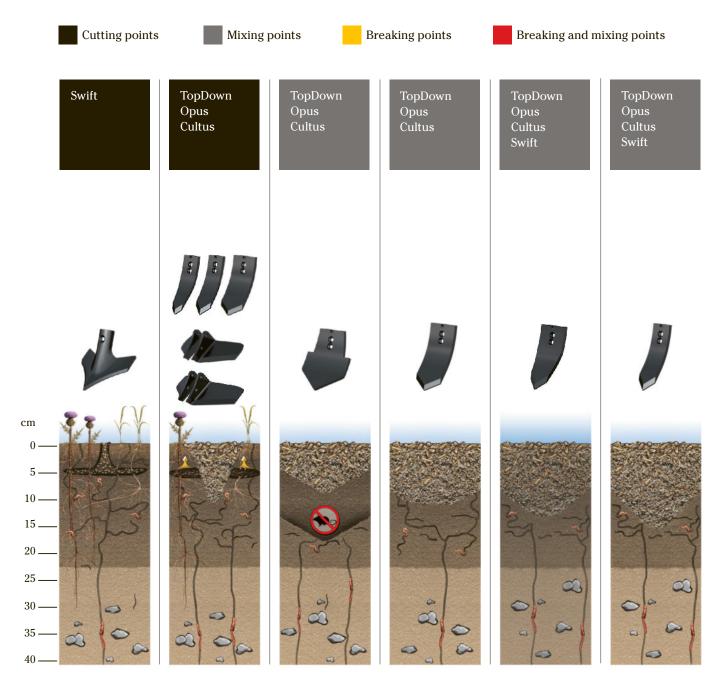
# Excellence in versatility

Each unique year in the field, poses different challenges. To adapt to varying conditions the cultivator needs to offer versatility. Equipped with the optimal points for the task, the machine produces excellent work results, while minimising fuel consumption.



#### Points according to requirement

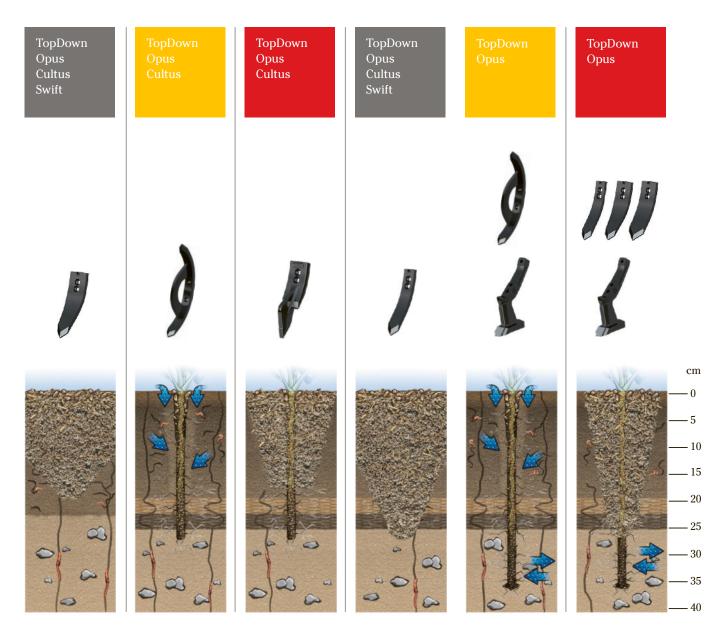
Väderstad offers a wide selection of points with different characteristics, from 50 to 340mm working width. This enables the machine to be tailored according to the task for various field conditions.



#### Väderstad parts manufacturing

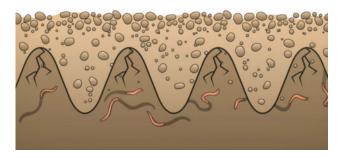
To leave nothing to chance, Väderstad manufactures points, shins, discs and packers in our own state-of-the-art production facility in Sweden. This means we are able to guarantee that each key component of the machine is constructed with the same top-of-the-line product philosophy. This is unique in the farm machinery industry.





#### Let your soil determine your point

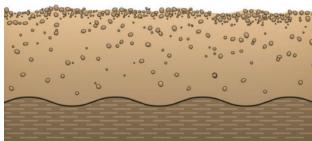
To maximise the root available space, great care should be taken to soil type when selecting points for the cultivator. While the heavy soil can rely on its structure, a lighter self-compacting soil needs a complete loosening to create optimal conditions for the next crop.



#### Heavy soils with structure

Compaction layers needs to be broken and focus should be set on creating a fine crumbled surface. If the structure and amount of residues allows for it, a thinner point works fine in the heavy soil.

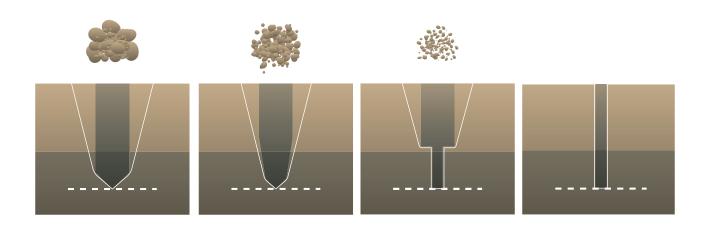
In wet years always choose a thinner point to minimise negative impacts on soil structure.



#### Self-compacting soils

During the vegetation period the self-compacting soil collapses, thereby decreasing the space available for root nutrient and moisture uptake.

The wider points delivers a complete loosening, full mixing and aeration of the soil profile.



#### The point tip impacts clod creation

Deeper layers in heavy soils tend to be more compact. If brought to the surface, this results in a high amount of clods. By selecting a point with a narrow tip, a finer tilth is created, thus saving additional soil preparation.

#### Complete range for all needs

#### Mixing points

To match the needs of all soil types, the Väderstad mixing points are available in working widths from 50 to 210mm. The working width of the point effects the clod creation, amount of soil mixed and fuel consumption.



#### LowDisturbance

The LowDisturbance point brings no soil to the surface, instead its focus is set on water management in wet years.

On the multipurpose cultivator TopDown, the discs works the topsoil while the LowDisturbance points breaks the soil to create drainage slots.



#### **BreakMix**

The BreakMix point combines the advantages of breaking compactions with a very intensive mixing. BreakMix adds versatility, lowers input cost and produces fine tilth.

The BreakMix point is intended for primary or secondary tillage, on farms with heavier soils with risks of compaction.



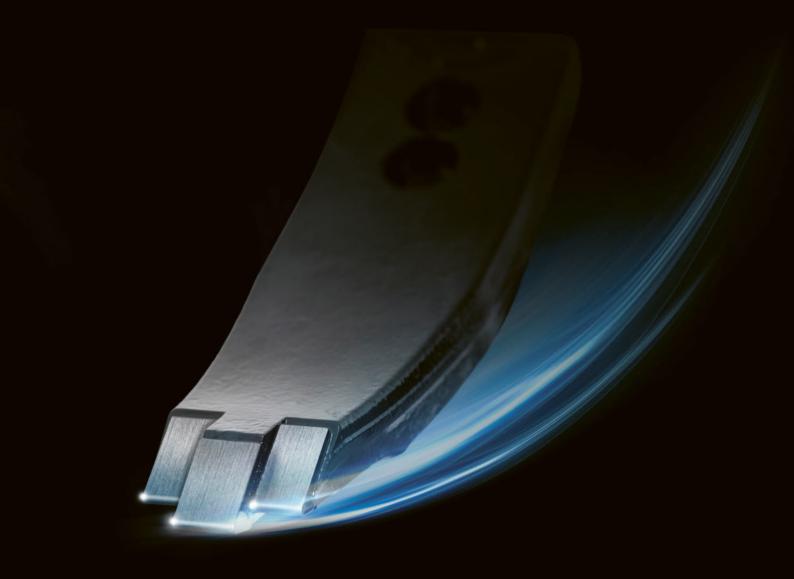
#### DeepLoosening

The DeepLoosening points breaks compactions in depth. By working as a compliment to the other points on the cultivator, the draught requirement is reduced while an additional pass with a separate machine is saved.

The DeepLoosening point is mounted to work down to 40cm on the rear tine row of the Opus or TopDown cultivator - either full coverage or in the wheel tracks.



## Marathon



#### The economic and agronomic choice

Marathon is the family name for hard metal points at Väderstad. A hard metal point increases the working life up to 10 times, compared to a standard point. Most importantly, it offers several agronomical benefits.

#### The time aspect

Marathon makes sure that you are working in the field longer allowing you to take advantage of the optimal weather for productive work. No points need to be changed during the season which can be crucial in some years.

#### Maintained depth and mixing

Since the hard metal points are placed at the tip of the point, they maintain a perfect working depth throughout the full working life of the point. An additional benefit is that the amount of material mixed also remains the same.



#### Angled hard metal increases stone resistance

The Marathon hard metal is folded around the tip of the point. This gives it a very thick base where forces are diverted in two directions, which in turn makes it very stone resistant. An additional benefit is that it also prevents prevents point wear from underneath which would otherwise eventually crack the hard metal.

## Packer according to soil

On reconsolidating cultivators the packer is essential for a perfect working result. To maximise the performance great care should be taken in selecting the packer type according to soil conditions.





#### Full depth reconsolidation

The aim of the cultivator packer is to deliver full depth reconsolidation. This eliminates air pockets and restores the capillarity throughout the working depth of the cultivator. This allows the coming crop great access to soil moisture, improving the crop yield potential.

1

The importance of weight, aggressiveness and coverage

A full depth reconsolidation is achieved through the combination of weight, aggressiveness and coverage of the packer. The packer weight determines the pressure applied. Increasing the aggressiveness of the packer profile focuses the weight on a smaller area, improving its ability to transfer the weight downwards.

The coverage of the packer defines its ability to spread the pressure evenly throughout the full working width of the machine.

2

#### Consider

#### Contact surface important on lighter soil

To prevent bulldozing and insufficient depth keeping, the packer must run on top of the soil. A heavier soil has a higher carrying capacity than a lighter soil. This means that a lighter soil requires a larger contact area between the packer and the soil, while a heavier soil allows for a narrow contact area. When selecting the packer for lighter soil conditions, the packer contact surface needs to be considered.

#### Heavier soil requires aggressiveness

By applying high weight on narrow segments, the highly aggressive packer has greater ability to deliver reconsolidation at depth. This is crucial to reach full depth reconsolidation in heavier soils. An additional benefit comes from the fact that the aggressive packer profile minimises clods, securing a high degree of fine tilth. This means that the aggressiveness of the packer needs to be maximised on heavier soils.



#### Double SteelRunner

- High coverage
- Medium contact area
- High aggressiveness
- High weight

Double steel packer, leaving a weatherproof consolidated surface. Scrapers keep the packer clean.
Packer diameter: 600mm



#### Single SteelRunner

- High coverage
- Narrow contact area
- High aggressiveness
- High weight

Steel packer with an aggressive profile. Scrapers keep the packer clean. Packer diameter: 600mm\*



#### RubberRunner

- High coverage
- Large contact area
- Low aggressiveness
- High weight

Rubber packer with low bulldozing. Enables packer road transport for trailed machines. Pending scrapers keep the packer clean. Packer diameter: 600mm



#### Double SoilRunner

- Medium coverage
- Large contact area
- Low aggressiveness
- Medium weight

Double packer with a U-profile allows soil to work against soil, leaving an open surface.

Packer diameter: 580mm



#### Single SoilRunner

- Low coverage
- Low aggressiveness
- Medium contact area
- Low weight

*U-profile packer allows soil to work against soil, leaving an open surface. Packer diameter: 580mm* 



#### CageRunner

- Low coverage
- Large contact area
- Low aggressiveness
- Low weight

Cage packer with crumbling capabilities. Packer diameter: 600mm

\* Cultus 300-350: 550mm



#### Save passes with BioDrill

With the mountable small seeder BioDrill, a small-seeded crop such as oilseed rape or cover crops can be established in the same pass as the tillage operation. BioDrill provides accurate seeding at the same time saving passes on the field.





#### Precise radar control

BioDrill is equipped with a precise radar controlled metering system, ensuring an even distribution over the entire working width. This accuracy is fully measurable to a full-scale seed drill, important when drilling low seed rates or cover crop mixtures with varying seed sizes.



#### Exact seeding result

The BioDrill 360, fitted on the wider cultivator models, is equipped with a powerful hydraulic fan allowing for large quantities of seed to be uniformly distributed over a wide working width. The powerful fan ensures the seeding result remains constant in all field conditions.





#### Swift 400-870

Swift 400-870 is a trailed tine cultivator, designed to perform at peak level in both wet and dry years. You benefit from a spacious design, which can handle large quantities of crop residues. The narrow tine spacing results in an intensive mixing and even working result.



The models in the product family span from  $4.0\ \mathrm{to}\ 8.7$  metre working width.

#### Vibrating tines

The Swift tines provide effective mixing down to 20cm working depth. Since the tine vibrates with a frequency up to 100 times per second, it produces a very fine soil. An additional benefit comes from the fact that the vibrations result in less wear on points, lowering operating costs and time spent on servicing. The Swift tine is unique in its strength and therefore comes with a three-year warranty.

#### **Unique frame construction**

Each tine axle is equipped with two tines – one in front of the axle and one behind. This construction allows

for a narrow tine spacing of 19.3cm, providing intensive mixing over the entire working width. Swift's unique design offers a low machine weight which results in minimised draught requirement. Floating wings on the larger Swift models maintain a constant depth even in hilly conditions.

#### Depth setting from cab

A large distinct scale clearly displays the working depth, which is set hydraulically from the cab on the move. This allows the driver to adapt the working result to different soil types or varying conditions in the field.









>130hp

hp 19.

### High capacitylow draught requirement





The vibrating Swift tines deliver an intensive mixing down to 20cm working depth.



To be able to adapt to varying soil conditions, the driver is able to adjust the intensity of the hydraulic levellers with millimetre precision on the move.

#### Cultus 300-400

The 3-4m tine cultivator Cultus 300-400 has powerful tines working down to 25cm depth. You benefit from a spacious frame construction offering impressive mixing capabilities. Cultus is the ideal cultivator for those looking for high quality working result, performance and durability.



#### Very effective tines

The Cultus tine is designed for high performance during a long working life. With a very effective stone release at 450kg using horizontally mounted double springs, Cultus is able to keep the same working depth at all times. The massive self-adjusting centrepiece of the spring using conical bushings in the fastening bolts gives the tine outstanding durability. The double spring prevents shock forces from entering the frame, as a result multiplying the working life.

#### Frame designed for high throughflow

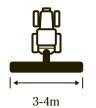
Cultus has three strong axles and 30cm tine spacing. Together with the ground clearance, this gives maximum throughflow and capacity. The tine distribution further provides very good mixing of harvest residues, preventing the creation of straw rows.

#### Full control from cab

Cultus is able to cultivate the soil down to 25cm depth, but the machine also works very well in shallow cultivation. To gain full control, the working depth is controlled hydraulically from the cab on all mounted versions. This makes Cultus a versatile precision cultivator on varying soil types.

#### The highly versatile Cultus

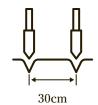
Depending on the need for reconsolidation and weight distribution, Cultus can be delivered as a mounted machine as well as a trailed machine equipped with a rubber packer, the RubberRunner.





Intensive cultivation





**Packers** mounted



Single SteelRunner





Single SoilRunner





CageRunner







RubberRunner





Cultus 300-400 is available either as a trailed or mounted machine.



The Cultus tine is able to work with high performance down to 25cm working depth.

#### Opus 400-700

Opus 400-700 is a powerful and versatile trailed tine cultivator with an impressive capacity. It is able to handle large amounts of crop residues while keeping the draught requirement moderate.



#### **Extremely powerful tines**

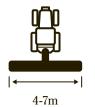
Opus is equipped with robust tines, which mix and loosen the soil down to 30cm working depth. With DeepLoosening points the depth increases to 40cm. The tines have a hydraulic stone release, which can be adjusted variably up to 700kg release force. Thanks to this high release force and its soil-seeking points, Opus is able to maintain a constant working depth in all field conditions.

#### **Heavy-duty frame**

The frame is designed for heavy use in tough conditions. It has three axles and 27cm tine spacing, which ensure an intense cultivation and good throughflow. The heavy tine cultivator Opus is built around a strong frame which can withstand high stresses extending the working life.

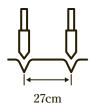
#### Always a level field

The levellers are fitted on a parallelogram, ensuring that the correct working angle is maintained at any depth. To be able to adapt to varying soil conditions, the driver is able to adjust the intensity of the hydraulic levellers with millimetre precision on the move.









**Packers** 



Single SteelRunner



Double SteelRunner



Double SoilRunner

#### Power and versatility





The carrying wheels positioned in the middle of the machine, makes Opus both easy to transport and gives it a small turning radius on headlands.



The powerful Opus tines are equipped with a stone release with up to 700kg release force. This ensures depth is maintained down to 40cm working depth.

#### TopDown 300-900

TopDown 300-900 is a high intensity multipurpose cultivator, performing both a full-scale shallow cultivation and a deep cultivation in one single pass. By adapting the working result to different conditions in the field, TopDown delivers an unmatched performance.



TopDown reduce passes, preserves ground moisture, increases capacity and lowers the establishment costs.

#### Multiple operations in one pass

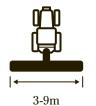
TopDown is a multipurpose cultivator, combining an intensive disc cultivator along with a robust three axle tine cultivator in the same machine. The 12.5cm spaced discs on individually suspended disc arms, creates fine tilth by cutting and mixing the top soil. The 27cm spaced tines then loosen and mix the soil and crop residues down to 30cm working depth. With DeepLoosening points the depth increases to 40cm. In the final two working zones, the leveller and packer then concludes by ensuring an even and fully reconsolidated surface.

#### High quality discs

The high quality discs are produced using specialist hardened Swedish V-55 steel. The discs provide intensive cutting and mixing of soil and crop residue. To adapt to varying soil conditions, the working intensity of the discs can be adjusted from the cab on the move. Thanks to the discs conical shape, they maintain the same working angle relative to the soil, irrespective of wear or working depth.

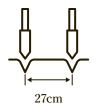
#### Effective mixing and loosening

With 27cm tine spacing, TopDown intensively mixes and loosens the soil down to 30cm depth. With DeepLoosening points the depth increases to 40cm. The 700kg stone release system maintains the correct working depth in all conditions, contributing to an even crop growth.









Discs



450mm Disc



470mm TrueCut

#### Unmatched perfomance



#### **Packers**



Single SteelRunner



Double SteelRunner



Double SoilRunner



By performing multiple operations, TopDown is able to create a good seedbed in one pass.



TopDown 300-700 folds to 3 metre transport width, while the wider TopDown 900 folds to 5 metre.

#### Accessories





#### Drawbar and towing eye

The following options are available: towing eye 40/50mm, Ball coupling 80mm, Ball towing eye 42/51/71mm.

#### Linkage drawbar

Linkage drawbar Cat 2 or 3 with rigid or hydraulic push rod. For Swift 400-440.





#### Linkage drawbar

Linkage drawbar with towing eye and hydraulic push rod. For Swift 560-870.

#### Rear drawbar for attachments

Rear drawbar allowing attachment of a roller behind the cultivator. For Swift 400-870.





#### Following harrow

Following harrow sorting larger aggregates to the surface. For Swift 400-870.

#### Tiller with great leveling result

Tiller times level the field and give a slight consolidation. For Swift 400-870.



**BioDrill 180-250** 

BioDrill 180-250 for small seeds and cover crops. For Cultus 300-400 and TopDown 300.



#### BioDrill 360

BioDrill 360 for small seeds and cover crops. For Swift 400-720, Opus 400-700 and TopDown 400-900.



#### Fertiliser kit

Fertiliser kit with adjustable depth placement. For Opus 400-700 and TopDown 300-900.



#### Spreader nozzles

Spreader nozzles for row seeding in line with cultivator. For Opus 400-700 and TopDown 400-700.

	SW 400	SW 440	SW 560	SW 640
Working width (m)	4.05	4.44	5.60	6.36
Transport width (m)	3.0	3.0	3.0	3.0
Transport height (m)	2.8	3.0	3.6	3.4
Basic weight (kg)	2900	3000	3500	4500
Number of tines	21	23	29	33
Tine spacing (cm)	19.3	19.3	19.3	19.3
Wheel dimension	520/50-17	520/50-17	520/50-17	520/50-17
Depth adjustment	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Hydraulic requirements	4 DA	4 DA	4 DA	4 DA
Draught requirements (hp)	130-200	140-220	170-280	190-320

	SW 720	SW 870
Working width (m)	7.14	8.69
Transport width (m)	3.0	3.0
Transport height (m)	3.7	4.0
Basic weight (kg)	4600	5100
Number of tines	37	45
Tine spacing (cm)	19.3	19.3
Wheel dimension	520/50-17	520/50-17
Depth adjustment	Hydraulic	Hydraulic
Hydraulic requirements	4 DA	4 DA
Draught requirements (hp)	220-360	260-440

	CS 300	CS350	CS400
Working width (m)	3.0	3.5	4.0
Transport width (m)	3.0	3.5	4.0
Transport height (m)	1.8	1.8	1.8
*Weight with RubberRunner (kg)	2100/2400	2300/2600	-/2800
*Weight with CageRunner (kg)	1800/-	1900/-	-
*Weight with Single SteelRunner (kg)	2100/-	2300/-	-
*Weight with Single SoilRunner (kg)	1800/-	1900/-	2200/-
Number of tines	10	12	13
Tine spacing (cm)	30	30	30
Wheel dimension	-/7.00-15	-/7.00-15	7.00-15
Hydraulic requirements	1 DA	1 DA	1 DA
Draught requirements (hp)	120-200	140-220	160-240

<sup>\* 3-</sup>point/Trailed DA=Double action

	OS 400	OS 500	OS 600	OS 700
Working width (m)	3.75	4.75	5.75	6.75
Packer width (m)	4.0	5.0	6.0	7.0
Transport width (m)	3.0	3.0	3.0	3.0
Transport height (m)	2.7	3.2	3.6	4.0
Weight with Single SteelRunner (kg)	5600	6200	8400	9000
Weight with Double SoilRunner (kg)	5200	5600	7900	8500
Weight with double SteelRunner (kg)	6000	6300	8600	9200
Number of tines	14	18	22	26
Tine spacing (cm)	27	27	27	27
Wheel dimension	520/50-17	520/50-17	560/45-22.5	560/45-22.5
Hydraulic requirements	3 DA	3 DA	3 DA	3 DA
Draught requirements (hp)	170-220	210-260	270-320	320-370
	TD 300	TD 400	TD 500	TD 600
Working width (m)	2.65	3.75	4.8	5.75
Packer width (m)	3.0	4.0	5.0	6.0
Transport width (m)	3.0	3.0	3.0	3.0
Transport height (m)	1.9	2.7	3.2	3.6
Weight with Single SteelRunner (kg)	4400	6200	7000	9100
Weight with Double SoilRunner (kg)	4000	5800	6500	8100
Weight with Double SteelRunner (kg)	4400	6400	7100	8900
*Number of discs	22	30	38	46
Number of tines	10	14	18	22
Tine spacing (cm)	27	27	27	27
Wheel dimension	520/50-17	520/50-17	520/50-17	560/45-22.5
Hydraulic requirements	4 DA	4 DA	4 DA	4 DA
Draught requirements (hp)	150-200	200-240	250-300	300-360
	TD 700	TD 900		
Working width (m)	6.75	9.10		
Packer width (m)	7.0	9.0		
Transport width (m)	3.0	5.0		
Transport height (m)	4.0	4.0		
Weight with Single SteelRunner (kg)	9900	13200		
Weight with Double SoilRunner (kg)	8700	-		
Weight with Double SteelRunner (kg)	9700	-		
*Number of discs	54	72		
Number of tines	26	35		
Tine spacing (cm)	27	27		
Wheel dimension	560/45-22.5	620/50-22.5		
Hydraulic requirements	4 DA	4 DA		
Draught requirements (hp)	350-420	400-600		

<sup>\*</sup> Number of discs on front tool DA=Double action

### Reliable and durable farm machinery

Year Warranty Lifetime Warranty

2-year warranty on Väderstad seed drills, planters and tillage equipment. Lifetime manufacturing warranty on all genuine Väderstad discs.

