



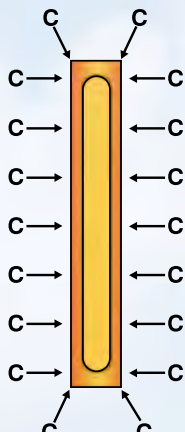
ÖVERUM

XCELSIOR/VARI FLEX
Fully mounted reversible ploughs





Carburizing of mouldboard blanks.



Carbon penetrates into the surface layer of steel.

Hardened steel

Överum **Mucro** is the name of the heat-treated steel used in Överum wearing parts.

The raw material is chosen with great care and heat-treated according to Överums own method.

The correct carbon content in the steel profile determines the properties of the mouldboard. The mould board blanks are processed for 24 hours in an oven with carbon rich environment and high temperature. Carbon then penetrates into the surface layer of the steel. The subsequent heat treatment will give the surface layer both hardness and wearing resistance at the same time as it gives toughness and impact strength in the centre of the mouldboard.

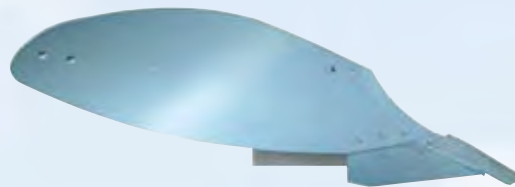
Överum plough bodies a result of new design technique and advanced manufacturing methods.

The XL-body performs excellently in different ploughing conditions. The furrow slice is inverted in an even successive twisting move. The twisting curve has been calculated to give minimal energy consumption. The draft requirement is therefore low despite the fact that the XL-body leaves a wide furrow for today's wide tractor tyres. Simple shapes and clever build up means low prices and limited wear. This results in down to earth economy.

New stone release system

The lifting height of the plough body when releasing over a large stone is very important for the plough life, preventing overloading of material and welding seams. The new Överum ploughs with hydraulic stone release system have got a substantially increased lifting height. The share point can move well over 50 cm vertically from the working position.

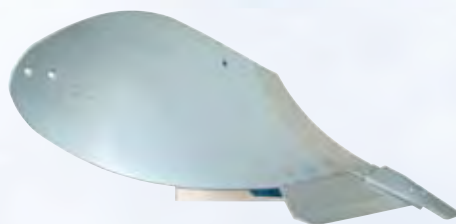
The stone release resistance is easy to adjust with the tractor hydraulic outlet (also on the go with an optional check valve). The maximum start releasing resistance is enhanced for the new hydraulic stone release system. The force is then decreasing as the plough body is releasing. This effectively protects all the details in the system. Lower pressure is used in light soils giving a soft and gentle stone release, and less stones pulled up on the surface. Higher pressure is required in heavy soils to prevent the plough bodies from releasing simply because of soil resistance.



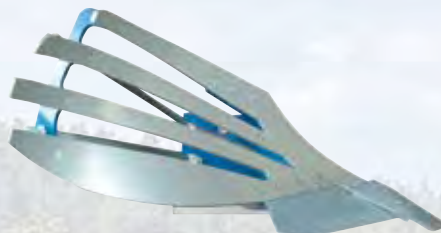
XL -Scandinavian type plough body for wide furrows and varying depth.



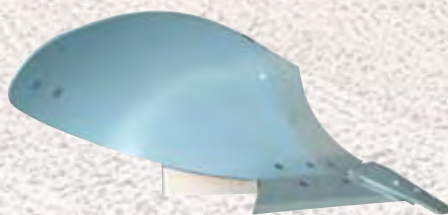
XLP -Scandinavian type plough body with plastic mouldboard for organic sticky soils.



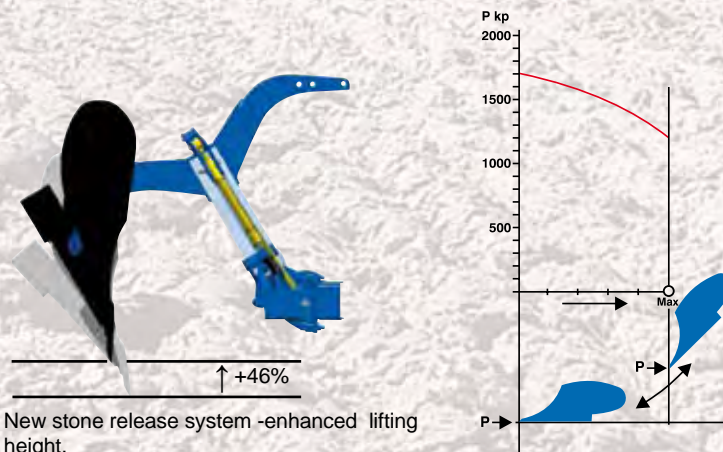
XU -Aggressive plough body for deep and wide furrows.



XS -Slatted plough body for sticky abrasive soil.



UC -Aggressive plough body for 14" furrows.





BX 380 H is easy to lift and smooth to handle, even for tractors with limited lifting capacity.



BX 380 H with XL-bodies, spring loaded disc coulters and EG-skimmers.

Överum BX

The BX range consists of fully mounted reversible ploughs with low lift requirement. Strong design manufactured from high grade heat-treated steel in vital parts means durable strength in comparison to the weight.

- The center of gravity is close to the tractor for minimum lift requirement.
- The BX ploughs “turn under”. The bodies pass under the frame and the depth wheel passes up high when the plough is turned. The top link can be fitted high on the tractor and low on the plough therefore the lift requirement is minimized.
- Disc coulters can be mounted to all plough bodies.
- BX-F has fixed beams with individual shear bolts for each leg.
- BX-H has fully automatic hydraulic stone release system. It can be adjusted to suit different soil conditions with the tractor’s spool valve.
- Överum reversible ploughs have documented low draft requirement according to official tests. This means energy savings, less slippage as well as increased capacity.
- The quick hitch headstock is standard equipment. With the easily detachable cross shaft hitching is a lot easier and safer.
- The furrow width can be adjusted in three steps in order to suit different ploughing conditions.
- Separate adjusting bolts for right and left hand, mean easy vertical setting in the field. When adjusting right hand plough bodies, left hand bodies are not affected and vice versa.



BX 490 F with EM-skimmers. Each leg and body is protected by a shear bolt.



Due to the fact that the bodies are turning under the frame, the centre of gravity comes close to the tractor, and the plough becomes easy to lift.



Quick coupling cross shaft for easy and safe connection.



The furrow width can be adjusted in three steps.

Technical specification								
Model	Number of Furrows	Working width cm	Weight kg with XL-body*	Point to point clearance cm	Underbeam clearance cm	Pairs of disc coulters possible to fit	Recommended tractor power hp	Approx. lift requirement
BX 280 H	2	60-80	760	80	75	2	50-90	1600
BX 380 H	3	90-120	970	80	75	3	70-120	2100
BX 290 F	2	70-90	620	90/100	75	2	50-90	1500
BX 390 F	3	105-135	780	90/100	75	3	70-120	1700
BX 490 F	4	140-180	940	90	75	4	70-120	1900

*Equipped with: depth wheel, one pair of disc coulters, others fin coulters.

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CX 490 H with EM-skimmers. 90 cm point to point clearance makes room for effective skimming equipment.

Överum Xcelsior CX

The Xcelsior CX ploughs feature a modular designed beam support and draw frame allowing all the stress to be evenly distributed over the full length of the plough. The result is a simple strong and clean design with logical and easy adjustment. The Xcelsior range of CX ploughs are manufactured from high quality steel for strength and reliability to work in the toughest conditions.

Large clearance between plough bodies and generous underbeam clearance allow space for effective skimmers to give good weed control and straw incorporation.

- The large diameter pivot shaft spreads the load whilst the plough is turning over.
- The direction of turnover for the Xcelsior CX range can be chosen according to conditions. The bodies turning under the frame result in good clearance to the ground even at low lifting heights. The bodies turning over the frame is recommended when using a furrow press. The lift requirement is then approx. 10% higher.
- The Överum Xcelsior CX quick coupling cross shaft makes connection to the tractor safe and easy.
- The Överum Xcelsior range of ploughs are very easy to adjust. Plough alignment is set with a turnbuckle to make the plough pull in line. Front furrow adjustment can be done either with a spindle or by a hydraulic cylinder.
- The working furrow width of a Xcelsior plough is easily adjustable to three differing widths which enables the plough to operate in most if not all conditions.
- Ploughing depth is easily set without using tools. The large diameter wheel gives good support and low rolling resistance. A shock absorber makes the change of position gentle.
- The Överum Xcelsior plough, fitted with the well proven CAD/CAM designed XL bodies, combines excellent performance with low draft requirement and low cost for wearing parts.



CX 390 H. XL-bodies and EG-skimmers perform a well closed finish.



Bodies turning over the frame require slightly higher lift capacity. When the bodies are turning under the frame (see page 3) a lower lifting height is sufficient.



New heavy duty CX headstock. The cross shaft can be mounted in two heights. Butterfly lock for transport is available as an option.



Quick coupling cross shaft for easy and safe connection.



CX 490 H with Nivell furrow leveller. Ploughing and levelling in the same pass.

Xcelsior CX-F, fixed beam ploughs

Close coupled models, 3-5 furrows

- The centre of gravity is very close to the tractor. This means that the lift requirement is low even with the good point to point clearance of 90 cm.
- Each leg and plough body are protected against overload by an easily replaceable shear bolt.

Long clearance model, 3-4 furrows

- 100 cm point to point and 75 cm underbeam clearance gives a model with extra clearance and enables disc coulters to be fitted to all furrows.
- These disc coulters are individually adjustable and placed forward of the point where the best cutting effect is obtained.

Xcelsior CX-H, non-stop ploughs

- The hydraulic stone release system is easily adjusted to suit different soil conditions. Using the hydraulic spool valve on the tractor the release resistance is adjusted. Lower pressure is used in light soils giving a soft and gentle stone release. Higher pressure is required in heavy soils to prevent the plough bodies from releasing simply because of soil resistance.
- The release resistance is greatest when the point is in working position. Then it decreases gradually when the point is forced out of the ground. This reduces the stress on both the plough and the tractor.
- On the CX range it is possible to fit an optional headstock allowing transportation of the plough in the butterfly position.
- The combi wheel (transport/depth) is then remounted to the side of the plough and the topline is fitted in the slotted hole for safe transport.



CX 590 F with trashboards and Combi wheel in forward position.



The frame profile becomes wider in the front as the forces are accumulated. The furrow width is adjustable in three steps.

Technical specification								
Model	Number of Furrows	Working width cm	Weight kg with XL-body*	Point to point clearance cm	Underbeam clearance cm	Pairs of disc coulters possible to fit	Recommended tractor power hp	Approx. lift requirement
CX 390 H	3	105-135	1060	90	75	3	70-110	2500
CX3100 H	3	120-150	1070	100	75	3	70-110	2900
CX 490 H	4	140-180	1280	90	75	4	90-150	3400
CX 4100 H	4	160-200	1300	100	75	4	90-150	3900
CX 390 F	3	105-135	940	90	75/80	1	60-100	1500
CX 3100 F	3	120-150	950	100	75/80	3	60-110	2200
CX 490 F	4	140-180	1110	90	75/80	1	70-120	2500
CX 4100 F	4	160-200	1120	100	75/80	4	70-120	3000
CX 590 F	5	175-225	1280	90	75/80	1	90-150	3400

*Equipped with: depth wheel, one pair of disc coulters, others fin coulters.

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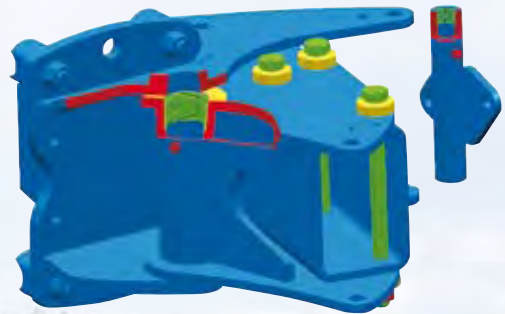


Vari Flex CX 490 H with hydraulic furrow width adjustment from 12 to 20 inches.

Vari Flex CX

Överum Vari Flex CX is a new series of fully mounted reversible ploughs in the medium range, for tractors up to 160 hp. The range consists of three, four or five furrow ploughs with either shear bolt protection, or fully automatic hydraulic stone release system.

- The furrow width is hydraulically controlled from 12 to 20 inches (30 to 50 cm) (Vari Flex CX 580 H from 12 to 18 inches).
The pivot point for the furrow width adjustment is placed in the pulling line of the plough beam. This minimizes the adjustment forces and the wear of the bearings.
- The hydraulic furrow width adjustment can be extended with a hydraulic front furrow width adjustment. These two can also be connected in a master/slave system, resulting in an automatic adaptation of the front furrow width corresponding to the others. By flicking a switch the same spool valve will act on the front furrow only.
- By regulating the furrow width the plough can easily be adapted to different ploughing conditions. Wider furrows result in higher output and lower energy consumption.
The furrow width resulting in the best quality ploughing for each soil type can easily be found.
- All pivot points in the furrow width adjustment are equipped with replaceable bushes with greasing possibility. The greasing reduces the forces required, and prevents dust and water getting in.
- The Vari Flex CX range incorporates a new design of the main frame. Precision drilling for the extensive bolt assembly has made it possible to use a heat treated steel main frame tube with 40% higher strength compared to standard frame tubes. This together with several other heat-treated details in the build give the Vari Flex CX ploughs a high strength to weight ratio.



All pivot points in the furrow width adjustment are equipped with replaceable bushes with greasing facilities.



Precision drilling for the extensive bolt assembly has made it possible to use a heat-treated steel main frame tube.



Vari Flex CX 580 H. Hydraulic furrow width adjustment from 1,5 to 2,25 m.

- The direction of turn over for Vari Flex CX can be chosen according to conditions. Normally 3-and 4-furrow models are mounted with the bodies turning under the frame, resulting in good clearance of the ground even at low lifting height. The bodies turning over the frame is recommended when using a furrow press. In this case the four-furrow model is equipped with an alignment cylinder. When the turn over is activated the furrow width is automatically going down to min. position, the plough reverses, and the furrow width comes back to the preset value again. Five furrow ploughs are always mounted with alignment cylinder and bodies turning over the frame.
- One half of a double cylinder with a common piston rod manages the automatic alignment. The other half of the double cylinder is controlling the furrow width adjustment.
- The line of draft can be fine-tuned in order to balance out all side forces. The top link is then pointing in the direction of travel when the lower links are free to move sideways. The draft requirement is thereby reduced to the minimum.
- The Vari Flex CX is a strong medium range plough with good build qualities ensuring a long life.



Vari Flex CX 490 F with fixed disc coulters and EG skimmers. Bodies as well as skimmers have individual shear bolts.



With the turnbuckle all side forces are balanced out for minimum draft requirement.



The double cylinder memorises the furrow width setting during the alignment and turnover action.

Technical specification								
Model	Number of Furrows	Working width cm	Weight kg with XL-body*	Point to point clearance cm	Underbeam clearance cm	Pairs of disc coulters possible to fit	Recommended tractor power hp	Approx. lift requirement
Vari Flex CX 390 H	3	90-150	1140	90	75	3	70-120	2600
Vari Flex CX 3100 H	3	90-150	1150	100	75	3	70-120	3000
Vari Flex CX 490 H	4	120-200	1370	90	75	4	90-150	3500
Vari Flex CX 4100 H	4	120-200	1380	100	75	4	90-150	4000
Vari Flex CX 580 H	5	150-225	1570	80	75	1	100-160	4500
Vari Flex CX 390 F	3	90-150	990	90	75/80	3	60-100	1600
Vari Flex CX 3100 F	3	90-150	1000	100	75/80	3	60-100	2300
Vari Flex CX 490 F	4	120-200	1190	90	75/80	4	70-120	2600
Vari Flex CX 4100 F	4	120-200	1200	100	75/80	4	70-120	3100
Vari Flex CX 590 F	5	150-250	1360	90	75/80	5	90-150	3500

*Equipped with: depth wheel, one pair of disc coulters, others fin coulters.

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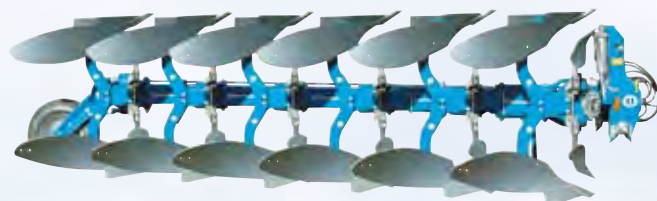
Vari Flex 590 H. A heavy duty plough with hydraulic furrow width adjustment.

Överum Vari Flex DX

Överum Vari Flex DX is a range of fully mounted reversible ploughs with hydraulically adjustable working width from 30 to 50 cm (12 to 20 inches). The Vari Flex DX range consists of heavy duty ploughs suitable for tractors up to 200 hp, (cat 3), and is available as four or five furrow models with hydraulic stone release system, or with four to six furrow models with shear bolt protection.

During the reversing action the Vari Flex plough frame is straightened out, i.e. the furrow width goes down to min. working width. Then the reversing takes place and the furrow width comes back to the preset value automatically. For transport the plough is locked in butterfly position, and the combi wheel is set in its position for transport.

- The Vari Flex DX plough is easy to set. The vertical adjustment is set without using tools with separate screws independent of each other. The alignment can be adjusted precisely to make the plough pull easy straight behind the tractor without locking the lower links. In that way the forces on the mouldboards is balanced out with the landsides, and the plough becomes easy to pull. The working depth is adjusted without tools on the combi wheel.
- The furrow width is hydraulically controlled from 12 to 20 inches (30 to 50 cm).
The hydraulic furrow width adjustment can be extended with a hydraulic front furrow width adjustment. These two can be connected in a master/slave system, resulting in an automatic adaptation of the front furrow width corresponding to the others. By flicking a switch the same spool valve will act on the front furrow only.
- Each plough component is mounted on the frame in a new way with replaceable bushes.
- By regulating the furrow width the plough can easily be adapted to different ploughing conditions. The wider furrows, the higher output in ploughed land per litre diesel oil. The furrow width resulting in the best quality ploughing for each soil type can easily be found.



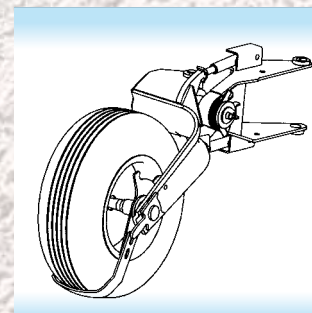
Vari Flex 690 F is equipped with fixed beams protected with individual shear bolts. The working width is hydraulically adjustable from 1,8 to 3,0 m.



The double cylinder memorises the furrow width setting during the alignment and turnover action. The line of draft can be fine tuned in order to balance out all side forces and the plough pulls easy.



The automatic alignment secures a problem free turn over independent of furrow width setting.



During reversing the wheel movement is effectively damped by a three-step brake.



Vari Flex 490 H with high beams has extra clearance for heavy trash.



The centre of gravity is close to the tractor. Reducing the lift requirement.

- The combi wheel for Vari Flex DX is rear mounted beside the rear plough body. There it secures the best possible depth control together with the tractor lower links also on hillsides. The weight transfer to the tractor is favourable and the carrying capacity in wet ploughing conditions likewise. The wheel follows automatically when the furrow width is adjusted.
- During the reversing action the wheel movement is cushioned by a patent pending three-step brake, which effectively prevents bangs even when the wheel becomes heavy from sticking soil.
- Change over to transport position is easy to do. A spring-loaded lock is released and the wheel is turned 90 degrees and locks automatically. At the same time the plough is let down on the transport wheel, the brake pressure is released to let the wheel pivot freely. The fully mounted plough is then transported as semi mounted.
- All Vari flex DX models can be built in high clearance version with 80 cm underbeam clearance for deep ploughing and extra room for crop residues.



The new combi wheel is easy to set in transport position. Pressure is taken off the tractor for safe and rapid transport on rough roads.

Technical specification								
Model	Number of Furrows	Working width cm	Weight kg with XL-body*	Point to point clearance cm	Underbeam clearance cm	Pairs of disc coulters possible to fit	Recommended tractor power hp	Approx. lift requirement
Vari Flex DX 490 H	4	120-200	1610	90	75/80	1	100-160	4000
Vari Flex DX 590 H	5	150-250	1920	90	75/80	1	130-200	5000
Vari Flex DX 490 F	4	120-200	1430	90	75/80	1	100-160	3700
Vari Flex DX 590 F	5	150-250	1700	90	75/80	1	120-180	4300
Vari Flex DX 690 F	6	180-300	1970	90	75/80	1	140-200	5400

*Equipped with: depth wheel, one pair of disc coulters, others fin coulters.

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Xcelcior DX 590 H with EG-skimmers. A heavy duty plough for tough ploughing conditions.

Överum Xcelcior DX

The Xcelcior DX-series consists of fully mounted reversible ploughs intended for big tractors and heavy duty ploughing. Modern design and quality manufacture are the main characteristics for the Xcelcior DX ploughs.

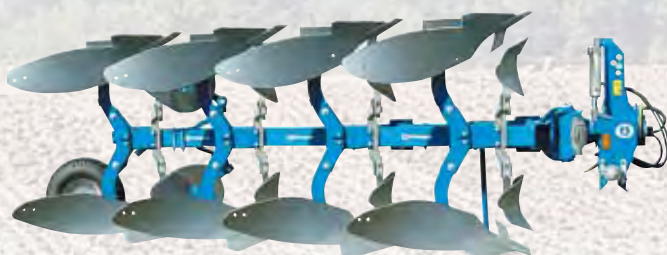
- The quick hitch cross shaft (cat 3) can be set in two different height positions to allow correct draft balance to the tractor.
- Ø 150 mm pivot shaft with needle bearings spread the forces when turning the plough.
- The Xcelcior DX frame is built to a wedge form with increasing width as the forces increase forward in the plough.
- A hydraulic alignment ram automatically straightens the plough, giving it a gentle turning action.
- The Xcelcior DX ploughs are very easy to adjust. Plough alignment is set by altering the stroke of the hydraulic alignment ram with the threaded rear section. Vertical adjustment is set with separate set screws for r.h. and l.h. plough bodies without the use of tools.
- The heavy duty combi wheel is available in two versions. The rear mounted version offers the best depth control and weight transfer. The side mounted version is clamped to the main frame and the position can be changed along the frame to suit different requirements. The large diameter tyre gives good support and low rolling resistance.
- Överum Xcelcior DX ploughs are transported in the butterfly position. The transport lock on the headstock is set into the locking position and the combi wheel is changed from depth wheel to transport position. When the reversing action comes to the butterfly position the springloaded catch automatically locks in the transport position.
- The furrow width is adjustable in three different positions to suit variable ploughing conditions.



With high clearance profile beams large amounts of crop residues will flow through.



Heavy duty headstock with quick coupled cross shaft and alignment cylinder.



Xcelcior DX 4100 F with high clearance beams and EM-skimmers.

Technical specification				Point to point clearance cm	Underbeam clearance cm	Pairs of disc coulters possible to fit	Recommended tractor power hp	Approx. lift requirement
Model	Number of Furrows	Working width cm	Weight kg with XL-body*					
DX 490 H	4	140-180	1510	90	75/80	4	120-180	4000
DX 4100 H	4	160-200	1530	100	75/80	4	120-180	4300
DX 590 H	5	175-225	1820	90	75/80	5	140-180	5000
DX 5100 H	5	200-250	1840	100	75/80	5	150-180	5700
DX 4100 F	4	160-200	1350	100	75/80	4	120-180	3500
DX 590 F	5	175-225	1590	90	75/80	1	120-180	4000
DX 5100 F	5	200-250	1610	100	75/80	5	150-180	4500
DX 690 F	6	210-270	1760	90	75/80	1	150-180	5000

*Equipped with: depth wheel, one pair of disc coulters, others fin coulters.

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Accessories



Skimmer EG. Wide shallow cut. Works well with both fin coulters and disc coulters.



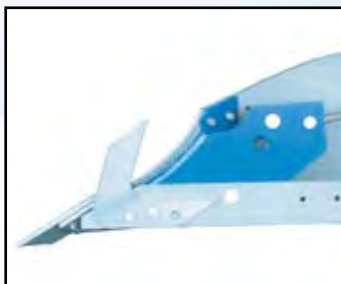
Skimmer EP. Plastic mouldboard for the best scouring properties.



Skimmer EM. Handles large amounts of crop residues. Works best with fin coulters.



Trashboard. Good clearance for straw. Not recommended for sticky soils.



Fin coulters. Low weight and good clearance.



Fixed disc coulters. 18" or 20" plain or 20" rippled disc.



Spring loaded disc coulters. 18" or 20" plain or 20" rippled disc.



Furrow widening knife for wide tractor tyres.



Depth wheel steel. Diameter 500 mm, width 160 mm.



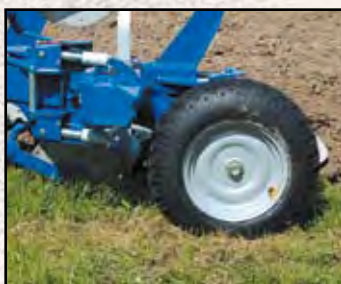
Depth wheel rubber 7.00 x 12. Diameter 645 mm, width 182 mm.



Combi wheel for depth control/transport 10.00 x 12. Diameter 710 mm, width 264 mm.



Double wheel for BX, CX and Vari Flex CX. Diameter 575, width 210 mm.



Combi wheel for Xcelisior and Vari Flex DX models. Dim. 10,5 x 16. Diameter 755 mm, width 275 mm.



Combi wheel in forward position for Xcelisior DX models. Diameter 755 mm, width 275 mm.



Hydraulic side adjustment BX. Front furrow width.



Hydraulic side adjustment CX/DX. Front furrow width.



Stone release pressure adjustment set for on the go adjustment.



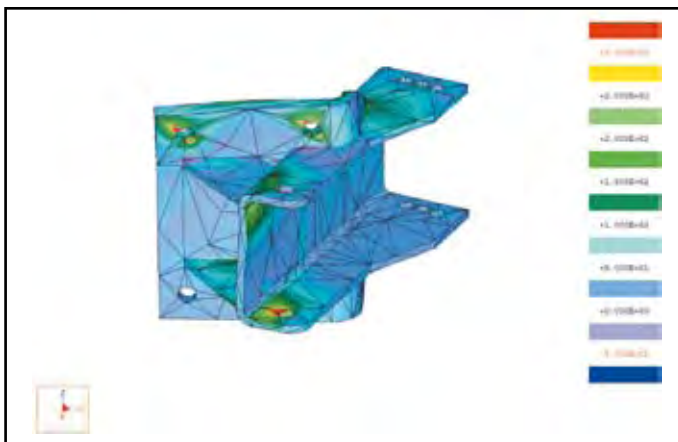
Furrow press arm for Xcelisior CX and DX. Double acting rubber suspension.



Furrow press arm for Vari Flex CX and DX. Double acting rubber suspension.



Nivell integrated furrow leveller from three to four furrows.



Computer technique and craftsmanship

A combination of modern computer technique and reliable craftsmanship regarding material knowledge, heat treatment and hardening are the key elements in the success of the Överum plough range.

The design engineers work in a three dimensional computer environment. Every detail is designed as a solid prepared to make movement and strength calculations on.

This makes it possible to test every function and movement in the computer before constructing the first prototype. Directly linked to the design computer there is a numerically controlled mill which produces a model of the detail.

When the designer is satisfied with the model, the tools

forming the different parts of the plough body are designed. The information is transferred to the mill which produces the exact tools used for hot bending and hardening of the parts. Despite all modern techniques, of course all new products are rigorously tested in comprehensive laboratory and field tests.

The concentration on product development represents a solid ground for the future and gives the Överum products Quality, Strength and Precision.

Överums Bruk AB is a part of Kongskilde Industries, a world-wide group producing products for farming and industry.



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