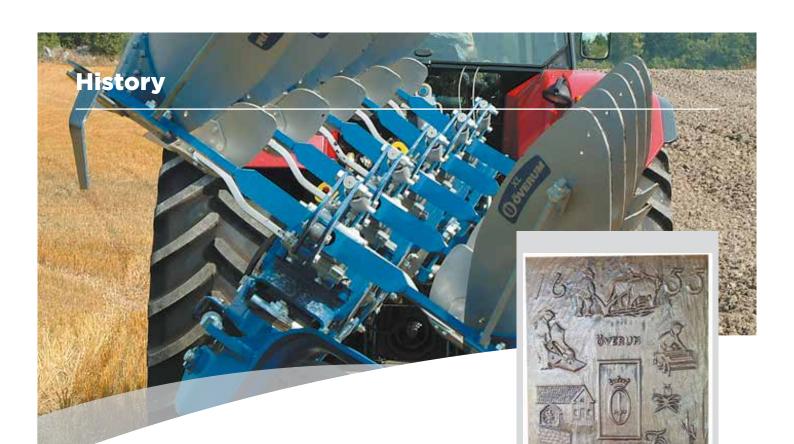


**OUR MAIN PLOUGH RANGE** 

Kongskilde ploughs

Ploughs for all soils,
from the experts.





## From Överum to Kongskilde

For more than 360 years the ÖVERUM factory has led in the industrial production and processing of steel.

For the last 165 years, they have been producing ploughs, so they know a thing or two about ploughing! The core competence, then as now, is the finishing of steel. The mould boards are made of carbonized hardened steel, so today Överum possess the most thorough processing of wearing parts on the market. The treatment time is 19 hours. Subsequently, after various intermediate steps the wearing parts are then hardened. The main plough frame is pretreated in a similar fashion.

To ensure stress free production, this process takes place after any welding has been carried out, then the ploughs are bolted together in final assembly. Based on this extensive experience, the XL-body has the lowest draft requirement for plough bodies on the Market. The scientific evidence studies are shown at the Swedish University in Uppsala.

Överum have paid particular attention to stone protection. Since 1968, a hydraulic stone protection has been offered. This step less system can be customized to suit all soil conditions.

Great focus is on easy and precise setting down. The sequence is as follows: horizontal, vertical, line of draft (pull) and then front furrow.

Since 2015, conventional, fully mounted, semi-mounted and wagon ploughs have been produced under the name KONGSKILDE.





#### The correct choice

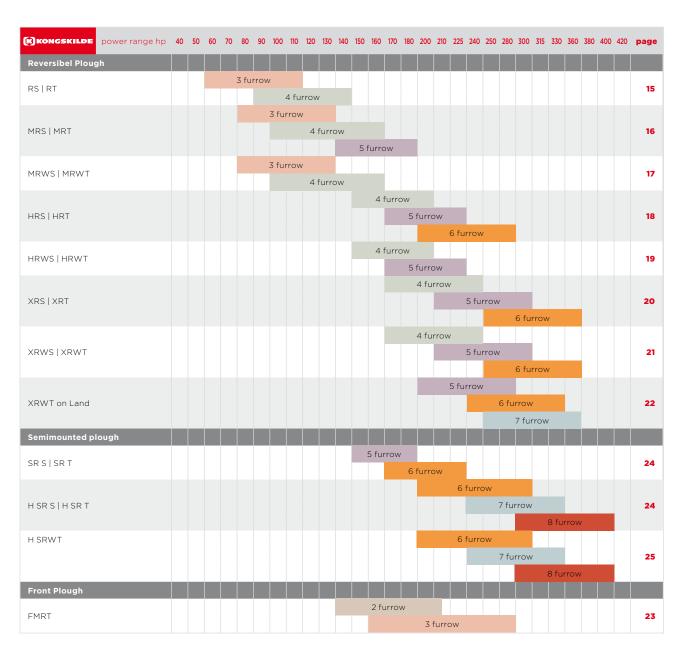
## Which plough for which tractor

Kongskilde has continually developed the plough range and technology. The focus was on efficiency, precision and economy.

Kongskilde ploughs consist of a modular system which means

the modules are bolted to the frame, not welded.

In your search for a new plough, there are two parameters: tractor power and the number the furrows. Using our table you can quickly find the appropriate model that best suits your requirements



#### **Advantages of ploughing**



# Good reasons for ploughing

Among mechanical weed cultivation, the plough has through centuries been acknowledged to be the most reliable machines in cultivations. Threats of herbicide resistant weeds getting more and more abundant is forcing today's farmer to rearm and again upheld the plough as key strategy for weed control as last resort.

The plough has many advantages: it not only breaks through the capillary, but mixes the crop residues and fertilizer perfectly and promotes the release of nutrients through mineralization. Harmful animals such as mice and snails are also combated to an extent by ploughing. The control of root weeds and fungal diseases is another advantage of ploughing.

This systematic procedure yields the most effective loosening around the entire region of the field.

It is also ideal to repair compaction damage. Ploughing increases the volume of the top surface by approx 30%. The proportion filled with air Pores with this method increased significantly. Surface water is also clearly absorbed faster too.

The plough bodies cut the furrow slices and then invert them. The turning action forces the soil to split up in a natural pattern. At the same time the skimmers clear the surfaces between the furrows.

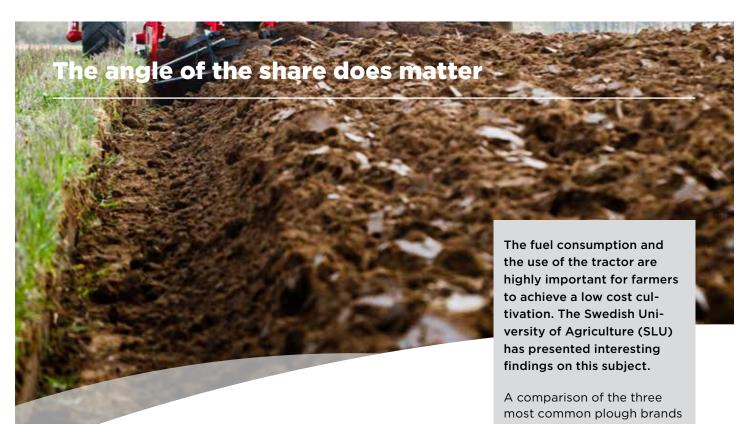


The plough requires less energy than a tine cultivator considering the cultivated volume of soil, due to the geometry of the plough body.

Wider furrows - 35 - 40 cm saves 11%

Red. depth from 24 - 19 cm saves 30%

The plough is an effective tool to loosen the soil, control weeds and mix crop residues and fertiliser.



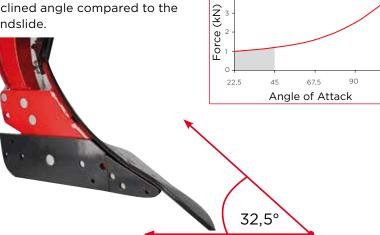
## The angle does matter

The angle of attack of the share is a vitally important feature. A Kongskilde plough does not cut or break the soil, so when correctly set the plough does not leave a pan in the bottom of the furrow unlike other makes. When correctly adjusted the leading edge of the share sits at an inclined angle compared to the landslide.

The force to pull a tine as a function of the angle of attack, after Godwin (1974)

Force of

pull

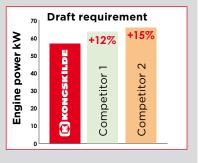


was also done by SLU. A 100 hp tractor was used to measure the draft requirement of the four furrow ploughs.

The furrow width of ploughs was adjusted to 40 cm and the depth of the ploughing was 20 cm. As you can see or

the depth of the ploughing was 20 cm. As you can see on the diagram, the Kongskilde plough with the AX-body was the one among the competitors which had the lowest draft requirement. This result means less slippage and higher efficiency which gives a lower fuel consumption and tillage cost.

Kongskilde AXbody has the lowest draft requirement among its competitors



## The design of our plough bodies



The type AX is a turning plough body with an extremely low draft requirement. This body has a universal application in all different types of soil for ploughing depths of 10-28 cm and with working widths of 30 - 55 cm.



The type AXP has the same body and properties as AX, only the mould board is made of plastic. Ideal for ploughing in very sticky soils.



The type XLD is a turning plough body of low draft requirement, for tractors with wide tyres (710 mm). Excellent turning of the furrows plough depths of 12-30 cm with a working width of 35-60 cm.



The type AH is a larger universal body with good crumbling and very good furrow clearance for wide tyres. For cutting widths from 40 cm and working depth to about 30 cm.



The type AS is a slatted body with 4 individually replaceable strips. Suitable for all soil types, is particularly impressive in sticky soil. Intensive crumbling, perfectly turned soil on a slope. For cutting widths from 40 cm and working depths below 30 cm.

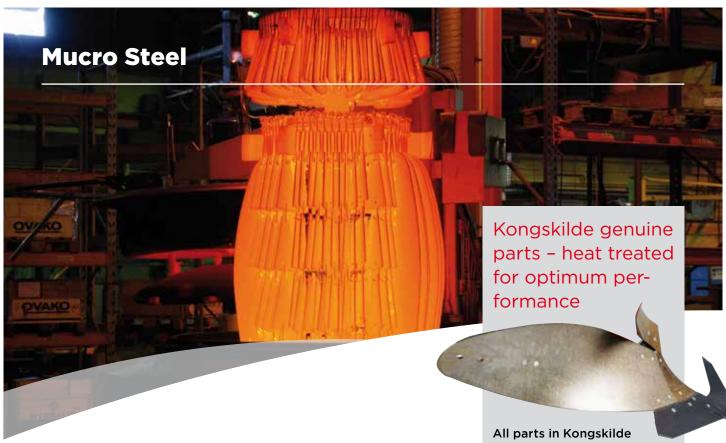


Type XSD is a new-developed turning plough body with slatted mouldboard, combining low draft requirement with very good scouring in sticky soil. The mouldboard has four separately exchangeable slats with double support stays, and has otherwise the same parts and functions as XLD.









## Innovative steel handling

More than 350 years of experience in steel handling is driving our benchmark for tomorrows innovations.

#### State-of-the-Art processing

The mould board blanks are processed for 18 hours in a carbon rich environment with high temperatures and cooled for 4 hours with nitrogen gas. The mould-boards are then heated up for 30 min to bring them into shape. Over 2 hours of reheating with 150° removes all stress out of the board ensuring highest quality.

Carburizing method

The correct carbon content in the steel profile determines the perfect properties of the mouldboard. Carbon penetrates into the surface layer of the steel creating a maximum surface hardness with a flexible inner core. Your advantage - wearing resistance as well as toughness and impact strength. All parts in Kongskilde plough bodies have gone through different types of advanced heat treatment, in order to give the steel in each and every detail optimized characteristics for its task.

Point, share and landside are hardened for maximum wear resistance and rupture strength.

The mouldboard is given a special carburizing treatment in order to achive even higher hardness in the surface, partly for increased wear resistance, but also for better scouring in sticky soil types.

Also the frog, on which all the wearing parts are mounted, is heat treated for best possible strength to weight ratio.



## Discover Quality

Kongskilde ploughs are designed to offer farmers quality ploughing results, easy operation and advantageous operational economy. All this is built upon several generations experiences in developing ploughs. This places Kongskilde ploughs in a league of their own. Heavy duty dimensioning and high quality material ensures a long life time!



**125 Headstock:** Means the dimension of the hollow shaft. Designed for tractors up to 180 hp. Cross shaft Cat. II and III.



**150 Headstock:** Means the dimension of the hollow shaft. For trouble free ploughing with tractors up to 220 hp. Cross shaft Cat. II and III.



**180 Headstock:** Built for heavy duty, this headstock suits perfectly the largest ploughs. Up to 360 hp. High quality 150 mm to 180 mm heat treated hollow shaft made from only 1 piece.



Points: The share points on Kongskilde plough bodies are extra long and designed in such a way that wear is equal throughout the lifetime. The design means good soil contact, and new points will break through an eventual ploughing pan. The long point has exceptional wearing life with homogeneous



dimension, The point, the share and the mouldboard are in the same plane on an Kongskilde body. This means that wear is distributed evenly, the power requirement is reduced, material expenditure is lower and the risk of soil sticking to the mouldboard is less than for other ploughs. Kongskilde carry



three types of points for improved performance in different systems.

**Turnable:** For improved capacity and increased lifetime. **Flush:** improved soil flow and minimum adherence in sticky soil. **Överum Special:** Short point for rocky conditions.

#### **Quality for you**



# High Tech

## Frame and Beam

Kongskilde ploughs feature frames made out of one piece, without weldings. On the frame, all parts are bolted. The design of the main frame has got precision drilling made by high technological CNC machines for the extensive bolt assembly.

Kongskilde has a high strength compared to the weight ratio! Which means that it is possible to use a heat treated Steel with 40% higher strength compared to standard frame tubes.

The profile has a high section modulus and can endure high loads. This modularity has many advantages. Worn or defective parts can be replaced easily and simple, because they are bolted. The same applies to the plough

leg. Kongskilde Plough legs are made for extrem use. Our 80 cm stone trip plough leg is made out of cast steel and is the strongest in the market.

The plough legs are not only put on top of the beam and welded, they surround the surface of the beam like an U-section.

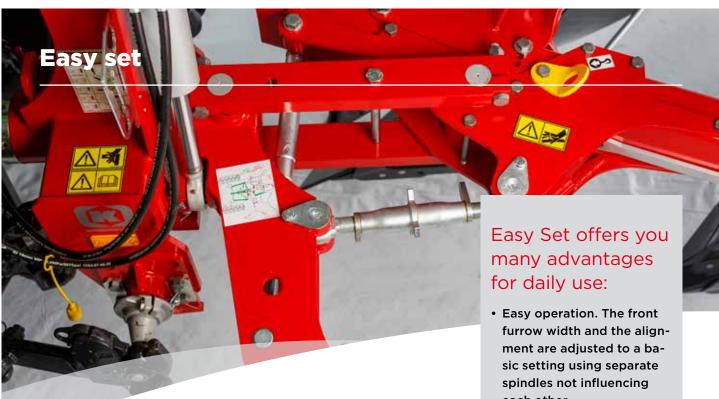


T-Model 80 cm: stongest

Shear Bolt: 16 mm 10.9 bolt quality, burst at a force of 4.000 kg



All pivot points in the furrow width adjustement are
equipped with replaceable
bushes with greasing possibility. The greasing reduces
the forces required and
prevents dust and water getting in.



### **Easy** Set

A simple system that ensures correct adjustment of the plough. This means excellent ploughing and lower operating costs.

Easy Set automatically adjusts the alignment of the plough as you adjust the front furrow. The system is designed as a parallelogram, where the geometry is calculated in order to adjust the alignment correctly once the basic setting of the plough is correct.

All Kongskilde fully mounted reversible ploughs have the Easy Set system as standard equipment.



- each other.
- · Correctly adjusted alignment ensures that the plough moves freely using a minimum of power.
- · Manoeuvering is easy once the plough is adjusted correctly.
- · On ploughs with hydraulically adjustable furrow width, Easy Set ensures perfect alignment for all furrow widths, which can be freely adjusted.
- The design is flexible, which means that shocks are not transmitted directly to the tractor.
  - Correct setting minimizes use of wearing parts.
    - Correct setting gives a perfect ploughing result.

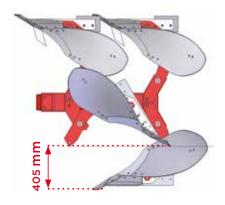
## Stone release system

Kongskilde offer two kinds of stone release system; hydraulic stone release system and shear bolt system. One of the highest release heights on the market. The kinetic ensures that a minimum load of pressure is transferred to the point during release for easy passage.

#### Shear bolt system

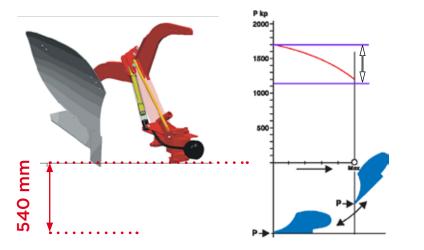
This system is most useful in soil with few fixed stones. The design is simple and inexpensive. Ploughs with shear bolts have a lower weight, and the centre of gravity is closer to the tractor. This reduces the lift requirement. The shear bolts are manufac-

tured from hard steel and dimensioned to burst at a force of 4.000 kg. All other design in the plough is dimensioned to exceed this force. With the high strength of the shear bolt you can plough non-stop even with smaller obstacles. The hard steel shears with a clean break to make it easy for you to replace bolts.

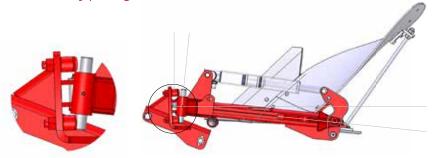


#### Hydraulic stone release system

Where there are many stones in the soil, the hydraulic stone release system from Kongskilde is efficient for non-stop ploughing. The release pressure for each plough body can be adjusted individually. This means that the pressure can be set higher for the front furrow in order to keep it in the soil, without exposing the plough and the tractor to a higher load. The adjustment possibilities are wide as the resistance force may range from 950 kg to 1.500 kg for each plough body. The geometry of the release system offers a large release height to ensure non-stop ploughing even in conditions with large stones and for deep ploughing.



One of the highest release heights on the market. The kinetic ensures that a minimum load of pressure is transferred to the point during release for easy passage









The perfect match for light tractors

RT/S is a plough range aimed for the smaller farmers and suitable for tractors up to 100 kW. The range consists of fully mounted reversible ploughs with low lift requirement. The centre of gravity is close to the tractor for minimum lift requirement. The RT/S ploughs "turn under" which means that the bodies pass under the frame and the depth wheel passes up high when the plough is turned. RT is equipped with a

fully automatic hydraulic stone release system and RS with fixed beams with individual shear bolts for each leg.

The furrow width can easily be adjusted in four steps to suit different ploughing conditions. In comparison to the weight the ploughs have a strong design manufactured from high grade heat-treated steel in vital parts means durable strength.



max	Ø- <b>4</b>		X	<b>*</b>	-		$\rightleftharpoons$	min
				RS				
140	125 mm	150 x 100	3	75 cm	90 / 100 cm	S: 405 mm	12" - 14" - 16"	1500
140	125 11111	mm	4	/5 CIII	90 / 100 cm	5. 405 11111	12" - 14" - 16" - 18"/20"	1900
				RT				
140	125 mm	150 x 100 mm	3	3 75 cm	90 cm	T: 540 mm	12" - 14" - 16" - 18"	2100
140			4					2500

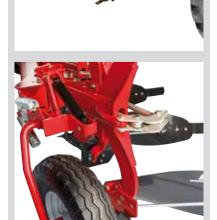


## THE standard plough

MRT/S represents the medium class models of Kongskilde Ploughs for tractors up to 130 kW. These reversible fully mounted 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 Kongskilde

MRS/T ploughs are manufactured from high quality steel for strength and reliability to work in the toughest conditions. This gives a plough for modern farmers who focus on professional farming, functional equipment and economical operation. The big pivot shaft diameter spreads the load on a large surface while the plough is turning over. The direction of turnover can be chosen. The frame is extendable.



max	Ø-		X	+		2		min			
MRS											
180			3					1700			
180	125 mm	150 x 150 x 8 mm	4	75 / 80 cm	90 / 100 cm	S: 405 mm	90 cm: 14"- 16"- 18"	2500			
180			5					3300			
	MRT										
180		150 x 150 x	3	75 / 80 cm	90 / 100 cm	T: 540 mm	100 cm: 16" - 18" - 20"	2500			
180	125 mm	8 mm	4					3400			



## **Staying** flexible

MRWT/S are reversible fully mounted plough with hydraulic operated working width. MRWT/S has a well thought out construction were the furrow width can be controlled from 30 to 50 cm. 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. All pivot points in the furrow width adjustment are also equipped with re-

placeable bushes with greasing possibility. The greasing reduces the forces required, and prevents dust and water getting in.

Kongskilde MRWT/S has a high strength compared to the weight ratio! The direction of turnover or turnunder can be chosen according to the conditions. During the turn process, while the frame is aglinmet, the working width is not reduced.



max	Ø-		X	1	-	2	$\rightleftharpoons$	† min
				MRWS				
180			3					1600
180	125 mm	100 x 150 mm	4	75 / 80 cm	90 / 100 cm	S: 405 mm	12" tot 20"	2600
180			5					3500
				MRWT				
180	125 mm 100 x 150	3	75 / 00	00 /100	T 540	10" +-+ 20"	3000	
180	125 11111	mm	4	75 / 80 cm	90 / 100 cm	T: 540 mm	12" tot 20"	4000



## The work horse

The Kongskilde HRS/T -series consists of fully mounted reversible ploughs intended for Tractors up to 165 kW and heavy duty ploughing. Modern clean design and quality manufacture are the main characteristics for the Kongskilde HRS/T ploughs.

The frame of the HRS/T is a sturdy U-profile and the frame is built to a wedge form with increasing width as the forces increase forward in the plough. The HRT/S wheel is placed at the rear of the plough for the best weight transfer. The frame is extendable.

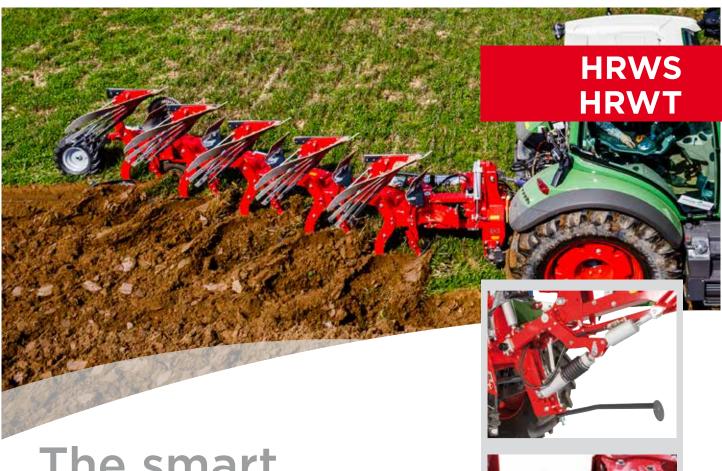




#### **Technical Specifications**

max	Ø-		X	1		2		min	
HRS									
220			4		90 / 100 cm	S: 405 mm	90 cm:	3000	
220	150 mm	n 150 x 150 x 9 mm	5	75 / 80 cm			14"-16"-18" 100 cm: 16"-18"-20"	4000	
220			6		90 cm			5000	
				HRT					
220		150 mm 150 x 150 x 9 mm	4	75 / 80 cm		T: 540 mm	90 cm: 14"-16"-18" 100 cm: 16"-18"-20"	4000	
220	150 mm		5		90 / 100 cm			5000	

S = Stonerelease and T = Stonetrip



## The smart all-rounder

HRWT/S is the plough model from Kongskilde for tractors up to 165 kW. The plough range is equipped with a heavy duty headstock with a 150 mm pivot shaft and needle bearings. The five furrow models are equipped with an alignment cylinder as a standard. The working width is hydraulically adjustable within a range of 30 to 50 cm. The favorable geometry in the regulation

system makes it possible to adjust the working width on the go with relatively low pressure. All pivot points in the furrow width adjustment are equipped with replaceable bushes with greasing facilities, for less friction and for keeping the dirt and water out. During the turn process, while the frame is alignmet, the working width is not reduced

#### **Technical Specifications**

max	Ø-		X	<b>†</b>	4	2		† min
				HRWS				
220	150	150 x 100	4	7F / 00 am	00 /100 am	S: 405 mm	10" tot 20"	3500
220	150 mm	mm	5	75 / 80 cm	90 / 100 cm	5: 405 mm	12" tot 20"	4500
				HRWT				
220	150	150 x 100 mm	4	75 / 80 cm	00 /100 am	T: 540 mm	12" tot 20"	4000
220	150 mm		5		90 / 100 cm	1: 540 mm		5000

S = Stonerelease and T = Stonetrip



## Heavy Duty for high performance

The XRS/T series has a simple and clean construction, with few moving parts. XRS/T is suitable for tractors up to 250. The working width can be manually adjusted in 5 steps. XRS/T is equipped with a quick coupling cross shaft that can be placed in four different positions. The head stock can be equipped with cat. 3 or 4 cross shaft. The pivot shaft with needle bearings is 180mm and spreads the forces

on a very big surface when turning the plough. A hydraulic alignment ram automatically straightens the plough behind the tractor to give it a gentle turning action. After the turn the plough automatically returns to working position. This system minimizes the strain of the tractor.

XRS/T frames are extendable.





max	Ø-		X	1				min		
XRS										
360			4		90 / 100 cm	S: 405 mm		5000		
360	150 - 180 mm	120 x 220 mm	5	75 / 80 cm	90 / 100 CIII		14" - 16" - 18" - 20" - 22 "	6000		
360			6		90 cm			7000		
				XRT						
360			4		00 /100 am			5000		
360	150 - 180 mm	120 x 220 mm	5	75 / 80 cm	90 / 100 cm	T: 540 mm	14" - 16" - 18" - 20" - 22 "	6500		
360			6		90 cm			8000		



Reversible fully mounted plough with hydraulic operated working width. The geometrical design of the furrow width setting results in easy adjustment on the go with limited pressure needed. All pivot points are equipped with replaceable bushings with greasing possibility. The headstock is like XRS/T made really strong with a 180 mm pivot axle placed in needle bearings for an efficient distribution of load. The plough range is equipped

with a double cylinder. One half of the cylinder manages the automatic alignment. The other half of the double cylinder is controlling the furrow width adjustment.

When the turnover is activated the furrow width is automatically going down to min. position, the plough reverses, and the furrow width comes back to the pre set value again. XRWS/T frames are extendable.



max	Ø-		X	<b>†</b>	4	<b>2</b>		min			
	XRWS										
360			4		90 / 100 cm	S: 405 mm		4500			
360	150 - 180 mm	120 x 220 mm	5	75 / 80 cm	90 / 100 CIII		14" to 22 "	5500			
360			6		90 cm			6800			
				XRWT							
360			4		00 /100 am			5000			
360	150 - 180 mm		5	75 / 80 cm	90 / 100 cm	T: 540 mm	14" to 22 "	6500			
360			6		90 cm			8000			



Kongskilde XRWT On Land is a new series of heavy duty fully mounted reversible ploughs. The On-land feature means that the plough can be pulled by a tracked or wheeled tractor with dual wheels on un-ploughed land with accurate GPS support. In on-land position the plough is in balance for turn-over without any alignment movement. This makes the turnover guick and easy. At

and Flexible

need to be shift, to change front furrow to On-land position.

In-furrow position automatic alignment to minimum working width takes place before turnover of the plough. When the furrow width is changed, the plough is automatically adjusting the front furrow accordingly. Transport in the butterfly position reduces heavy shocks both for the tractor and for the plough.

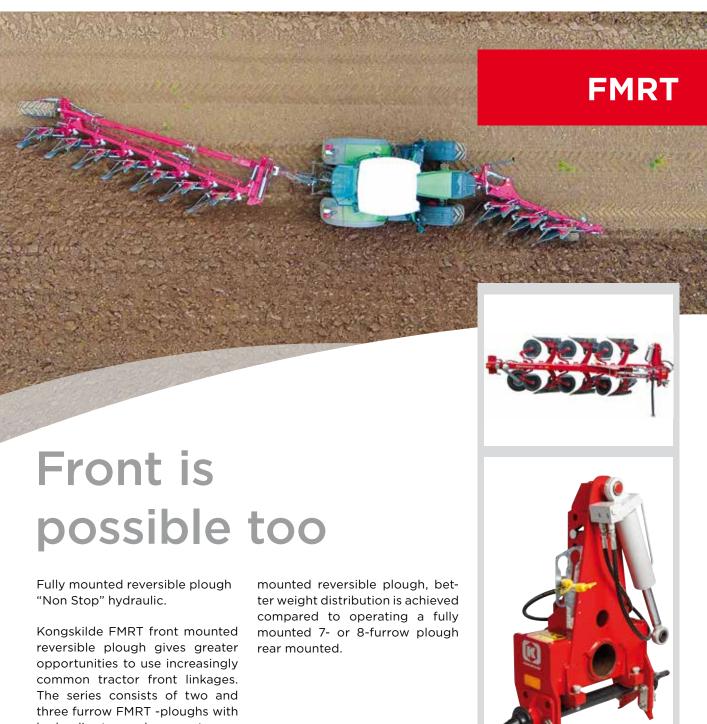


#### **Technical Specifications**

XRWT On-land only two locker

max	Ø-		X			2		min min		
XRWT on Land										
360			5		90 cm	T: 540 mm	14" tot 22 "	6500		
360	150 - 180 mm	120 x 220 mm	6	75 / 80 cm				8500		
360			7					11000		

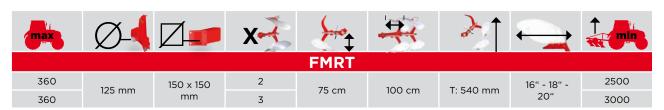
S = Stonerelease and T = Stonetrip



hydraulic stone release system.

By using the Kongskilde FMRT in combination with a normal rear

#### **Technical Specifications**



S = Stonerelease and T = Stonetrip



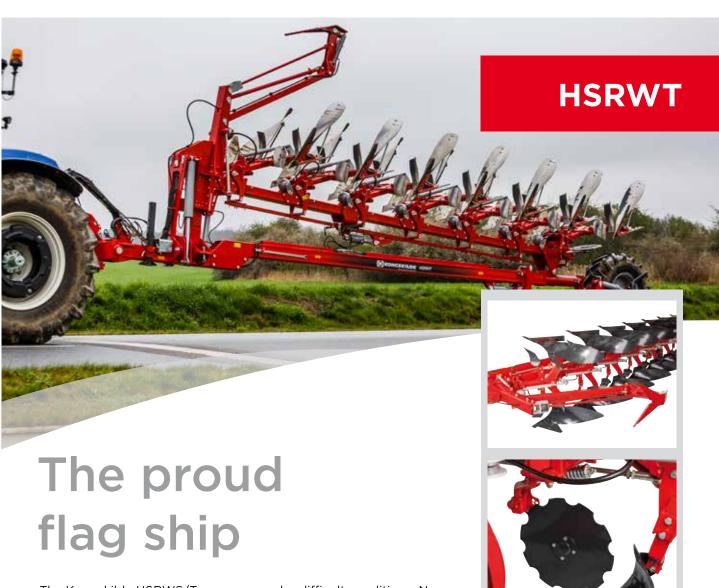
## For high capacity ploughing

SRS/T 4-7 furrow, HSRS/T from 5-8 furrows. Fixed beam shear bolt version or hydraulic stone trip. Both models have robust frames with high ground clearance. A large area of free space around the tractor treaded depth wheel

means trouble free ploughing under difficult conditions. Narrow transport width, a low centre of gravity and good weight distribution enable quick and safe transport without compromising steering ability on rough surfaces.



max			X					† min		
				SRS						
225	A: 150 x 150	B: 150 x 150	5	75 000	00 000	C: 405 mama	14" - 16" - 18"			
225	x 9 mm	x 9 mm	6	75 cm	90 cm	S: 405 mm	14" - 16" - 18"			
				SRT						
225	A: 150 x 150	B: 150 x 150	5	75 cm	90 cm	T: 540 mm	14" - 16" - 18"			
225	x 9 mm	x 9 mm	6	75 CIII	90 (111	1. 540 111111	14 - 10 - 16			
				HSRS						
360			6							
360	A: 250 x 150 x 8 mm	B: 180 x 180 x 10 mm	7	80 cm	100 cm	S: 405 mm	14" - 16" - 18"			
360			8							
	HSRT									
360			6							
360	A: 250 x 150 x 8 mm	B: 180 x 180 x 10 mm	7	80 cm	100 cm	T: 540 mm	14" - 16" - 18"			
360			8							



The Kongskilde HSRWS/T plough incorporates the heavy-duty beam housing design already introduced on the Semi mounted plough with hydraulically adjustable furrow width. Fixed beam shear bolt version or with hydraulic stone trip. Both models have robust frames with high ground clearance. A large area of free space around the tractor treaded depth wheel means trouble free ploughing

under difficult conditions. Narrow transport width, a low centre of gravity and good weight distribution enable quick and safe transport without compromising steering ability on rough surfaces.

One of the largest wheel dimensions available on the market (420/70 R 25) ensures low pull resistance during work and high stability during road transport.



max			X		4	<b>&gt;</b>		† min		
HSRWS										
360	A: 120 x 220	B: 180 x 180	7	00	100	S: 405 mm	14``to 22``			
360	x 10 mm	x 10 mm	8	80 cm	100 cm	3. 403 11111	14 10 22			
				<b>HSRWT</b>						
360			6							
360	A: 120 x 220 x 10 mm	B: 180 x 180 x 10 mm	7	80 cm	100 cm	T: 540 mm	14``to 22``			
360			8							

#### **Options**

#### **Skimmers**



**EG / EP Skimmers** 

The mouldboard are protected with Shear bolts against obstacles. In addition to the Length also the side grip can be adjusted at Kongskilde skimmers.

EC skimmers: wide, flat cut. For normal conditions

EP skimmers: plastic Moldboard. Ideal for sticky, boggy soils.



**EM Skimmers** 

Ideal for larger amounts of Crop residues, e.g. Corn. The mould-board are protected with Shear bolts against obstacles. In addition to the Length also the side grip can be adjusted at Kongskilde skimmers.



Coverboard

Good passing of strow, mixes good Plant remains in. Good for different conditions less suitable for sticky soils.

#### Accessories



**Rippled Disc** 



Landside wearing plate



**Notched Disc** 



Standard furrow knife



**Plain Disc** 



Offset furrow knife

#### **Options**

#### Wheels medium range



**Steel - ø 500x160 mm** RS/RT · MRS/MRT



Rubber - ø 7.00-12 MRS/MRT · HRS/HRT



Rubber/Combi - ø 10.0/80-12/8 MRS/MRT · HRS/HRT MRWS/MRWT · HRWS/HRWT



Rubber/Combi - ø 10.5/65-16/10 HRS/HRT - rear or center mounted



RS/RT · MRS/MRT - center mounted

#### Wheels heavy range



Maximum traction wheel - 26x12.00-12

MRS/MRT · HRS/HRT · MRWS/ MRWT · HRWS/HRWT - mechanical depth adjustement, hydraulic brake. Here equipped with rim sides.



**Rubber/Combi** - 260/70-16 **Rubber/Combi HD** - 340/55-16 XRS/XRT · XRWS/XRWT · XRWT On Land - mechanical depth

adjustement, mechanical friction brake.



New centre mounted combi wheel

for XRS/XRT - XRWS/XRWT - XRWT On Land.

Choise of mechanical or hydraulic depth adjustement, hydraulic brake.



Hydraulic depth control

for tractor treaded support wheel.



**Hydraulic depth control** 

and tractor treaded tire for combi wheel above.



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