

## K.T.S Timber Trailer S 7.0 t with S 5.4 m crane

How did we come up with the idea of making a small trailer with a long crane? We did it through our continuous customer contacts. Among the comments we have heard from all of you who have come up with ideas for development many are of the kind 'I have a smaller tractor which I want to have a suitably sized trailer for, a trailer which has all the functions of a larger trailer and that is fully equipped with a long crane'. **We always listen to our customers when we design or further develop our products**, and we always do our very best to fulfil the wishes and requirements of our customers. So, this is what you wanted: K.T.S Timber Trailer S 7.0 t with K.T.S S 5.4 m Crane!

Design-wise, the 7.0 t trailer is similar to the 8.5 t trailer but smaller. See tables further back in this information for equipment alternatives! Further back you will also find pictures of the different equipment alternatives.

1

When you work in the forest with the K.T.S Timber Trailer, you are well equipped. Even though the trailer is smaller, the quality is still the same as of our other trailers and cranes. Powerful but also flexible central frame, bogie boxes, axles and wheels, which will withstand heavy loads during many years of hard work, 'climbing-type' bogie for best accessibility. Strong cast steel slewing house with four slewing cylinders which is perfectly adapted to the lifting force of the crane.

2

The K.T.S crane and the K.T.S trailer are designed **to work together as a complete unit**. This is why **you can trust** your investment in K.T.S trailers and cranes, knowing that they will last, not just for a year or two, but for many years to come.



3

The S trailer and crane are suitable for use with smaller tractors and also older ones with less hydraulic capacity or those with two-wheel drive. The picture shows it in use with a 1979 Volvo BM 2250 with 68 hp. It is of course also possible to use with newer and larger tractors as well as with smaller ones.

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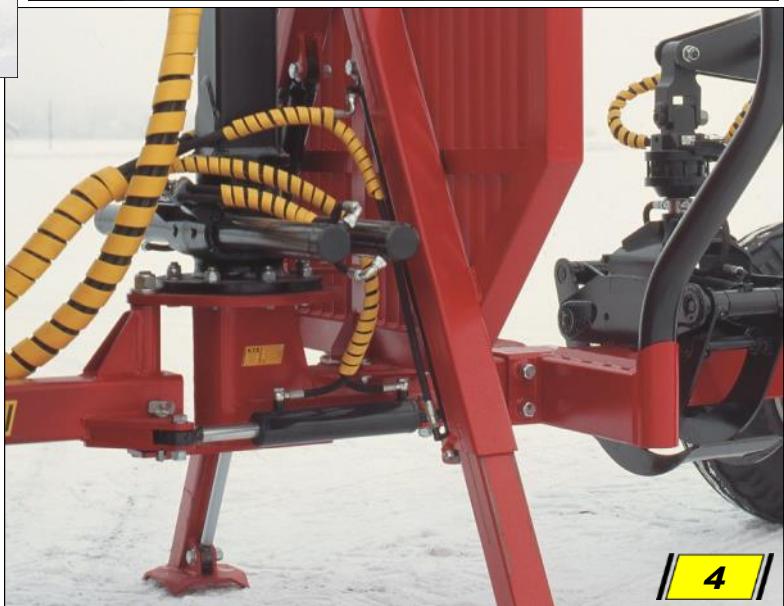
K.T.S Timber Trailer S 7.0 is equipped with trailer steering. The telescopic support legs are fitted on the reinforced gate. The crane post is as low as possible in order to have the slewing house less in the way when loading and unloading. The low position of the slewing house and the low crane post also gives the trailer a low centre of gravity, which means better stability and less risk of overturning.



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The slewing house is adapted in size to this smaller crane, but has the same design as on the larger cranes.

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K.T.S Hydraulic Crane S 5.4 m does not only have very long reach - it is also strong enough to lift heavy logs or, as the picture shows, several lighter at the same time.

Powerful cranes will subject slewing house, crane post, and support legs to enormous forces when lifting heavy logs. Then, **it is safe for you as the owner to know that the equipment is built for tough jobs.**

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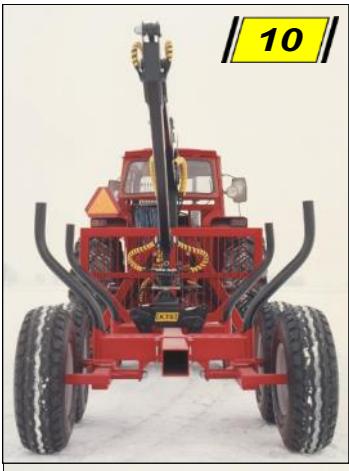
Even though the S Crane does not have a comfort joint, the manoeuvrability is excellent.



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**I K.T.S<sup>®</sup> Maskiner**

SICKELSTA 116 • SE-692 93 KUMLA • SWEDEN

– I kundernas tjänst sedan 1951 –



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A box-section bogie bolster, with a single long axle running in replaceable, lubricatable bushings, provides extra strength. The bogie bolster can swing through  $\pm 30^\circ$ , and is of the 'climbing' type, providing **excellent accessibility over difficult ground**. Front and rear edges have been bevelled, so as not to be stuck by stumps.

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Powerful trailer steering and attachment of the slewing house.

The crane cannot be moved to the tractor 3-point as is possible for the larger trailers. It is possible, however, if you buy a separate 3-point adaptor for the crane.

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- K.T.S timber trailers deliver! **Very large loading area: 1.2 m<sup>2</sup>**.
- **This is an actual measurement.** Compare it with the loading areas of other cranes, but check how the values have been calculated!
- The load area is very large, despite the fact that the total width does not exceed 1.87 m (with standard wheels). Narrower vehicles are easier handled in the forest.
- Also look at the extremely good ground clearance, which reduces the risk of getting stuck by stumps and stones.
- The bogies are of 'climbing type', with extra-large wheels, providing good load-carrying on soft ground.

You may fit the K.T.S Trailer with well protected tail-lights, brake-lights and blinkers, thus increasing road safety. The contact to the tractor is connected in accordance with the Bosch standards.

An adjustable support foot is available for the trailer.

The stakes can naturally swing aside if they are hit by something when the trailer is unloaded, reducing damage to growing trees. The stakes are securely fastened to the trailer.

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The K.T.S timber trailer and K.T.S hydraulic crane are designed and intended to work together as a unit.

Investing in, owning and using such a **carefully designed and long-life trailer** is a guarantee of reliability and economy.

All steel parts of the trailer are shot-blasted for maximum protection and finish quality. This is followed by priming and undercoating, before finishing with a high-quality top coat.

This first-class surface treatment ensures that **your investment will retain its finish**, despite years of use and outdoor storage.

## K.T.S Hydraulic Crane S 5.4 m

### Grapple lifting capacities as functions of outreach, horizontal crane arm, kg

Crane model	1.0 m	2.0 m	3.0 m	4.0 m	5.0 m	5.4 m
5.4 m	1 700	1 275	780	575	355	315

All lifting capacities have been stated as useful grapple load, including grapple and rotator.

### Grapple lifting capacities as functions of outreach, ground level, kg

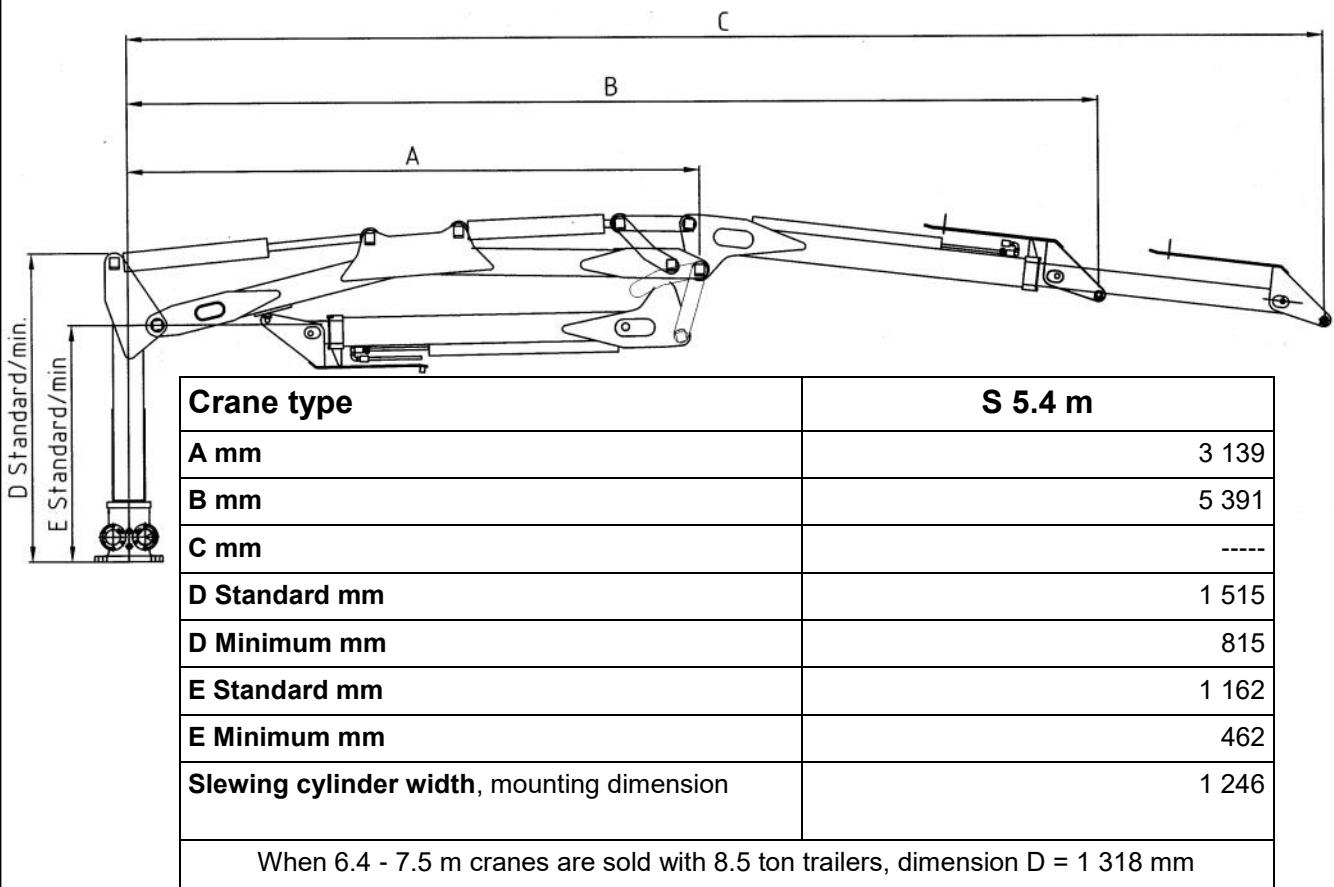
Crane model	1.0 m	2.0 m	3.0 m	4.0 m	5.0 m	5.3 m, max
5.4 m	1 326	956	608	520	290	245

All lifting capacities have been stated as useful grapple load, including grapple and rotator.

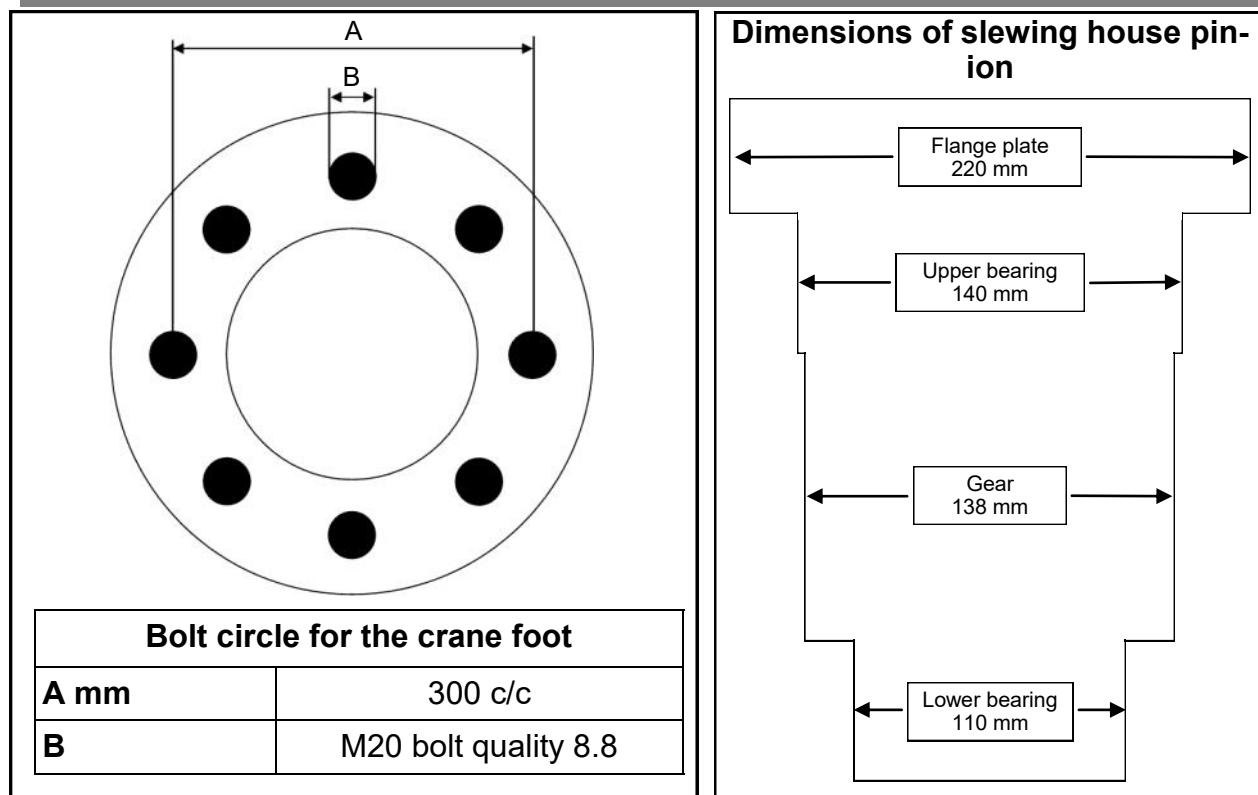
## **Specifications K.T.S Hydraulic Crane 5.4 m**

<b>Equipment</b>	<b>Crane S 5.4 m</b>
Comfort joint to simplify work	No
Hydraulic extension	No
Digging equipment can be mounted	No
Arm cutter can be mounted	No
Lifting capacity of grapple at maximum reach	See separate table
Gross lifting force of crane	2.5 tonmeter
Grapple area of standard grapple	0.18 m <sup>2</sup>
Fully rotating rotator	Yes / standard
Rotator torque	750 Nm (75 kpm)
Slewing attenuator on rotator link	No
Hydraulic support legs on the trailer when sold with crane	Not possible
Telescopic support legs instead of folding support legs	Yes / standard
Hydraulic support legs when the crane is sold with a 3-point adaptor	Yes / standard
No. of slewing cylinders on slewing house	4
Slewing angle	370° (360° is a complete revolution)
Slewing torque	5.4 kNm (550 kpm)
Height of slewing house	280 mm
Weight of slewing house	150 kg
Hydraulic valve	7 slides
Control levers	7 lever
Other control lever systems available	Yes, extra equipment
Float position on hydraulic valve	No
<i>Hydraulic valve suitable for open or closed hydraulic systems (Closed hydraulic system for e.g. John Deere)</i>	Yes, extra equipment
<i>Recommended pump capacity (Lower or higher flows can be used: the crane will simply perform more slowly or faster)</i>	15-50 l/min
<i>System pressure (Lower pressure: lifting capacity will be reduced. Higher pressure: no increase in lifting capacity, as the hydraulic system is fitted with a pressure relief safety valve.)</i>	175 bar (175 kg/cm <sup>2</sup> )
Maximum pressure	220 bar (220 kg/cm <sup>2</sup> )
Separate pump on PTO shaft 50 l/min 360 rpm, oil tank with filter	No
Lubricatable bushings or link bearings in all joints	Yes / standard
3-point adaptor for 3-point hitch	28 mm, category 2 825 mm between hydraulic arms attachment points
Weight, including grapple, rotator and without 3-point adaptor	482 kg
Weight, 3-point adaptor	280 kg
Weight, grapple	79 kg
All performance specifications that are pressure dependent are calculated at 175 bar pressure.	

## K.T.S Hydraulic Crane S 5.4 m



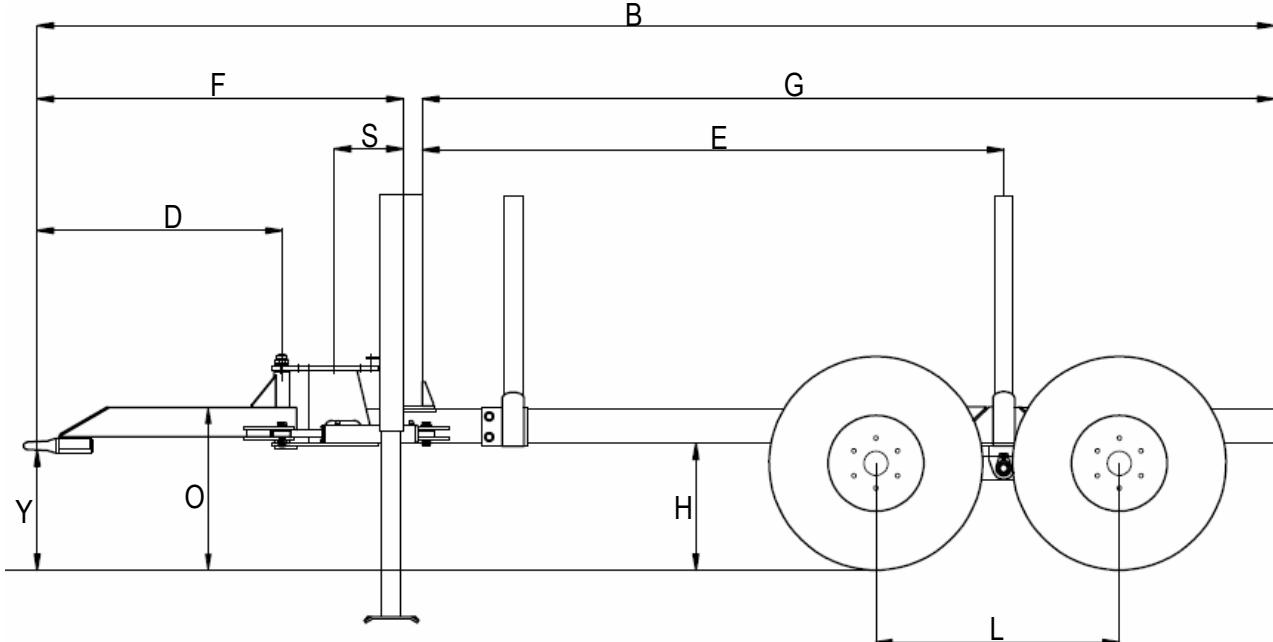
### **Dimensions of pinion and bolt pattern for slewing house 2.5 ton/m Crane model S 5.4 m**



# Specifications K.T.S Timber Trailer 7.0 t

Maximum load	7.0 t
Trailer type	Single frame - Central frame
Standard crane	5.4 m
Possible to install a crane up to 7.5 m	No
Possible to move crane from trailer to tractor's 3-point	Not possible
Effective load area	1.25 m <sup>2</sup>
Chain saw box	Not possible
Gate	Yes / standard
Gate height	850 mm
Stake height	850 mm
Stake dimension, internal reinforcement in base	76 x 6 mm
Extension stakes	No, stakes made as one unit
Divider stakes, for timber sorting	Extra equipment
No. of stakes	4
More bolsters can be fitted	Yes
Hydraulic support legs	Yes
Folding support legs	Not possible
Telescopic support legs	Standard
Trailer steering	Yes / standard
No. of steering cylinders	1 pc.
Max. steering angle	40° to both left and right
Towing eye to tractor	Forged towing eye for hitch connector
Fork coupler when tractor has no towing hitch	Extra equipment
Lubricatable bushings or link bearings in all joints	Yes / standard
Diameter of steering pivot	50 mm
Bogies	Yes / standard
Tip angle of bogies	± 30°
Axle separation	995 mm
Distance on bogie from centre of front axle to centre of pivot	530 mm
Track width	1,622 mm
Tyre size, standard, <i>other sizes available to order</i>	11.5/80 x 15.3 10-ply
Brakes, drum or disc	Extra equipment
Pneumatic brakes	Not possible
Brake hoses run fully protected in frame or substantial steel tubes	Yes / standard when trailer is fitted with brakes
Number of hydraulic outlets needed	1 double-acting + 1 single-acting with separate return, or 2 double-acting Extra equipment available so that 1 single-acting and 1 return will be enough
Support foot	Extra equipment
Hydraulic wheel drive, incl. tractor tread wheels	Not possible
Valve enabling crane operation via the hydraulic drive pump	Not possible
Stub shaft dimension	60 x 60 mm 70 x 70 mm broms
Central frame of special steel	140 x 140 x 5 mm
Load width at bottom of load area	890 mm
Load width at top of stakes	1,648 mm
Loading width at the top of the stakes for brushwood equipment	Brushwood equipment not possible
Overall height, including crane at towing eye height 400 mm; <i>this measure depends on the height of the tractor hitch hook</i>	About 2,275 mm
Recommended tractor power for full load	40 hp and up
Weight, complete timber trailer	1,260 kg
Weight complete, without crane and 3-point adaptor	778 kg

## Dimensions K.T.S Timber Trailer S 7.0 t

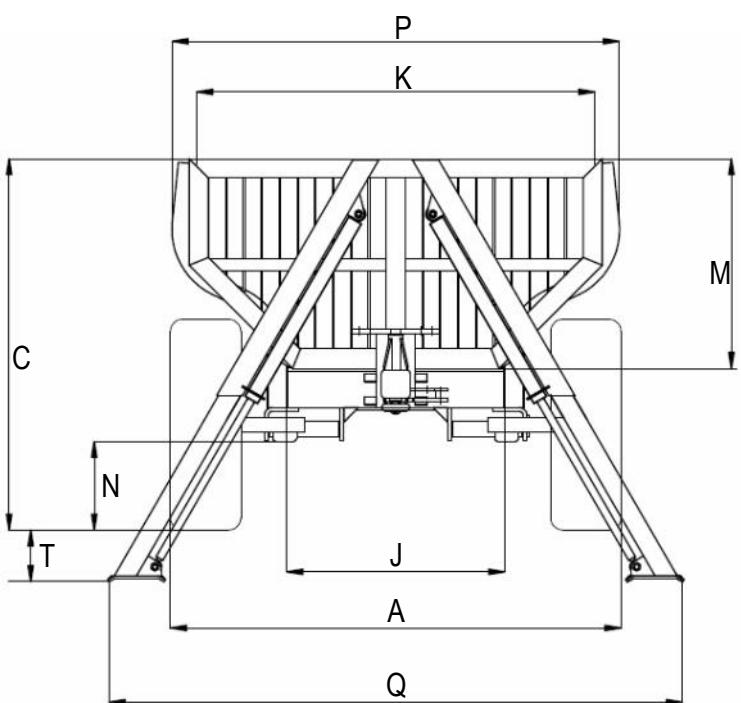


	<b>S 7.0 t</b>
<b>B</b> mm	5,055
<b>D</b> mm	1,000
<b>E</b> mm	2,375
<b>F</b> mm	1,495
<b>G</b> mm	3,480



	<b>S 7.0 t</b>
<b>H</b> mm	519
<b>L</b> mm	995
<b>O</b> mm	665
<b>Y</b> mm	490
<b>S</b> mm	280

## Dimensions K.T.S Timber Trailer S 7.0 t



	<b>S 7.0 t</b>
<b>A</b> mm	1,867
<b>C</b> mm	1,541
<b>J</b> mm	760
<b>K</b> mm	1,648
<b>M</b> mm	850
<b>N</b> mm	368
<b>P</b> mm	1,853
<b>Q</b> mm	2,385
<b>T</b> mm	215