# BUILT BUILT



# PALMS FIFTH GENERATION INNOVATIONS

Palmse Mehaanikakoda (PALMS) is a family business founded in 1992 by father and son.

Today, PALMS is the largest producer of forestry trailers and cranes in Europe. We have achieved the leading position through persistent work and continuous product development.

**PALMS** is founded on 4 core values:

Passion for building the best equipment in our field.
Innovation that makes forestry easier for our customers.

Uncompromising product **quality.**Value of long-lasting

customer relationships.

Our latest fifth generation of PALMS forest cranes and widened trailer model range is not plainly playing with words. Those are the products that are among the best, you can buy.

Join the PALMS family and choose a reliable tool appropriate for your needs.

Anti Puusepp Palmse Mehaanikakoda co-founder GUARANTEE

3-year warranty for frame, column and booms.

### boom increa

# HOSE ROUTING

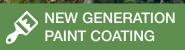
We have developed a unique and well-protected solution for hydraulic hoses from the boom to the rotator.\*

> STRENX™ STEEL

PALMS production is complemented by SSAB quality certificate "My Inner StrenxTM." All our cranes are produced using Swedish top quality Strenx<sup>™</sup>-steel.

## 

As a first for self-loading foresty trailer producers in Northen Europe, we hid hydraulic hoses inside the telescopic crane boom. This design significantly increases durability and reliability. Best examples from our crane lineup are PALMS 5.85; 7.86 and 7.94.



Thanks to KTL and powder coating, the equipment lasts longer and has a significantly higher resale value.





The new patented shaft system for pivoting connections reduces maintenance cost and increases the cranes durability. \*

# IMPROVED WORK

a la salate la

The foldable operator platform and ladder are easy and comfortable to use.

## TURNING HOUSE DESIGN

The turning house design is based on computer simulation strength test. Important crane parts are also tested and designed accordingly. Our cast iron design provides significant advantages compared with the welded design.\*

# GRILLES

PALMS trailers have strong and safe safety grilles which comply with EU directives.

# TESTED DRAWBARS

The trailers drawbars meet the newest EU standards.

## NEW UNIBODY FRAME TYPE - U

For better protection, all control systems are hidden inside the frame. The unibody design also provides multiple positions for the bolsters.

## LOCKABLE BOLSTERS

Patented system for quick, easy and secure bolster locking.\*

\*Not available for all models.

# **FORESTRY CRANES**



indicates series.
A lower number indicates a smaller model just like with cars.
Imaximum reach of the crane (8,6 m).



# FORESTRY CRANES - 2ND SERIES / 2.50, 2.54

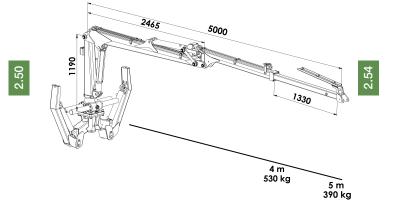
**2<sup>ND</sup> SERIES** cranes are smallest in the PALMS cranes selection. Despite the compact size, these cranes are serious workhorses and can be used universally in many ways. The technological solutions are similar as used in our bigger crane series. These cranes are easy to control, and they can be mounted on different platforms.



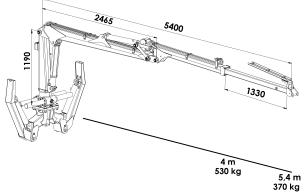
From 2017 onwards, all PALMS products first receive a EPO primer coating by cataphoresis treatment before being powder coated. Quality surface coatings keep away rust and provide the product a higher resale value. PALMS is the first producer in forestry crane and trailer segment, in the Northern Europe, using KTL + powder coating technology.







	<b>PALMS 2.50</b>	PALMS 2.54
Maximum reach	5,0 m	5,4 m
Lifting torque, gross	26 kNm	26 kNm
Telescope boom length	1,33 m	1,33 m
Slewing cylinder quantity	4 pcs	4 pcs
Slewing torque	7,8 kNm	7,8 kNm
Working pressure	190 bar	190 bar
Rotator maximum load	30 kN(FL)	30 kN(FL)
FITS TRAILERS	6S; 7SX	6S; 7SX



\* Detailed info on additional equipment and combinability possibilities can be found on the last pages of the catalogue. In case of additional questions contact your local PALMS dealer.

# FORESTRY CRANES - 3RD SERIES / 3.67

**3<sup>RD</sup> SERIES** cranes are ideally suited for preparing firewood for you and your neighbour, as well as removing hay bales from the fields.

## BROAD PRODUCT SELECTION

Every customer has unique needs. Combine our products to create equipment for your specific needs. Combination possibilities are explained on the last pages of the catalogue.





	PALMS 3.67	2810
Maximum reach	6,7 m	6700 0 0
Lifting torque, gross	41 kNm	ci gg
Telescope boom length	1,85 m	
Slewing cylinder quantity	4 pcs	1850
Slewing torque	12 kNm	
Working pressure	190 bar	
Rotator maximum load	30 kN(FL)	4 m
FITS TRAILERS	7SX; 8SX; 9S; 10D	820 kg 6,7 m 430 kc

\* Detailed info on additional equipment and combinability possibilities can be found on the last pages of the catalogue. In case of additional questions contact your local PALMS dealer.

# FORESTRY CRANES - 4<sup>TH</sup> SERIES / 4.70

**4<sup>TH</sup> SERIES** cranes are powerful but do not require a large tractor. Technologies and components used in their construction are same as those of greater series, yet models in the 4th series remain light and compact.



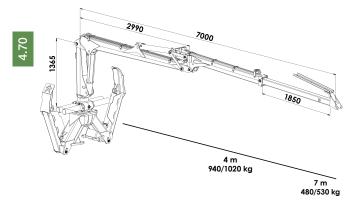


# NEW SLEWING CONNECTIONS (PATENT EP 3 239 540 A1)

The new crane boom shaft system is designed to reduce maintenance costs and increase the crane's durability. The special coating of the boom shafts makes connections more durable and gives them a lower friction coefficient which in turn reduces fuel consumption. The boom shaft's lubrication points are now conveniently located on the side of the boom. The new boom shaft's are fitted on the 4th, 5th and 7th series cranes.



	PALMS 4.70
Maximum reach	7,0 m
Lifting torque, gross	47 kNm
Lifting torque (205 bar)	50 kNm
Telescope boom length	1,85 m
Slewing cylinder quantity	4 pcs
Slewing torque	15 kNm
Working pressure	190 bar
Working pressure HP model	205 bar
Rotator maximum load	45 kN(FL)
FITS TRAILERS	8SX; 9S; 10D; 13D; 10U; 13U



\* Detailed info on additional equipment and combinability possibilities can be found on the last pages of the catalogue. In case of additional questions contact your local PALMS dealer.

# FORESTRY CRANES – 5<sup>TH</sup> SERIES / 5.72; 5.85

5<sup>TH</sup> SERIES cranes are designed for daily forestry work and optimized for use with a medium-sized tractor. The cranes can be used with a wide choice of trailers and may also be placed on chippers, or tractor frames. The professionally designed crane boom geometry and significant lifting capacity help you to move the logs with ease.

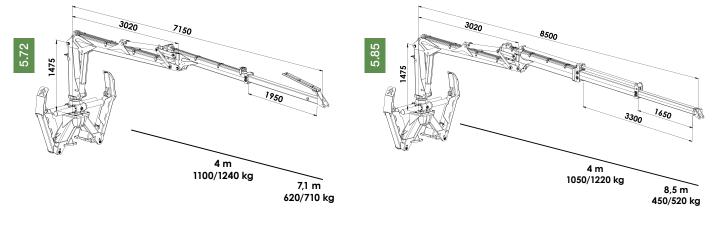
# HIDDEN HYDRAULIC HOSES

The forest cranes most vulnerable component is hydraulics. Damaged hydraulic hoses mean wasted work days. For better protection PALMS designers hid the hydraulic components inside the telescopic boom.

**PPR** - PALMS Protected Hose Routing Solution between boom and rotator has passed hardest tests in the forest.







	PALMS 5.72	PALMS 5.85
Maximum reach	7,15 m	8,5 m
Lifting torque, gross	63 kNm	63 kNm
Lifting torque (190 bars)	56 kNm	56 kNm
Telescope boom length	1,95 m	3,3 m
Slewing cylinder quantity	4 pcs	4 pcs
Slewing torque	17 kNm	17 kNm
Working pressure	215 bar	215 bar
Rotator maximum load	50 kN(FL)	50 kN(FL)
FITS TRAILERS	9S; 10D; 13D; 10U; 13U; MWD 3.2	9S; 10D; 13D; 10U; 13U; MWD 3.2

\* Detailed info on additional equipment and combinability possibilities can be found on the last pages of the catalogue. In case of additional questions contact your local PALMS dealer.

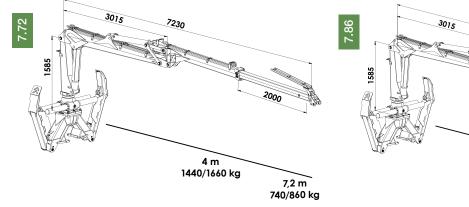
# FORESTRY CRANES – 7<sup>TH</sup> SERIES / 7.72; 7.86; 7.94

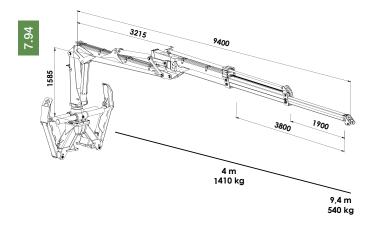
**7<sup>TH</sup> SERIES** cranes are for serious everyday forestry work. These top models accumulate all our knowledge of the past decades. In addition to our larger trailers, these cranes can be placed on chippers, or mounted directly on the tractor frame.

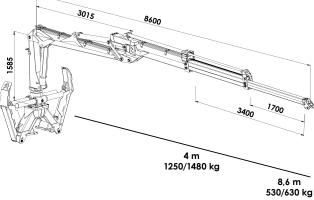
	PALMS 7.72	<b>PALMS</b> 7.86	PALMS 7.94
Maximum reach	7,2 m	8,6 m	9,4 m
Lifting torque, gross	83 kNm	83 kNm	83 kNm
Lifting torque (190 bars)	74 kNm	74 kNm	-
Telescope boom length	2,0 m	3,4 m	3,8 m
Slewing cylinder quantity	4 pcs	4 pcs	4 pcs
Slewing torque	21 kNm	21 kNm	21 kNm
Working pressure	215 bar	215 bar	215 bar
Rotator maximum load	60 kN(FL)	60 kN(FL)	60 kN(FL)
FITS TRAILERS	13D; 10U; 13U; MWD 3.2	13D; 10U; 13U; MWD 3.2	13D; 10U; 13U; MWD 3.2

\* Detailed info on additional equipment and combinability possibilities can be found on the last pages of the catalogue. In case of additional questions contact your local PALMS dealer.









## TUNING HOUSE DESIGN

The slewing mechanism is the heart of the crane. The fifth generation crane models are equipped with an improved cast iron turning house, which is even more durable than the previous model. Improved turning houses are used on 2nd, 5th and 7th series cranes.

# TRAILERS



PALMS trailer model names refer to frame type (indicated by letter) and nominal loading capacity (indicated by number).

S – Single beam trailer
 D – Double beam trailer
 U – Unibody type trailer
 MUD – Mechanical 4WD
 HMUD – Hydro mechanical 4WD



is a double beam trailer with a nominal loading capacity of 10 000 kg.

\*The actual loading capacity depends on the additional equipment and installed crane.

# HD HEAVY DUTY

Heavy Duty indicates, that the product is one of the most advanced and capable forestry machines of the series.

# FORESTRY TRAILERS - S-SERIES / 6S, 7SX, 8SX, 9S

S-SERIES forestry trailers are light and compact. The gross weight of the trailer depends on the model, between 8.5–12 tons. Single beam trailers are suitable for 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> series cranes.

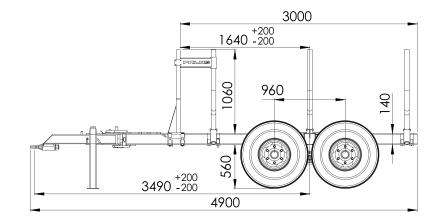
# $\bigcup_{LOAD} \stackrel{\text{INCREASED}}{\text{LOAD AREA}}$

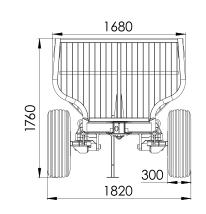
When it comes to forestry trailers, the load area becomes more important than loading capacity. A larger load area means that you can fit more logs onto the trailer.

## As an extra option we provide:

- bolster extensions
- loading area widening system on U-type and MWD 3.2 trailers.



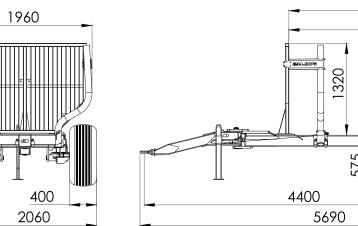


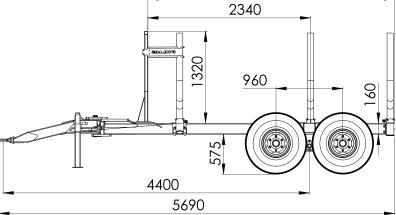


6S

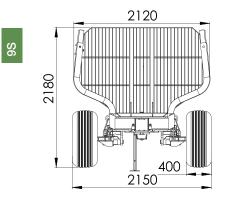
8SX

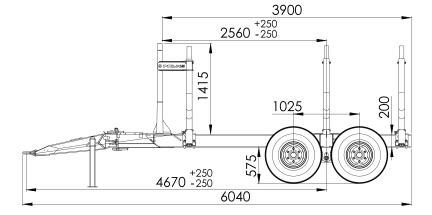
2060





3550





	PALMS 6S	PALMS 7SX	PALMS 8SX	PALMS 9S
Gross weight	8000 kg	9000 kg	10 000 kg	12 000 kg
Curb weight	815 kg	1060 kg	1140 kg	1375 kg
Chassis	140 x 140 x 6 mm	160 x 160 x 6 mm	160 x 160 x 8 mm	200 x 200 x 8 mm
Load area cross-section	1,5 m <sup>2</sup>	1,7 m <sup>2</sup>	2,0 m <sup>2</sup>	2,25 m <sup>2</sup>
Max crane size by lifting torque	32 kNm	42 kNm	47 kNm	65 kNm
Drawbar control cylinders, standard / (optional)	1/(0) pcs	1 pcs	2 pcs	2 pcs
Frame extension length (optional)	-	0,52 m	0,61 m	0,7 m
FITS CRANES	2.50; 2.54	2.50; 2.54; 3.67	3.67; 4.70	3.67; 4.70; 5.72; 5.85

\* Detailed info on additional equipment and combinability possibilities can be found on the last pages of the catalogue. In case of additional questions contact your local PALMS dealer. Final dimensions and weights might be different depending on the equipment level.

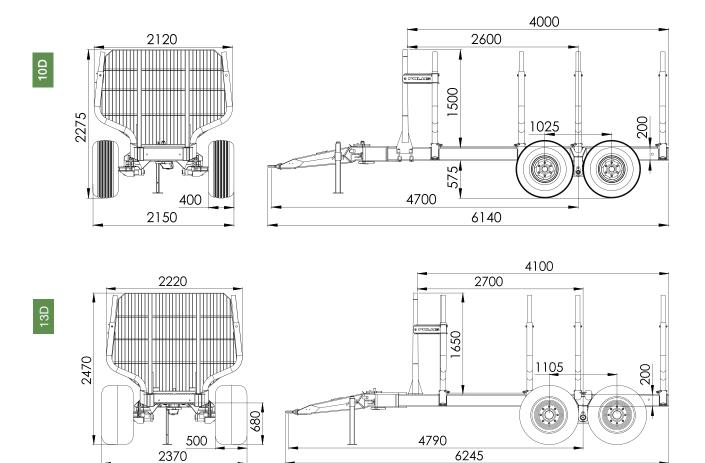
# FORESTRY TRAILERS - D-SERIES / 10D; 13D

**D-SERIES** trailers have a strong double beam frame design that provides large loading capacity. These trailers can be combined with 3rd, 4th, 5th and 7th series cranes.

## LOCKABLE BOLSTERS (PATENT EP 3284659)

PALMS engineers have created and patented a unique locking system for bolsters. The bolsters are locked quickly and securely into their sockets. No tools are required for attaching the bolsters to the trailer. The innovation is standard equipment for 9S, 10D, 13D, 15D, 10U and 13U trailers.





	PALMS 10D	PALMS 13D
Gross weight	13 000 kg	16 000 kg
Curb weight	1570 kg	2000 kg
Chassis	2 x 200 x 100 x 8 mm	2 x 200 x 120 x 8 mm
Load area crosssection	2,4 m <sup>2</sup>	2,85 m²
Max crane size by lifting torque	75 kNm	85 kNm
Drawbar control cylinders	2 pcs	2 pcs
Frame extension length (optional)	0,85 m	0,85 m
FITS CRANES	4.70; 5.72; 5.85	4.70; 5.72; 5.85; 7.72; 7.86

\* Detailed info on additional equipment and combinability possibilities can be found on the last pages of the catalogue. In case of additional questions contact your local PALMS dealer. Final dimensions and weights might be different depending on the equipment level.



# FORESTRY TRAILERS - U-SERIES / 10U; 13U

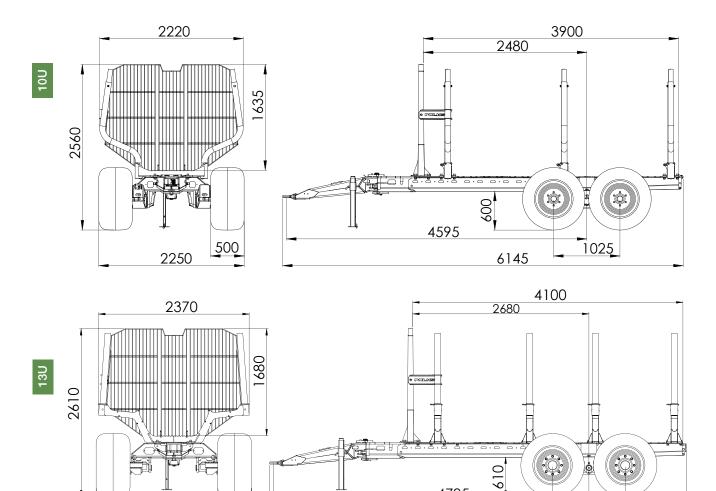
**U-SERIES** trailers are designed for heavy logging. Thanks to the strong unibody design, these work horses are durable and capable of bearing really heavy loads. StrenxTM" steel allows PALMS to offer a unique combination of trailer key features, like light weight and durability. U-series trailers are available with regular bolsters and forwarder type bolsters.



# FRAME

All trailers can be ordered with an option of extendable frame. The frames can be extended up to 1 m of extra length. Extensions are provided with and without bolsters and bunk. To provide maximum customizability, the trailer has multiple bolster locking positions.





4795

6335

PALMS 10U PALMS 13U **Gross weight** 14 000 kg 17 000 kg Chassis unibody unibody Load area 2,6 m<sup>2</sup> 3,0 m<sup>2</sup> cross-section Max crane size by 85 kNm 85 kNm lifting torque Drawbar control 2 pcs 2 pcs cylinders Frame extension 0,99 m 0,99 m length (optional) 4.70; 5.72; 4.70; 5.72; **FITS CRANES** 5.85; 7.72; 5.85; 7.72; 7.86; 7.94 7.86; 7.94

2370

500

\* Detailed info on additional equipment and combinability possibilities can be found on the last pages of the catalogue. In case of additional questions contact your local PALMS dealer. Final dimensions and weights might be different depending on the equipment level.



1105

# FORESTRY TRAILERS - MWD 3.2 / MWD 3.2; HMWD 3.2

After serious tests in the forest PALMS proudly presents **MWD-SERIES** forestry trailers. Thanks to the mechanical 4-wheel drive, this bad boy gets you through the hardest conditions. This professional trailer has NAF axles and is available with mechanical (MWD), or hydro-mechanical (HMWD) drives.

# HEAVY DUTY



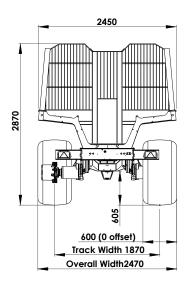


You can choose between two different 4WD systems:

• Fully mechanical MWD 3.2 needs a customized transmission box between the tractor's ground speed PTO and trailer axles. Therefore, the MWD 3.2 can only be used with tractor for which this trailer has been designed.

• **Hydro mechanical HMWD 3.2** has a hydro mechanical transmission, between the tractor's PTO and axles. This 4x4 system is universal and fits onto all suitable sized tractors with PTO.

#### MWD 3.2; HMWD 3.2



Short

Α

В

С

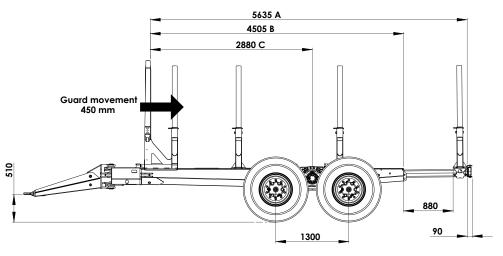
D

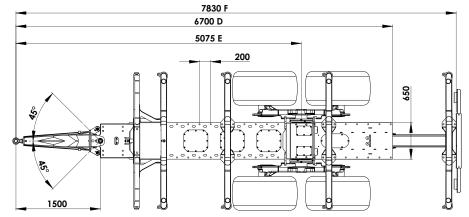
Е

F

Standard

Long





	PALMS MWD 3.2	PALMS HMWD 3.2
Gross weight	18 000 kg	18 000 kg
Curb weight	4020 kg	4100 kg
Chassis	unibody	unibody
Load area cross section	3,2 m <sup>2</sup>	3,2 m <sup>2</sup>
Load area wideners	2 x 300 mm will increase LACS by 0,66 m², total 3,86 m²	2 x 300 mm will increase LACS by 0,66 m², total 3,86 m²
Max crane size by lifting torque	100 kNm	100 kNm
Drawbar control cylinders	2 pcs	2 pcs
Lenghts of loading areas	4,1 m / 4,5 m / 4,65 m + extension up to 1 m	4,1 m / 4,5 m / 4,65 m + extension up to 1 m
Y-drawbar option	yes	yes
Trailer pushing power	max 75 kN	max 60 kN
Tyres	Standard 600/50/22,5 Nokia Forest Optional 710/40/22,5	Standard 600/50/22,5 Nokia Forest Optional 710/40/22,5
Driving speed	max 10km/h with traction max 40km/h without traction	max 5 km/h with traction max 40 km/h without traction
FITS CRANES	4.70; 5.72; 5.85; 7.72; 7.86; 7.94	4.70; 5.72; 5.85; 7.72; 7.86; 7.94

\* Detailed info on additional equipment and combinability possibilities can be found on the last pages of the catalogue. In case of additional questions contact your local PALMS dealer. Final dimensions and weights might be different depending on the equipment level.

# **ADDITIONAL EQUIPMENT**

CRANES	2.50	2.54	3.67	4.70	5.72	5.85	7.72	7.86	7.94
Maximum reach, m	5	5,4	6,7	7	7,15	8,5	7,2	8,6	9,4
Lifting torque, gross kNm	26	26	41	47	63	63	83	83	83
Lifting torque by 190 bars, kNm	-	-	-	-	56	56	74	74	-
Lifting capacity at 4 m without grapple and rotator, kg	530	530	820	940	1240	1220	1660	1480	1410
Lifting capacity at full reach without grapple and	070	070	400	400	710	500	060	600	E 40
rotator, kg	370	370	430	480	710	520	860	630	540
Lifting capacity by 190 bars at 4 m without grapple and rotator, kg	-	-	-	-	1100	1050	1440	1250	-
Lifting capacity by 190 bars at full reach without grapple and rotator, kg	-	-	-	-	620	450	740	530	-
Telescopic boom stroke length	1,33	1,33	1,85	1,85	1,95	3,3	2	3,4	3,8
Slewing cylinder amount	4	4	4	4	4	4	4	4	4
Slewing torque, kNm	7,8	7,8	12	15	17	17	21	21	21
Working pressure, bar	190	190	190	190	215	215	215	215	215
Rotator maximum load, kN	30	30	30	45	55	55	60	60	60
Crane weight without support leg & valve block	390	400	620	710	820	900	1160	1280	1310
Pillar slewing angle, °	370	370	370	370	380	380	380	380	380
Recommended oil flow, L/min	20-35	20-35	30-45	45-70	50-90	50-90	60-120	60-120	60-120
CONTROL VALVES			•				•	•	
6/8 XY control valve, A3	+	+	+	+	_	_	_	_	_
4/8 XY+2x el.on-off valve, A4	+		+	+	+	+	+	+	_
4/8 XYZ control valve, A7		+							
,	+	+	+	+	+	+	+	+	
2/8 Pre-hydraulic,+2x el.propo Parker P70, A11	-	-	+	+	+	+	+	+	+
2/8 Pre-hydraulic, +2x el.propo, A12	-	-	+	+	+	+	+	+	+
2/8 Pre-hydraulic, +2x el.propo, Parker P70, A14	-	-	-	+	+	+	+	+	+
Propo el, Walvoil joysticks, Parker P70, A19	-	-	+	+	+	+	+	+	+
Propo el, Walvoil joysticks Parker L90 LS, A21	-	-	-	+	+	+	+	+	+
Propo el, display+ministick, Parker L90, A25	-	-	-	+	+	+	+	+	+
Radio control, A26	-	-	-	+	+	+	+	+	+
PALMS Tip Control Parker Mini Jstx L90, A41	-	-	-	-	-	-	-	+	+
SUPPORT LEGS		4	1			L	1	1	
A-type support legs	+	+	+	+	+	+	-	-	-
FD-type support legs	+	+	+	+	+	+	+	+	+
GRAPPLES									
Grapple C02	+	+	+	_	-	-	-	-	-
Grapple C1	+	+	+	+	+	+	-	-	-
Grapple C3	-	-	+	+	+	+	+	+	+
Grapple C5	-	-	-	-	+	+	+	+	+
Energy wood grapple C6	-	-	-	-	+	+	+	+	+
Energy wood grapple C7	-	-	-	-	+	+	+	+	+
OTHER EXTRAS			•			•		•	
Radio-controlled winch	+	+	+	+	+	+	+	+	+
Joystick holders	+	+	+	+	+	+	+	+	+
LED-work lights	+	-	+	+	+	+	+	+	+
Operator seat on boom	-	-	-	+	+	+	+	+	+
Oil cooling kit	-	-	+	+	+	+	+	+	+
Electronic floating position for lifting and slewing	+	+	+	+	+	+	+	+	+
Valve block attached to main beam	-	-	+	+	+	+	+	+	+
Slewing gear hydraulic damping	-	-	-	+	+	+	+	+	+
Slewing gear and lifting cylinder hydraulic damping	-	-	-	+	+	+	+	+	+
High-pressure oil filter	+	+	+	+	+	+	+	+	+
Rotator double brake	+	-	+	+	+	+	+	+	+

\*Final dimensions and weights might be different depending on equipment level.

TRAILERS	6S	7 <b>SX</b>	8SX	9S	10D	13D	10U	13U	MWD 3.2
Gross weight, kg	8000	9000	10000	12000	13000	16000	14000	17000	18000
Curb weight (without options), kg	815	1060	1140	1375	1570	2000	1850	2000	4020
Total length. mm	4900	5550	5690	6040	6140	6240	6145	6335	6700
Width with standard wheels, mm	1820	1990	2060	2150	2150	2360	2220	2360	2510
Standard wheel size	11,5/80-15,3	400/60-15,5	400/60-15,5	400/60-15,5	400/55-22,5	500/50-17	400/55-22,5	500/50-17	600x50x22,5
Load area cross-section, m <sup>2</sup>	1,5	1,7	2,0	2,25	2,4	2,85	2,6	3,0	3,2
Load area length mm	3000	3400	3550	3900	4000	4100	3900	4100	4090
Chassis, mm	140x140	160x160	160x160	200x200	2x200x100	2x200x120	unibody	unibody	unibody
Bolster pairs standard	3	3	3	3	3	3	3	3	4
2WD-hub motor drive	-	-	-	+	+	+	+	+	-
4WD-roller drive	-	-	-	+	+	+	+	+	-
Hydraulic brakes	+	+	+	+	+	+	+	+	+
Air brakes	+	-	+	+	+	+	+	+	+
Drawbar control cylinders standard / (optional), pcs	1/(0)	1	2	2	2	2	2	2	2
Max crane size by lifting torque, kNm	32	42	47	65	75	85	85	85	100
Frame extension length (optional), m	-	0,52	0,61	0,70	0,85	0,85	0,99	0,99	0,9
WHEELS	<u>.</u>	<u>.</u>	1		L	L	1		
Wheels 11,5/80-15,3	+	+	+	-	-	-	-	_	-
Wheels 400/60-15,5 RF-rim	+	+	+	+	+	_	-	-	-
Wheels 480/45-17 RF-rim	_	_	+	+	+	_	+	_	_
Wheels 500/50-17 RF-rim	_	_	-	+	+	+	+	+	_
Wheels 400/55-22,5 RF-rim	-	_	-	+	+	_	+	-	-
Wheels 500/50-22,5 RF-rim	-	-	-	-	-	+	-	+	-
Wheels 550/45-22,5 RF-rim	_	_	-	_	_	+	_	+	_
Wheels 600/50-22,5 RF-rim	_	_	-	_	_	+	_	+	+
Wheels 710/40-22,5 RF-rim	-	-	-	-		-	-	-	+
HYDRAULICS	L	L	L	L	L	L	L		
Piston pump on trailer drawbar	-	+	+	+	+	+	+	+	-
Piston pump with multiplier for PTO	_	+	+	+	+	+	+	+	+
Piston pump with multiplier on drawbar	-	+	+	+	+	+	+	+	+
Variable pump on drawbar	-	+	-	+	+	+	+	+	+
Tank, 100l	-	+	+	+	+	+	+	+	+
Tank, 100I filled with HVLP oil	-	+	+	+	+	+	+	+	+
OTHER ADDITIONAL EQUIPM			i			·	L		
Tail lights	+	+	+	+	+	+	+	+	+
Support links for first bolster pair	-	+	+	+	+	+	+	+	-
Additional bolsters	+	+	+	+	+	+	+	+	-
Bolster extensions	-	-	-	+	+	+	+	+	+
Frame extension	+	+	+	+	+	+	+	+	+
Operator work platform on drawbar	-	+	+	+	+	+	+	+	-
Base frame for sorting	_	_	+	+	+	+	+	+	+

					CRANE	S				
		2.50	2.54	3.67	4.70	5.72	5.85	7.72	7.86	7.94
S	6S	+	+	-	-	-	-	-	-	-
СС Ш	7SX	+	+	+	-	-	-	-	-	=
	8SX	-	-	+	+	-	-	-	-	=
<b>A</b>	98	-	-	+	+	+	+	-	-	-
Ĕ	10D	-	-	+	+	+	+	-	-	=
	13D	-	-	-	+	+	+	+	+	+
	10U	-	-	-	+	+	+	+	+	+
	13U	-	-	-	+	+	+	+	+	+
	MWD 3.2	-	-	-	-	+	+	+	+	+

# ADDITIONAL EQUIPMENT / Incomplete selection of equipment on photos

#### **CONTROL VALVES**



Mechanical 5/7 XY, A3







Mechanical 4/8 XYZ, A7

Pre-hydraulic 2/8 withhydraulic + 2x el. propo, A11; A12; A14

Electric Parker IQAN mini, A25



Hydraulic 4/8 XY + pre-control 2x el. on-off, A4



Propo A19/A21



Electric radio control, A26





## **ADDITIONAL EQUIPMENT**



PALMS 4 WD (roller drive between wheels)



Radio-controlled winch



Support links for first bolster pair

#### **ADDITIONAL EQUIPMENT** .





Top seat



Working platform with ladder



Joystick holders



LED-work lights



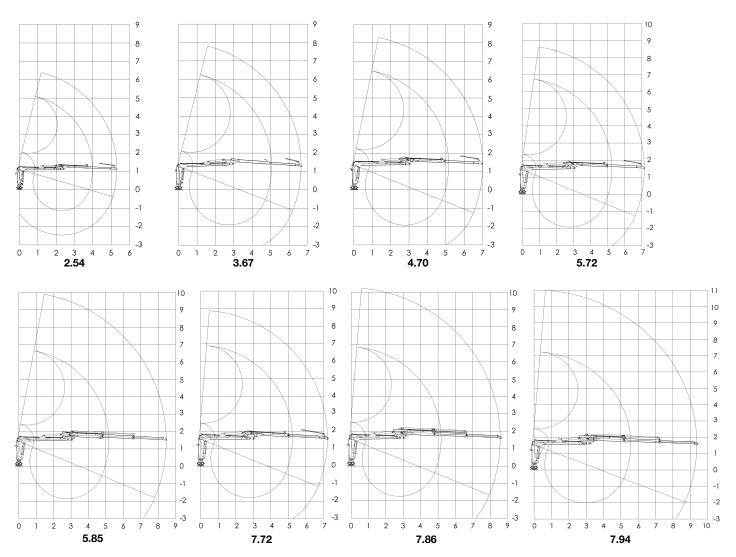
**Rear lights** 



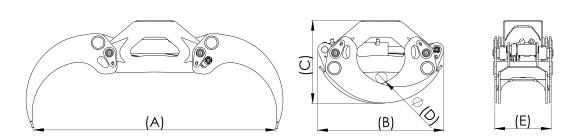
Base frame for sorting

# **ADDITIONAL EQUIPMENT**

## **LIFTING DIAGRAMS**



GRAPPLES



	MASS (kg)	AREA (m²)	DIMENSION A (mm)	DIMENSION B (mm)	DIMENSION C (mm)	DIMENSION D (mm)	DIMENSION E (mm)
PALMS C02	69	0,15	1040	670	410	60	305
PALMS C1	88	0,18	1230	690	480	80	315
PALMS C3	114	0,23	1465	760	500	69	340
PALMS C5	148	0,265	1400	800	580	80	380
Palms C6 energywood	127	0,21	1475	760	500	60	370
Palms C7 energywood	148	-	1400	800	580	-	380
Cutting head Nisula 175E	183	-	765	680	760	-	520
Gravel bucket GB3	81	0,36 / 200	1520	930	843	-	574





# Palmse Mehaanikakoda LLC

Võsupere küla, Vihula vald 45202, Lääne-Virumaa, Estonia **Tel:** (+372) 3255 375 **Fax:** (+372) 3255 378 E-mail: info@palms.eu

Sales and info Tel: (+372) 3255 375 Production

**Spare Parts** Tel: (+372) 3255 376 Tel: (+372) 3255 508

