



PALMSE TRAILER PRODUCT CATALOGUE

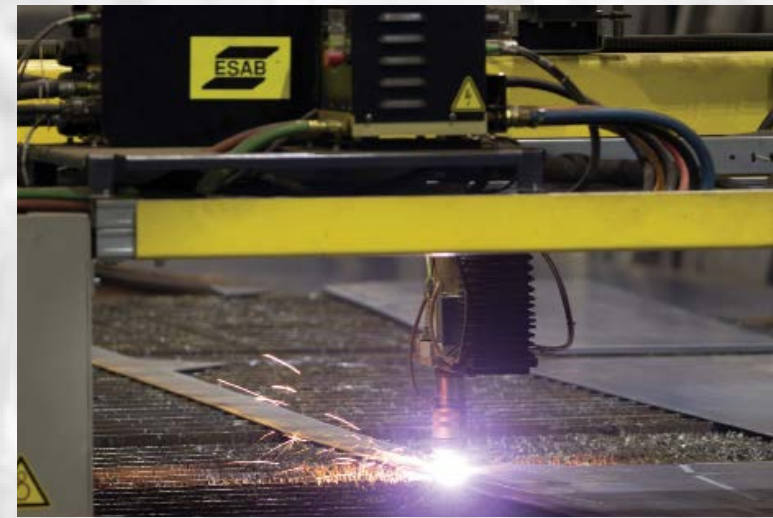
Tips for choosing a trailer

When choosing a trailer, one should ask the following questions:

1. with what kind of tractor will the trailer be used (capacity, tractor type)?
2. what materials will mainly be transported?
3. how long will the distances be?
4. what kind of ground will the trailer mainly be used on?
5. how will the trailer be loaded, and what are the maximum lifting heights for existing equipment?
6. are there any special conditions? If so, what are they (such as the height of the warehouse door through which the trailer must fit, or the height of the ceiling in the room in which the trailer will be used when in a tilted position)?



We respect traditions and family values, and we wish to offer our customers the same. We are confident that reliable machines and a trustworthy cooperation partner make it possible for our customers to enjoy quality time with their family and friends.



Dear reader!

You are holding the product catalogue of one of our region's largest manufacturers of agricultural trailers, Palmse Trailer, which introduces our product range.

Palmse Metall OÜ is an Estonian manufacturing company and the owner of the Palmse Trailer trademark. We have been producing trailers in Estonia since 2005, and continuous development activities continue both to expand the model range and to improve product features. We are pleased that our effort to improve quality has now been also recognized by ISO 9001 certificate. We have also steadily increased our production base, and in 2022 plan to expand the area to almost 10,000 m². In addition to the premises, we consistently invest in our production capacity – Palmse Trailer is, to our knowledge, one of the only trailer manufacturers in the region to assemble both boxes and chassis of dumper trailers by robot welding. In addition, we have invested in a new laser cutter, which will help us to improve quality even more. In order to use more renewable energy, we set up a

park of solar panels next to the production buildings. The Palmse Trailer model selection includes dumper, platform, grain, animal, machinery and container trailers. Since 2022, a conveyor belt dumper trailer is added to our production list. In our various product groups, you can find reliable tractor trailers for cattle breeders, grain growers as well as road construction and utility companies. Our products are characterized by excellent value for money, durability, simplicity and functionality. Nine out of ten trailers are sold outside Estonia. Our trailers are highly valued by farmers in Scandinavia, Iceland, other Baltic countries and Central European countries such as Germany, Poland, the Czech Republic, Slovakia, Austria and Switzerland.

Palmse Trailer - a brand you can trust.



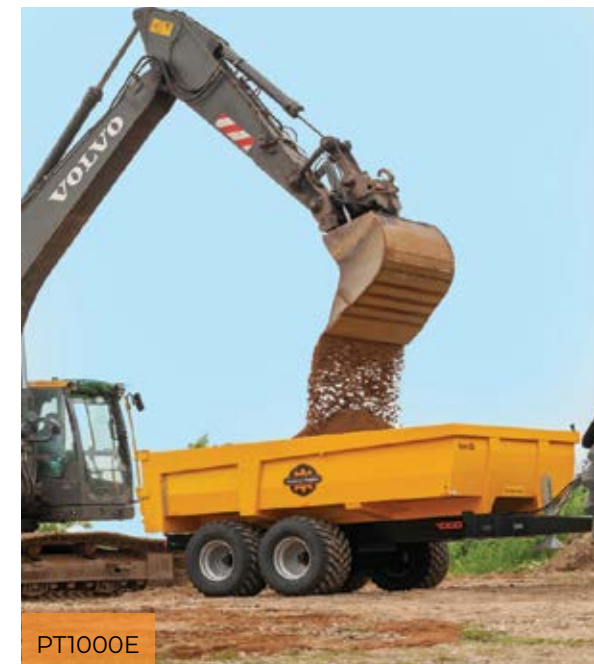
Palmse Trailer –
reliable partner in
the farm or in the
road construction

“



Lightweight dumper trailers

This trailer class includes models with a load capacity of 3.5 to 10 tons, and a capacity of 2.7 to 6.9m³. Trailers of this class are used primarily by utility and construction companies, but also by smaller agricultural entities and market gardens. Due to their small size and total mass, it is easy to manoeuvre such trailers, particularly in narrow conditions. We should also highlight the PT8610, which is a very practical solution for utility companies as it combines a dumper trailer and a crane. Due to that, it is possible to carry out most smaller-scale loading and transporting operations with only one machine and one driver.



	PT350-P	PT350-D	PT600	PT700	PT800	PT1000	PT1000E	PT1000E-1A	PT8610
Length (mm) (With HSD01)	4350	4350	5332 (5476)	5332 (5476)	5332 (5476)	5685 (5829)	5685 (5829)	5685 (5829)	6220
Width (mm)	1880	1840	2215	2215	2215	2550	2550	2550	2550
Height (mm)	1620	1480	1650	1720	1628	1900	1900	2050	1900 (2700)
Internal measurements (mm)	3000x1732x520	3000x1720x550	3680x2080x550	3680x2080x550	3680x2080x550	3970x2310x750	3970x2380x750	3970x2380x750	3970x2310x750
Capacity (m ³)	2,7	2,84	4,2	4,2	4,2	6,9	7,1	7,1	6,9
Capacity with extensions (m ³)	-	-	-	-	-	13,3	13,7	13,7	-
Empty weight (kg)	830	740	1390	1450	1720	2350	2550	2670	2600 (3420)
Max load capacity (kg)	3500	3500	6000	7000	8000	10000	10000	10000	8000
Total weight (kg)	4330	4240	7390	8450	9720	12350	12550	12670	10600
Max hitch load (kg)	1500	1500	1600	1600	1600	1800	1800	1800	2500
Axle sum	1	1	1	1	2	2	2	1	2
Permissible axle load (kg)	2830	2740	5790	6850	4060	5275	5375	10870	4050
Hub/axle, no. of bolts	70x70, 6	70x70, 6	70x70, 6	80x80, 8	70x70, 6	70x70, 6	70x70, 6	100x100, 8	70x70, 6
Suspension	-	-	-	-	Mechanical bogie	Mechanical bogie	Mechanical bogie	-	Mechanical bogie
Brake type; brakes on wheels	300x90; 0/2	300x90; 0/2	300x90; 0/2	300x90; 0/2	300x90; 0; 2/4	300x90; 0; 2/4	300x90; 0; 2/4	406x120 (412E); 2	300x90; 0; 2/4
Speed limit (km/h)	40	40	40	40	40	40	40	40	40
Oil volume for tipping (L)	1,8	1,8	9	9	9	12	12	12	12
Standard wheels	11,5/80-15,3	11,5/80-15,3	400/60-15,5	500/50-17	400/60-15,5	400/60-15,5	400/60-15,5	600/50-22,5	400/60-15,5

NEW! Palmse Trailer PT1610E-PS Pro Line

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New model! A road construction trailer with huge capability is ready to be at your service.

3xtreatment



reinforced profile: wear resistant steel



convertible backdoor with double cylinders



hang backdoor can be easily removed



all steel pipes for hydraulic fluids

side post construction is made of special steel

bigger brakes 300x135 (314E)



Universal dumper trailers

Universal dumper trailers can be used for almost all agricultural works. The load capacity of this class of trailer is between 13-19t, and their capacity is 8.1-10.2m³. By adding extensions, the capacitance can be nearly doubled. Without extensions, the loading threshold is 1.9-2.31 meters from the ground, thanks to which loading materials into the box is more convenient. The sides and bottom of the trailer's box have welded seams, which makes it possible to

choose the materials of the box according to the purpose of the trailer. For example, it is possible to construct a box that has a Hardox or Raex steel bottom and ordinary steel side boards. It is also possible to use different thicknesses of steel on the bottom and sides. Adding extensions to the box makes it suitable for transporting materials with a smaller specific weight but a greater volume (such as grain, silage).



PT1300



PT1600



MECHANICAL BOGIE



SPRING BOGIE

	PT1300MB	PT1300SB	PT1300E	PT1600MB	PT1600SB	PT1610E-PS-K80	PT1610E-PS-TE50	PT1900MB	PT1900SB	PT2214
Length (mm) (With HSD01)	6375 (6519)	6375	6375 (6519)	6970	6970	6375	6375	7439	7439	8850
Width (mm)	2550	2550	2550	2550	2550	2550	2550	2550	2550	2530
Height (mm)	1900	2020	1900	2170	2285	2080	2080	2300	2310	2300
Internal measurements (mm)	4670x2310x750	4670x2310x750	4670x2380x750	5250x2310x750	5250x2310x750	4670x2380x900	4670x2380x900	5530x2310x800	5530x2310x800	7370x2310x800
Capacity (m ³)	8,1	8,1	8,3	9,1	9,1	10	10	10,2	10,2	13,62
Capacity with extensions (m ³)	15,6	15,6	16,1	17,6	17,6	-	-	21,7	21,7	-
Empty weight (kg)	2800	3090	2980	3650	4300	4000	4000	4400	5050	6330
Max load capacity (kg)	13000	13410	13000	16000	16000	16000	15000	19000	19000	22000
Total weight (kg)	15800	16500	15980	19650	20300	20000	19000	23400	24050	28330
Max hitch load (kg)	2600	2650	2600	3170	3170	4000	3000	3500	3500	3500
Axle sum	2	2	2	2	2	2	2	2	2	3
Permissible axle load (kg)	6600	6925	6690	8240	8565	8000	8000	9950	10275	8633
Hub/axle, no. of bolts	80x80, 8	80x80, 8	80x80, 8	90x90, 8	100x100, 8	90x90, 8	90x90, 8	100x100, 10	100x100, 10	100x100, 10
Suspension	Mechanical bogie	Spring bogie	Mechanical bogie	Mechanical bogie	Spring bogie	Parabolic springs	Parabolic springs	Mechanical bogie	Spring bogie	Parabolic springs
Self steering axles/rear axle block	-	-	-	-	-	-	-	-	-	Front and rear/+
Brake type; brakes on wheels	300x90; 0; 2/4	350x90 (359E) 2/4	300x90; 0; 2/4	350x90 (359E); 2/4	406x120 (412E); 4	300x135 (314E), 4	300x135 (314E), 4	400x80 (408E), 4	406x120 (412E), 4	400x80 (408E), 6
Speed limit (km/h)	40	40	40	40	40	< 60 (Airbr)	< 60 (Airbr)	40	40	40
Oil volume for tipping (L)	15	20	15	30	30	30	30	30	30	40



The centre of gravity for fully-loaded bulk trailers is relatively high, which sets high requirements for the suspension of the trailer to ensure efficient and safe operation. This is why we offer models with a standard bogie as well as models with a spring bogie.

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Bulk-dumper trailers

Bulk trailers are meant for transporting products with a very large volume, but a smaller specific weight. Our product selection contains bulk trailers with a load capacity of 10-19t, and a capacity of 11 to 21.6m³. Bulk trailers can also be supplemented with extensions, thereby increasing the capacity of the transport compartment to up to 33.7m³. Depending on the model, the transport compartment can be further increased by mounting an optional volume backdoor. Bulk trailers are used mainly for transporting materials with a smaller specific weight, such as silage grain, wood chips, grain, etc. Since the centre of gravity for a fully loaded bulk trailer is relatively high, the trailer's suspension plays an important role in ensuring an efficient and safe operation. That is the reason why our selection includes models with regular and spring bogies.

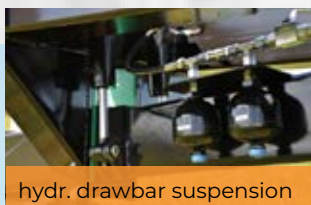
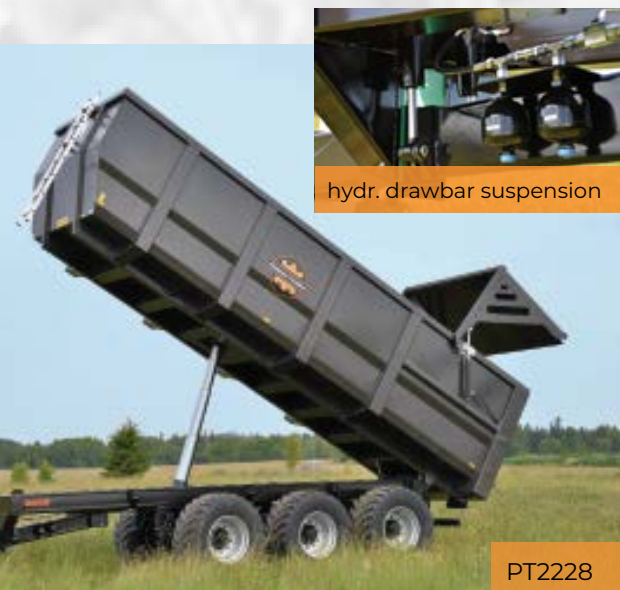


PT1011



PT1922L-SB

	PT1011	PT1217	PT1317SB	PT1620MB	PT1620SB	PT1620L-MB	PT1620L-SB	PT1920MB	PT1920SB	PT1922L-MB	PT1922L-SB
Length (mm)	5332	6375	6375	6970	6970	7560	7560	7439	7439	7550	7550
Width (mm)	2215	2550	2550	2550	2550	2550	2550	2550	2550	2550	2550
Height (mm)	2528	2750	2900	3020	3135	2870	2985	3100	3185	3100	3185
Internal measurements (mm)	3680x2080x1450	4670x2310x1600	4670x2310x1600	5250x2310x1600	5250x2310x1600	5830x2310x1450	5830x2310x1450	5530x2310x1600	5530x2310x1600	5830x2310x1600	5830x2310x1600
Capacity (m ³), ()-with volume backdoor	11	17,2	17,2	19,4	19,4	19,5	19,5	20,4 (22,1)	20,4 (22,1)	21,6 (23,3)	21,6 (23,3)
Capacity with ext. (m ³), ()-with volume backdoor	-	-	-	30,3	30,3	32	32	32 (34,7)	32 (34,7)	33,7 (36,4)	33,7 (36,4)
Empty weight (kg)	2200	3350	3640	4350	4900	4450	4950	5100	5750	5250	5900
Max load capacity (kg)	10000	12000	12860	16000	16000	16000	16000	19000	19000	19000	19000
Total weight (kg)	12200	15350	16500	20350	20900	20450	20950	24100	24750	24250	24900
Max hitch load (kg)	1700	2700	2650	3500	3500	3500	3500	3500	3500	3500	3500
Axle sum	2	2	2	2	2	2	2	2	2	2	2
Hub/axle, no. of bolts	70x70, 6	80x80, 8	80x80, 8	90x90, 8	100x100, 8	90x90, 8	100x100, 8	100x100, 10	100x100, 10	100x100, 10	100x100, 10
Suspension	Mechanical bogie	Mechanical bogie	Spring bogie	Mechanical bogie	Spring bogie	Mechanical bogie	Spring bogie	Mechanical bogie	Spring bogie	Mechanical bogie	Spring bogie
Brake type; brakes on wheels	300x90; 0/2/4	300x90; 0/2/4	350x90 (359E); 2/4	350x90 (359E); 2/4	406x120 (412E); 4	350x90 (359E); 2/4	406x120 (412E); 4	400x80 (408E); 4	406x120 (412E); 4	400x80 (408E); 4	406x120 (412E); 4
Speed limit (km/h)	40	40	40	40	40	40	40	40	40	40	40
Oil volume for tipping (L)	9	15	20	30	30	30	30	30	30	30	30
Standard wheels	400/60-15,5	500/50-17	500/50-17	550/45-22,5	550/45-22,5	550/45-22,5	550/45-22,5	600/50-22,5	600/50-22,5	600/50-22,5	600/50-22,5



hydr. drawbar suspension



rear axle block



self-steering axles

Large bulk-dumper trailers

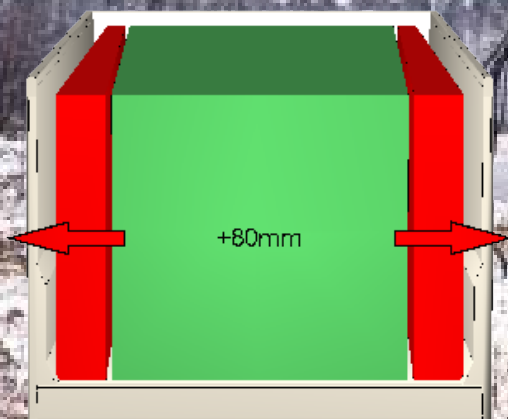
This product class includes trailers with a great capacitance and load capacity, which are generally used in large farms. The load capacity of these trailers remains 17-22t, and the capacitance of boxes is up to 27.2m³, which can be increased even up to 42.6m³ by adding extensions. This, in turn, means that these trailers must be able to carry very large volumes and axle loads on a daily basis. For the sake of long and trouble-free operations, we offer a rear axle block, parabolic spring suspension, and hydraulic drawbar suspension in this class. To reduce the turning radius and improve manoeuvrability, trailers from 20t of this class have steerable axles - a rear axle if the trailer has two axles, and front and rear axles if the trailer has three axles.

	PT1725K-SB	PT2021	PT2023	PT2221	PT2223	PT2226	PT2228
Length (mm)	8105	8085	8085	8085	8085	8850	8850
Width (mm)	2550	2530	2530	2530	2530	2530	2530
Height (mm)	3135	3060	3210	3005	3155	3040	3190
Internal measurements (mm)	6870x2310-2230x1600	6170x2310x1450	6170x2310x1600	6170x2310x1450	6170x2310x1600	7370x2310x1450	7370x2310x1600
Capacity (m ³), ()-with volume backdoor	25	20,7	22,8 (24,5)	20,7	22,8 (24,5)	24,7	27,2 (28,9)
Capacity with extensions (m ³), ()-with volume backdoor	40	33,5	35,6 (38,3)	33,5	35,6 (38,3)	40	42,6 (45,3)
Empty weight (kg)	6750	5850	5950	6250	6352	6751	6900
Max load capacity (kg)	17000	20000	20000	22000	22000	22000	22000
Total weight (kg)	23750	25850	25950	28250	28352	28751	28900
Max hitch load (kg)	3000	3500	3500	3500	3500	3500	3500
Axle sum	2	2	2	3	3	3	3
Max axle load (kg)	10375	11175	11225	8250	8284	8417	8467
Hub/axle, no. of bolts	100x100, 10	100x100, 10	100x100, 10	100x100,	100x100, 10	100x100, 10	100x100, 10
Suspension	Spring bogie	Tandem parabolic	Tandem parabolic	Tridem parabolic	Tridem parabolic	Tridem parabolic	Tridem parabolic
Self steering axles	-	Rear	Rear	Front and rear	Front and rear	Front and rear	Front and rear
Rear axle block	In standard	In standard	In standard	In standard	In standard	In standard	In standard
Brake type; brakes on wheels	406x120 (412E), 4	406x120 (412E), 4	406x120 (412E), 4	400x80 (408E), 6	400x80 (408E), 6	400x80 (408E), 6	400x80 (408E), 6
Speed limit (km/h)	40	40	40	40	40	40	40
Oil volume for tipping (L)	48	40	40	40	40	45	45
Standard wheels	600/50-R22,5	600/55-26,5	600/55-26,5	600/50-22,5	600/50-22,5	600/50-22,5	600/50-22,5

Designed primarily for silage transport, PT1725K has a conical box with a rear end that is 80mm wider than it is at the front. This way, the load can slide off the platform more easily when the box is tilted.

By adding extensions, the capacitance of large bulk-dumper trailers can be increased to more than 40m³.

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Container trailers

The container trailer system is at its most useful in operations during which the same base chassis is used for transporting different loads or if a low loading height is required. Container trailer systems are often used for the production of firewood or the transportation of machinery (loading a mini-excavator on a 1.5-metre-high trailer without a loading bay is very difficult). There are carrier boxes of various capacitances and different platform bases available for the container chassis. The load capacity of the chassis varies from 14 to 16.5 tons, and the length of boxes remains between four and six metres. Container trailers have a hydraulic blocking system on the rear axle which locks the axle, thereby making tilting and loading and unloading boxes more stable. The container trailer segment also includes the newest model ML414, with its chassis and mast construction, along with the geometry involved in loading and unloading the container, having been changed significantly, as a result of which the trailer's oil consumption levels have been reduced to 12.5l. In addition, the container and axle blocks are activated automatically according to the operation that is selected, which is why working with the ML414 is safer and quicker than with the previous model. Likewise, the main functions of the ML414 need only three hydraulic pairs on the tractor.



	ML414	ML414PS	ML115S	ML117S-SB
Chassis length (mm)	5624	5624	7500	7500
Width (mm)	2450-2550	2450-2550	2450-2550	2450-2550
Chassis height	2700	2700	2850	2950
Box length (mm)	4000-4500	4000-4500	5500-6000	5500-6000
Chassis weight (kg)	3000	3000	3880	4530
Max load capacity of chassis (kg)	14000	14000	16000	16500
Max tipping/exchanging capacity on hooklift (box included) (kg)	14000	14000	16000	16500
Total weight (kg)	17000	17000	19880	21030
Max hitch load (kg)	3000	2680	3170	3500
Axle sum	2	2	2	2
Max axle load (kg)	7000	7160	8355	8765
Hub/axle, no. of bolts	90x90, 8	90x90, 8	90x90, 8	100x100, 10
Suspension	Mechanical bogie	Tandem parabolic	Mechanical bogie	Spring bogie
Drawbar block	Optional	Optional	Optional	Optional
Rear axle block	In standard	In standard	In standard	In standard
Brake type; brakes on wheels	350x90 (359E); 4	300x135 (314E); 4	350x90 (359E); 4	406x120 (412E); 4
Speed limit (km/h)	30/40	< 60 (Airbr)	30/40	40
Oil volume for tipping (L)	12,5	12,5	22	22
Standard wheels	500/50-17	500/50R-17	550/45-22,5	600/50-R22,5

ML414



Mudguards over the wheels, 4 pcs



Handbrake with a crank



Boltable towing eye



Toolbox



Hydraulic block of the box



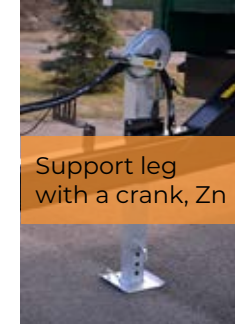
Side lights



Hydraulic support leg



Support leg with a crank, Zn



Valve between hook output and drawbar block



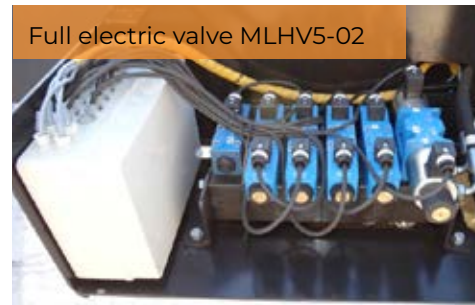
Hydraulic output on the hook



Front and rear mudguards



Full electric valve MLHV5-02



Rear working light



Container trailers

Hydraulic drawbar blocking

Thanks to hydraulic drawbar blocking, the trailer is secured to the tractor at two points. This distributes the trailer's load onto the tractor more evenly, and helps to prevent the tractor's wheels from being lifted off the ground.



A new, more efficient geometry

Thanks to the new construction being used in the ML414 model, we achieve the same lifting capacity when compared to the previous model by using 28% less power. This sets lower demands on the hydraulic system and delivers the greatest power in lifting stages where it is needed the most – in the upper and lower maximum, or so-called 'dead point'. Compared to its predecessor, the oil consumption levels for this model are reduced from 16 litres to 12.5 litres.



Safety valve

The new ML414 is supplied with safety valves, which prevent the operator from starting the container unloading when the container lock is activated. This makes the use of the trailer notably safer and helps to reduce damage that may be caused by the operator's lack of attention. Both main cylinders are supplied with double counterbalance valve which do not let the cylinders 'fall' in case of hose damage but ensure a slow and controlled drop. The main tipping cylinders have hydraulically integrated damping function on the lower end position. This improves the durability of the assemblies. All of the main cylinders have spherical self-aligning bearings and are lubricatable. All of the more important assembly joints have grease nipples and bronze bushings. Such an upgrade also makes it possible to manage with a smaller number of hydraulic outputs. Main functions such as tipping, loading and unloading the container (together with container and axle blocking) needs only three pairs of hydraulic outputs on the tractor. Additional functions such as the hydraulic control of the backdoor or drawbar block both need one extra pair.

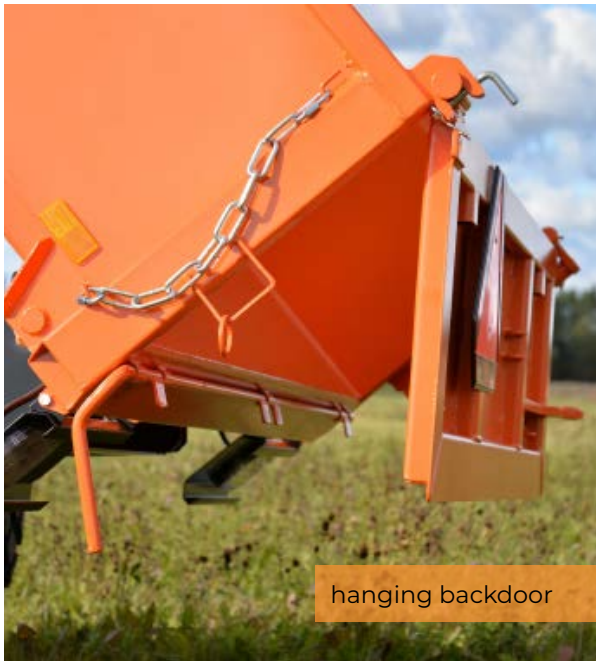


Before unloading the container, the container block must be deactivated. At the same time, the axle block is activated.

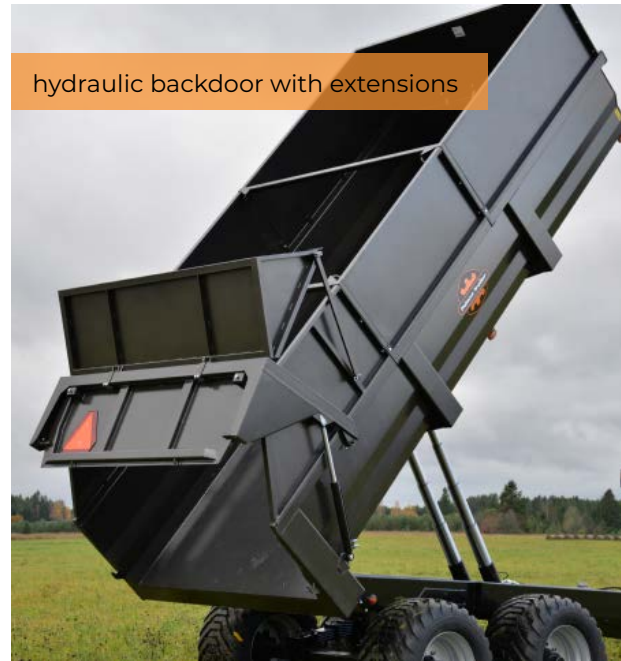


In the tipping position, the container block is activated.

Backdoors



hanging backdoor



hydraulic backdoor with extensions



right converted backdoor



hanging backdoor opening to the right



volume backdoor



hydr. backdoor opening to the right

Accessories

															
	OPTIM/STREX bottom + sides		Hardox steel bottom+sides		Rear pump		Bolt table towing eye		Air brakes		Front screen		Support leg with a crank, Zn		Handbrake
PT350D, PT350P				✓	✓				✓						✓
PT600	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓
PT700	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓
PT800	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓
PT1011	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
PT1000	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
PT8610	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
PT1000E	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
PT1300MB/1300SB	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
PT1300E	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
PT1217MB/1317SB	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PT1600MB/1600SB	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
PT1620MB/1620SB	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
PT1620L-MB/1620L-SB	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
PT1900MB/1900SB	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
PT1920MB/PT1920SB	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
PT1922L-MB/PT1922L-SB	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
PT2012	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
PT2021/2023	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
PT2221/2226	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
PT2223/2228	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
PT125				✓	✓	✓	✓	✓	✓			S	✓	✓	✓
PT150/150SB				✓	✓	✓	✓	✓	✓			S	✓	✓	✓
PT190				✓	✓	✓	✓	✓	✓			S	✓	✓	✓
PT307				✓	✓	✓	✓	✓	✓			S	✓	✓	✓
PT3650				✓	✓	✓	✓	✓	✓				✓	✓	✓
PT3750				✓	✓	✓	✓	✓	✓				✓	✓	✓
PT3800				✓	✓	✓	✓	✓	✓				✓	✓	✓
PT3925, PT3925-19T				✓	✓	✓	✓	✓	✓				✓	✓	✓
PT3980F				✓	✓	✓	✓	✓	✓				✓	✓	✓
PT5750				✓			✓	✓	✓				✓	✓	✓
PT5850				✓			✓	✓	✓				✓	✓	✓
PT4430				✓			✓	✓	✓				✓	✓	✓
PT4650				✓			✓	✓	✓				✓	✓	✓
PT4800				✓			✓	✓	✓				✓	✓	✓
	Hardox steel bottom		Set of wheel wedges		Rear hitch, rockinger		Front and rear mud- guards		Window		Grain hatch		Hydraulic support leg		Hydraulik suspen
															

Extensions and tents

[illegible]

extension $h=900\text{mm}$



extension $h = 700$ mm and
tent with rubber stripes



rolling tent with crank and bended tent holders



rolling tent with springs

News from the engineer's drawing desk

Let us present new category in Palmse Trailer:

Conveyor belt trailer PT9820 FLOW

Palmse Trailer is constantly evolving. Our efforts to find the best solutions and the intention to increase the competence and level of complexity of manufacturing trailers produced in Estonia have paved the way for entering a completely new segment. The conveyor belt trailer PT9820 FLOW is the cutting edge of Estonian engineering - the most sophisticated trailer in Palmse Trailer history. Its design, production, assembly and testing have been an exciting challenge for everyone. We started the project already in November 2020 and the whole design period took almost a year. Its complexity also involved the use of outsourcing, which required the involvement of different parties.

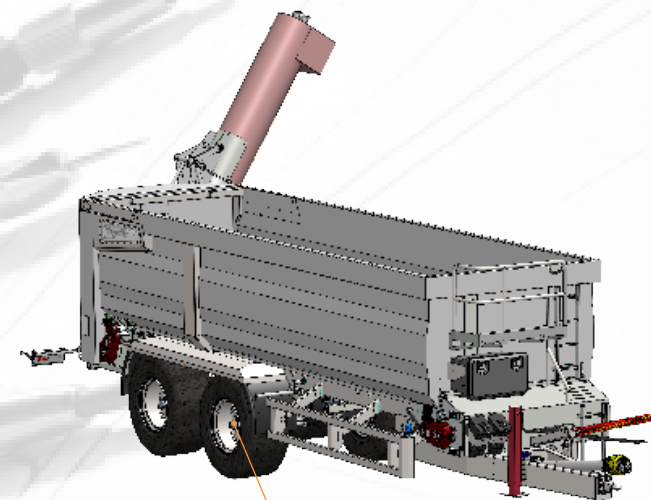
The conveyor belt trailer has two main versions:

- the main purpose is to reload the grain with a screw feeder at a speed of up to 15 m³/min;
- another version of the trailer is the loading of silage and bulk material using a conveyor belt at a speed of up to 49m³/min.

What does FLOW mean? It is a trailer equipped with a smart conveyor system that simplifies unloading or reloading.

“

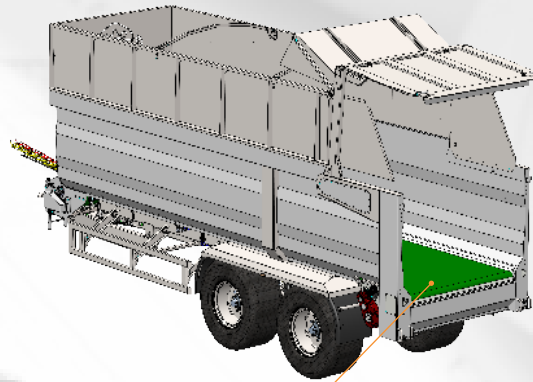
	PT9820-AS Flow
Length/with screw feeder (mm)	10450 / 11950
Width (mm)	2550
Height/with screw feeder (mm)	3142/3800
Internal measurements (mm)	8165x2310x1600
Capacity (m ³)	30,2
Capacity with extensions (m ³)	49,0
Empty weight (kg)	7980
Max load capacity (kg)	20020
Total weight (kg)	28000
Max hitch load (kg)	4000
Axle sum	2
Permissible axle load (kg)	12000
Hub/axle, no. of bolts	150x150; 10
Suspension	Tandem air
Self steering axles	Rear
Brake type; brakes on wheels	FL4118; 4
Speed limit (km/h)	40
Conveyorbelt unloading speed	9 m/min
Standard wheels	600/55R-26,5



The new feature is air suspension of the volume trailer. The entire suspension and axle section is produced by the highly recognized manufacturer BPW

The entire conveyor and reloading system can be remotely controlled. There are also mechanical levers behind the trailer, which can be used as an alternative if needed. The state-of-the-art control system understands whether there is a hydraulic hatch or a screw feeder configuration attached.

Accordingly, the system sets the logic for using the hydraulic valves. In addition, a sensor is installed in the system to indicate the limit positions of the conveyor.



Conveyor belt

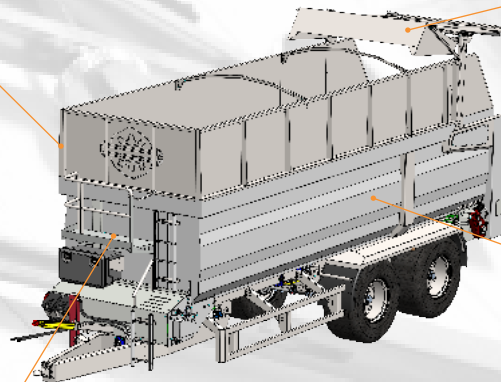
Profile side and stronger horizontal beam.

The upper profile and side post are much deeper, which add even more strength. On all new models, we use a rectangular steel tube with a higher cross-section as the upper profile, which makes the construction of the box considerably stiffer. In the side construction of the box, we have replaced the straight wall plate with a profiled one, which makes the entire construction almost 40% more resistant to horizontal loads.

The trailer can be ordered with or without extensions.



The screw and the body of screw feeder is made of wear resistant steel to provide greater durability.



A high level of safety has also been taken into account in the design of the backdoor.

There is only one side post to match the strength with the design - the profiled side provides strength to reduce the number of posts in order to lower the final weight of the trailer.

We have created a platform at the front of the trailer that is also compatible with other bulk-dumper trailers produced by Palmse Trailer

All lubricated bearings are easily accessible for easy maintenance.





PT3800



PT3750PS

Platform trailers

Our model range of platform trailers includes examples which have loading areas of between 6.5 to 9.8 m. Trailers with a loading platform greater than 7.5 m can be ordered with hydraulic bale holders. The hydraulic system for the bale holders is supplied by safety valves that prevent the support from falling downwards if the oil pressure is lost for some reason. Likewise, the use of safety valves also makes it possible to connect hydraulic hoses to the tractor when the system is under pressure. To reduce slipperiness, the platforms on these trailers are covered with corrugated steel plates, and there are no high edges. Due to this, goods can easily be loaded onto the trailer on euro pallets, for example. The construction of the axles makes it possible to mount

wheels depending on the model with a width of 400-700 mm onto the trailers, thereby ensuring the best possible movement across fields. Double-axle trailers are available with bogie or spring axles, and these are designed so that the load is divided between the trailer and its drawbar. This transfers some of the load onto the rear wheels of the tractor, thereby guaranteeing better movement on softer ground. As a new product in the class of platform trailers, we offer a double-axle trailer with a higher load capacity, which is primarily intended for the transportation of silage rolls. Due to its load capacity of 19 tons, and hydraulic and extended sides, it can also be used for transporting straw rolls with a larger diameter (between 1.3 and 1.8 m).

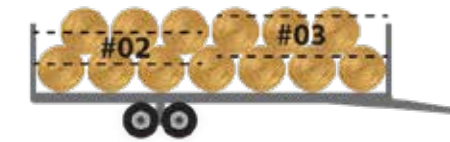
	PT3650	PT3750PS	PT3800	PT3925	PT3925-19T	PT3980F
Length (mm)	8280	9285	9785	10993	10993	10250/11997
Width (mm)	2460	2460 / 2580**	2460 / 2580**	2460 / 2580**	2460 / 2580**	2460 / 2580**
Height (mm)	990 / 1995*	1180 / 2186* / 2980**	1054 / 2060* / 2854**	1054 / 2060* / 2854**	1350 / 2356* / 3154**	1185 / 2190* / 3000**
Internal measurements (mm)	6520x2460x1005*	7520x2460x1005*/1800**	8020x2460x1005*/1800**	9220x2460x1005*/1800**	9220x2460x1005*/1800**	9800x2460x1005*/1800**
Empty weight (kg)	2050*	3200* / 4100**	2600* / 3391**	3220* / 4067**	4250* / 5200**	3982* / 4855**
Max load capacity (kg)	10000*	14000* / 13100**	12000* / 11209**	14000* / 13153**	19000* / 18050**	20000* / 19127**
Total weight (kg)	12050	17200	14600	17220	23250	23982
Max hitch load (kg)	2250	3000	3000	3000	3000	-
Axle sum	2	2	2	2	2	1 + 2
Permissible axle load (kg)	4900	7100	5800	7110	10125	7994
Hub/axle, no. of bolts	70x70; 6	90x90; 8	80x80; 8	B80x80; 8	100x100; 10	90x90; 8
Suspension	Mechanical bogie	Tandem parabolic	Mechanical bogie	Mechanical bogie	Mechanical bogie	Single+Tandem parabolic
Brake type; brakes on wheels	300x90; 0; 2 4	300x90 (309E); 4	300x90; 0/2/4	300x90; 0/2/4	400x80 (408E), 4	300x90 (309E); 6
Speed limit (km/h)	40	40	40	40	40	40
Standard wheels	400/60-15,5	550/45-22,5	500/50-17	500/50-17	600/50-R22,5	500/50-17

* without hydraulic bale holders (only bale holders at the ends of the trailer)

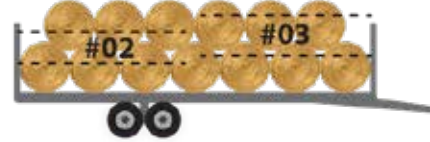
** with bale holders at the ends of the trailer and hydraulic bale holders

PT3925

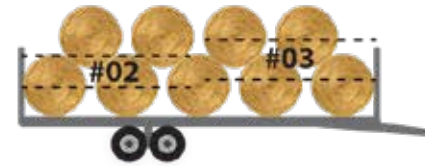
14t/9,25m | Wheels: 500/50-17



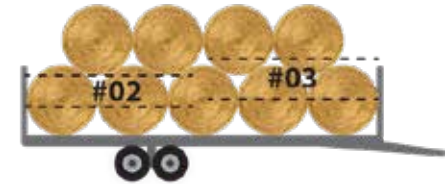
Front/Rear bale holder		Hydraulic side	
	26 11700 kg		26 11700 kg
	15 13500kg		14 12600 kg



Front/Rear bale holder		Hydraulic side	
	26 13731 kg		24 12675 kg
	13 13731 kg		12 12675 kg



Front/Rear bale holder		Hydraulic side	
	17 13600 kg		14 11200 kg
	8 12800 kg		7 11200 kg



Front/Rear bale holder		Hydraulic side	
	13 13163 kg		12 12150 kg
	6 12150 kg		6 12150 kg

Hydraulic bale holders

As accessories for bale trailers, we also offer hydraulic bale holders, the tip of which is almost 2.0m from the bottom of the loading platform. This makes it possible to use the trailer for transporting larger rolls in two layers (with each roll having a diameter of 1.3 to 1.8m). In addition, the hydraulic bale holders are supplied with safety valves which prevent the side holders from falling downwards if there is no oil pressure. They also allow for side holders to be set in any position and for the hoses to be detached from the tractor afterwards (without the safety valves it would not be possible to connect hoses that are under pressure).

We also offer a double-axle trailer PT3925-19T with a load capacity of 19 tons which is primarily intended for the transportation of silage rolls.



Machinery trailers

Machinery trailers constitute one of Palmse Trailer's product groups which has quickly become very popular. Machinery trailers are used primarily for the transportation of heavy equipment, and we offer three models – a single-axle trailer with a load capacity of 9 tons, a double-axle trailer with a load capacity of 16 tons and a triple-axle trailer with a load capacity of 23 tons. The double-axle and triple-axle stand out for their rich standard equipment – rear ramps work hydraulically and all axles have tyres and hubs that allow quick driving at a speed of up to 60 kilometres per hour. The height of trailers from the ground is less than one metre and, as most forestry equipment and excavators are not higher than three metres, it is possible to transport them on public roads without any additional restrictions. We offer the following accessories for machinery trailers: sliding stoppers, platform expanders, and a metal box for fastening chains. The latter is especially practical in cold conditions, as the chains are heavy and the cold can make plastic boxes fragile.



PT5850

	PT5350	PT5750	PT5850
Length (mm)	6750	9866	10866
Width (mm)	2320	2510	2510
Height (mm)	1112	935 / 2583	935 / 2583
Internal measurements (mm)	3460x2300 + 800x1200	6004+1483/ x2460/2000	7004+1483/ x2460/2000
Empty weight (kg)	1600	3560	4422
Max load capacity (kg)	8900	16000	23000
Total weight (kg)	10500	19560	27422
Max hitch load (kg)	3000	3080	3500
Axle sum	1	2	3
Max axle load (kg)	7500	8240	7974
Hub/axle, no. of bolts	90x90; 8	90x90; 8	90x90; 8
Suspension	-	Tandem parabolic	Tridem parabolic
Brake type; brakes on wheels	300x90 (309E); 2	300x90 (309E); 4	300x90 (309E); 6
Speed limit (km/h)	40	40/ (60)	40/ (60)
Standard wheels	500/50-17	215/75-17,5	215/75-17,5



platform expander



box for fastening chains

Grain trailers

The main difference between grain trailer and a standard dumper trailer with the same load capacity is the structure of the transport box. Grain trailers are designed so that they can be used both as a platform and as a box with two different side heights. Removable side boards are manufactured from thinner sheet metal in order to make the replacement of side boards as easy as possible, but the design of the side profiles is rigid enough for transporting bulk material and grain. As the side boards are removable and have a light construction, grain trailers are not suitable for the transport of stones and gravel. Similarly to other trailers that are manufactured by Palmse Trailer, grain trailers are also characterised by their stable construction with a strong chassis, high corrosion resistance and refinement quality, and a clever design. All grain trailers are supplied with a grain hatch as standard; load covers and adjustable support legs can be ordered as accessories. Ease of use is added by removable side boards of different heights. In addition, grain trailers usually have better levels of manoeuvrability due to their smaller empty weight.

	PT125	PT150	PT150SB	PT190
Length (mm)	5550	6600	6600	7669
Width (mm)	2470	2470	2470	2470
Height (mm)	2480	2530	2700	2530
Internal measurements (mm)	4000x2300x1310	4800x2300x1310	4800x2300x1310	5980x2300x1310
Capacity (m ³)	12,1	14,5	14,5	18,1
Empty weight (kg)	2250	2650	2940	3700
Max load capacity (kg)	10000	13000	13000	15000
Total weight (kg)	12250	15650	15940	18700
Max hitch load (kg)	2200	2600	2600	3170
Axle sum	2	2	2	2
Permissible axle load (kg)	5025	6525	6670	7765
Hub/axle, no. of bolts	70x70; 6	80x80; 8	80x80; 8	B80x80; 8
Suspension	Mechanical bogie	Mechanical bogie	Spring bogie	Mechanical bogie
Brake type; brakes on wheels	300x90; 0/2/4	300x90; 0/2/4	350x90 (359E); 2/4	300x90; 2/4
Speed limit (km/h)	40	40	40	40
Oil volume for tipping (L)	9	15	15	20
Standard wheels	400/60-15,5	500/50-17	500/50-17	550/45-22,5

PT190



grain trailers can be used with both one and two layers of side boards



lower side boards can be opened even when the upper side boards are closed

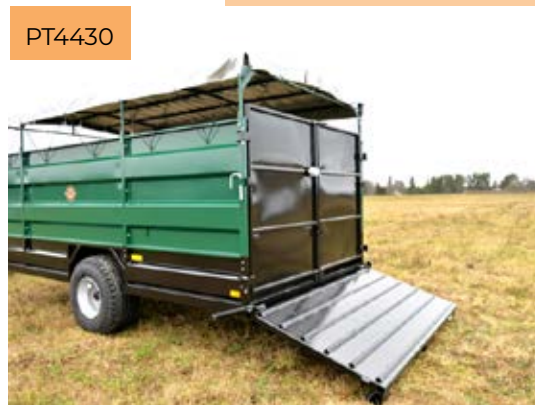
In the case of grain trailers, ease-of-use is improved by the addition of removable side boards of different heights.



Cattle trailers



PT4800



PT4430



PT4800

Palmse Trailer has both single- and double-axle trailers for transporting animals. In the form of the PT4650HS and PT4800HS, we also offer single-axle trailers with hydraulic suspension. The length of the trailers is 4.3-8m. Depending on the safety requirements and ease of use, the animal transport box can be divided into 2 or 3 sections according to the model. The trailers are equipped with a removable PVC cover and front part of the trailers have

an additional door. The floor is made of sheet metal, which is either ribbed or covered with a special non-slip material. Models without hydraulic suspension have a solid backdoor that is used as a ramp and is equipped with strong springs to make it easier to open and close; the same trailers also have removable sides, end walls and a removable roof, which allows the trailers to be used for other work.

	PT4430	PT4650	PT4650-HS	PT4800	PT4800-HS
Length (mm)	6465	8620	8280	10120	9780
Width (mm)	2520	2520	2540	2520	2540
Height (mm)	2680	2740	2840/2460	2740	2840/2460
Internal measurements (mm)	4240x2260x2000	6420x2260x2000	6500x2353x2000	7920x2260x2000	8000x2353x2000
Capacity (m ³)	19	29	30,6	35,8	37,6
Empty weight (kg)	1800	2460	3250	2760	3750
Max load capacity (kg)	2500	6000	6000	7000	7000
Total weight (kg)	4300	8460	9250	9760	10750
Max hitch load (kg)	1000	1500	1500	2100	1500
Axle sum	1	2	1	2	1
Permissible axle load (kg)	3300	3480	7750	3830	9250
Hub/axle, no. of bolts	70x70; 6	70x70; 6	90x90; 8	70x70; 6	90x90; 8
Suspension	-	Mechanical bogie	Hydraulic suspension	Mechanical bogie	Hydraulic suspension
Brake type; brakes on wheels	300x90; 0/2	300x90; 0/2/4	350x90 (359E); 2	300x90; 0/2/4	350x90 (359E); 2
Speed limit (km/h)	40	40	40	40	40
Standard wheels	11,5/80-15,3	11,5/80-15,3	385/65R22,5	11,5/80-15,3	385/65R22,5

Thanks to the hydraulic suspension of the PT4650HS and PT4800HS, the trailer can be lowered for a smoother approach for the animals. Rear gates can be used to guide on and off.

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Solar energy in Palmse Trailer



At Palmse Trailer, we are committed to making the best quality farm trailers and machinery trailers. Our production is big and needs a lot of energy, which is why in recent years we have been trying to find ways to manage production more sustainably. As a result of generating ideas, we came up with a more environmentally friendly solution: to create a solar panel park for Palmse Trailer. As for today, we are pleased to announce that we are able

to use renewable energy from our own solar park. The power of the park is 500 kW and depending on the weather, it covers most of our electricity needs in production. Saving electricity and developing new possibilities for sustainable lifestyle is an ongoing process. We find that there are still many unused opportunities in our company, but we plan to move forward with our activities in terms of sustainable consumption.

Supporting the community and sports

Our desire at Palmse Trailer is to give some of our success back to the community. That is why we have supported various projects, activities and sports to a greater or lesser extent for many years. For 10 years, we have sponsored the successful career of Peeter Pruus as a professional cyclist. His good results in prestigious international competitions have brought a lot of joy and fame.

In addition, since 2016 we have had a successful cooperation with various basketball clubs in our county Lääne-Virumaa. This is largely thanks to Andres Sõber - a successful basketball coach and legendary sports enthusiast.

He has been a great coach to the basketball team of Rakvere Tarvas for many years, which was also sponsored by Palmse Trailer. After the end of cooperation with this club, the legendary basketball coach Sõber moved on to train another strong club Tere / Kadrina Karud. Thus, Palmse Trailer also joined the team of sponsors of the Estonian Basketball Championship first league club led by coach Andres Sõber. In 2022 we support youth basketball: Palmse Trailer is sponsoring the Rakvere Sports School's youth team in the U16 age group. The team plays in the Estonian Championship and Cup competitions as well as the European Youth League EYBL.



We try to contribute to the sports activities of local young people, because young people are our future and their healthy lifestyle must be at the top of the list of priorities.

ISO 9001 certificate

We are pleased to announce that the quality of Palmse Trailer is now officially certified by the institution Bureau Veritas. We have recently received the ISO 9001 quality standard recognition for the owner of the Palmse Trailer trademark, Palmse Metall OÜ. The certificate issued by Bureau Veritas is a testament to our commitment for being professional and consistent in our business. It shows our intention to give our best at every stage of the production process. At Palmse

Trailer, we strive to ensure that our products are always of consistently good quality and that our brand is associated with only the best features. This is our promise to our customers to make the buying process easier when choosing a trailer manufacturer. Our ambition is always the same: to be a reliable partner in both the agricultural sector and road construction. Palmse Trailer - a brand you can trust.



PALMSE METALL OÜ

VÕSUPERE, 45405, HALJALA PARISH,
LÄÄNE-VIRUMAA, ESTONIA
www.palmsetrailer.eu
sales@palmsetrailer.eu
Tel +372 5645 0047

