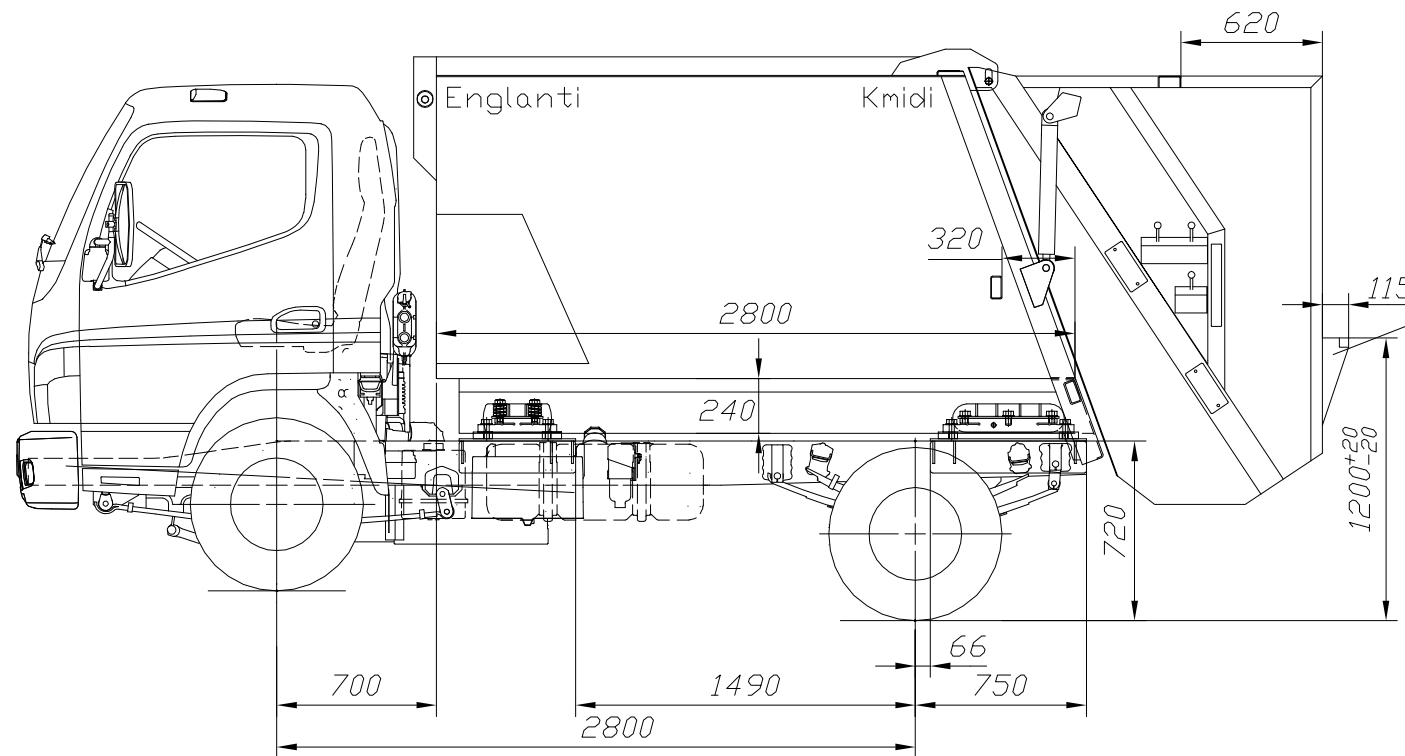


17713



PISTE ILMAN LAMPPUJEN AUKKOJA
HITSATTU

TURVAKAITEET: ILMAN

TUKIPUTKI RUNKOPALKKIEN VÄLIIN: KYLLÄ

V.MAJAKAT: 2 TAKSE JA 1 ETEEN VASEMMALLE

ASTIAHISSIN JA TAKAVALON KIINNIKKEET: ILMAN

LATTIAPELTI: VAKIO

ETUPELLIN KORKEUS: MATALA

RUNKOPALKKIEN KORKEUS: 240

RUNKOPALKKIEN LEVEYS: 753

HUOLTOLUUKUT: VASEMMALLE PUOLELLE

TILAVUUS: 4.6

TUOTE NUMERO: 76888445

VALMISTUS NUMERO: 17713

TILAUS NUMERO: 105206

Rear upper bracket	3KK3820B
Rear lower bracket	3KK3833C
Front upper bracket	3KK3822B
Front lower bracket	3KK3833C

OSA DEL	PIIR.NO RITN.NR	NIMITYS BENÄMNING	LKM.	MITAT DIMENS.	LAATU KVALIT.	KG
PIIR. RIT.	030512 UM	Kmidi Englanti Mitsubishi Canter 7C15 7.5t Akseliväli 2800		SUHDE SKALA 1:25	MALLI MODELL ENT.PIIR. TID.RITN. UUSI PIIR. NY RITN LIITTYY TILLHÖR	
TARK.						
GRANSK.						
HVV. GODK. KÄYTETTY	ANVANTS					

NTM

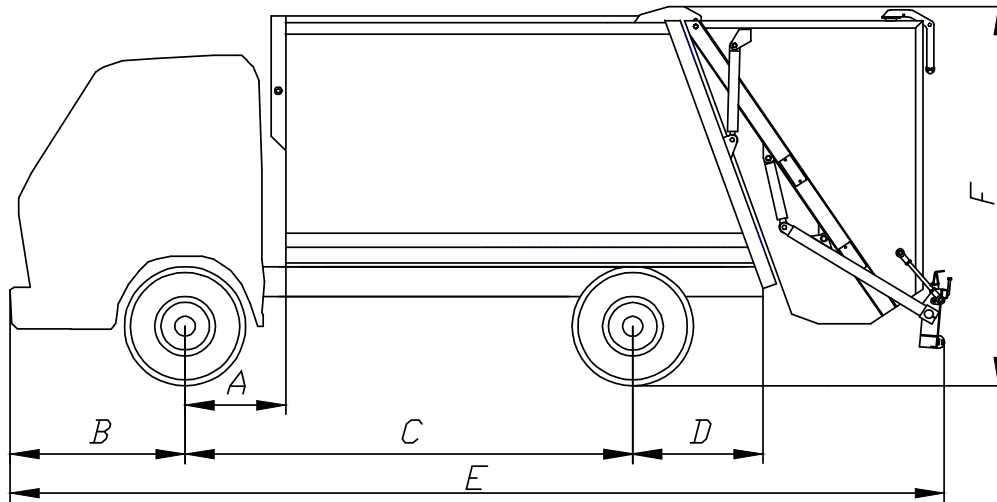
OY NÄRPIÖN PUU JA METALLI-AB NÄRPES TRÄ & METALL

VALM.NR
TILL.V.NR
3KK5460A

ASIAKAS
KUND DEMO

TO:	FAX NO:	DATE:	08.02.13
ATTN:	PAGE: 1/1	FAX FROM	+358-6-224 1525
FROM: U.Malm	REFERENS:	979,0	

Preliminary weightcalculations



Measurements:

A= 700	D= 700
B= 1140	E= 6600
C= 3400	F= 2488

Chassis: FUSO CANTER 7C15 EcoHybrid 7.5t

Equipment:

Bodywork: NTM Kmidi

Equipment: NTM bar lift (150kg)

Net volume: 6,0 m³

<u>Weight (kg):</u>	<u>Front</u>	<u>Rear</u>	<u>Total</u>
Chassis:	1695	860	2555 (1/2 tank)
Driver:	75	0	75
Bodywork:	53	2782	2835
	1823	3642	5465
Payload(kg/m ³) 341	506	1529	2035
	2329	5171	7500

Body potential = 3000kg (based on a refuse density of 100kg/m² and 5:1 compaction ratio).

Weights are subject to +/-5% chassis&body tolerances and may vary according to final equipment level.

OLYMPUS Twin Pack 16 (OLTP16)

EURO 5 - WIDE TRACK

SPECIFICATIONS

OLTP 16 shown, mounted on Dennis Eagle Elite 2 chassis - 6x2ML



Vehicle model	(Olympus Twin Pack) OLTP16. 65-35 & 50-50 Split
Elite chassis type	6x2 Mid Lift
Body effective volume (m3)	16.6
GVW (Gross Vehicle Weight)	23500
Unladen weight*	15380
Front axle plated weight	7100
Rear axle/bogie plated weight	17800 - 6300 / 11500
Turning circle - overall (metres)	18.6
Air suspension	Parabolic Springs (Front Air Assist Option) / Rear Air
Recycling box type	-
Recycling box volume (m ³)	-
Recycler at full height	-
V1 Overall length	8075
Overall length - tailgate raised	9130
V2 Overall wheelbase	4300
V3 Front overhang	1665
Front overhang - cab tilted	3465
V4 Rear overhang	2160
Rear overhang - tailgate raised	3040
V5 Front axle to front of body	650
V6 Overall height	3690
Overall height - tailgate raised	5190
V7 Height at exhaust tip - nominal	3750
V8 Cab roof height	3040
Cab roof height - cab tilted	3600
V9 Cab floor height	805
V10 First cab step height from ground	435
V11 Rave rail height	1070
V12 Ground clearance at lowest part of vehicle	250
V13 Ground clearance - tailgate	435
V14 Approach angle	15.5°
V15 Departure angle	15°

NOTE: Unless otherwise stated, all dimensions are nominal, in mm and represent an unladen vehicle without a lifting device and fitted with standard tyres; tyre deflection is not included. On vehicles with optional air suspension, heights may differ. All specifications are subject to manufacturers tolerances. An allowance of +/- 2% should be made for all weights. All weights are in kgs and include oil and water, and on diesel fuelled vehicles, AdBlue and 50 litres of fuel.

OLYMPUS Twin Pack 16 (OLTP16)

EURO 5 - WIDE TRACK

SPECIFICATIONS

Chassis

- Elite 2 6x2 Mid Lift.
- Cab - Low floor with one step entry, Cromwell stainless steel construction, standard seating for driver + 3 crew, optional driver + 1 or driver + 4 seating.
- Engine - Volvo (Euro5 EEV) D7F 300 bhp, 6 cylinder, 7.142 litre in-line diesel.
- Braking system - full air - twin circuit, ABS, 6 wheel parking brake.
- Gearbox - Allison MD3000, 6 speed automatic.
- For detailed specification and options, see relevant Elite 2 Datasheet.

Body

- Constructed from high tensile steel one piece rolled side sheets and braced by front and rear hoops with pressed integral channels and flat floor.
- The Olympus Twin Pack 16 has two totally separate body air spaces with a reinforced central partition.
- Sides in 4mm S275 EN10025, Roof in S355 EN10025.
- Floor in 3 sections across width : 5mm S355 EN10025.
- Rear hoop: 5-6mm S355 EN10025.
- Barrier Rails: 8mm Domex 700 (700 N/mm²).
- Rear Cross-member: 6mm Domex 650 (650 N/mm²).
- The body volume of 16.2m³ is divided longitudinally to give the following capacities:-

Body Split	65/35	50/50
Small compartment capacity (m ³)	10.6	8.1
Small compartment capacity (m ³)	5.7	8.1

Tailgate

- Two totally independent tailgates.
- Ideal rave rail height for manual loading and versatile binlift mounting.
- Sides and floor manufactured from high tensile abrasion resistant steel.
- Substantial pressed side plates form integrated channels to guide the packing mechanism.
- Heavy duty automatic body locks.
- Integral full height body seals fitted to prevent liquid leakage from bottom edge and sides.
- Integral tailgate props.
- Floor: 6mm Hardox 400 (400 HB - 1000 N/mm²).
- Sides: 7mm Hardox 400 (400 HB - 1000 N/mm²).
- Rave Rail: 4mm Hardox 400 (400 HB - 1000 N/mm²).
- Retainer plate: 4mm Wieldox 700 (700 N/mm²).

Size	Narrow	Wide	50/50
Swept volume capacity (m ³)	0.62	1.24	0.93

Packing Mechanism

- Totally independent two-plate packer/carriage design.
- Manufactured from high tensile abrasion resistant steel
- Strong box-girder construction.
- Packer plate pivots on heavy duty phosphor-bronze bearings.
- Slides within hopper channels on low friction self lubricating bearings.

Refuse Ejection Barrier

- Separate ejection barriers.
- Barrier face is manufactured from high tensile abrasion resistant steel, forming a smooth discharge surface.
- Self lubricating bearings guide the ejection barrier along rails within the body.
- Multi-staged double acting hydraulic cylinders, enable efficient ejection and retraction.
- Pressure regulation of the ejection barriers from cab display.


Electrical System

- Fully integrated CANBus system logic (Clean Open).
- Simple display unit in cab for body controls and diagnostics.
- Fully waterproofed junction boxes contained within lockers allowing easy access for diagnostics and maintenance via laptop.
- Number and colour coded wiring for easy identification, maintenance and fault finding.
- Weatherproof switch, plug and socket connectors.

Hydraulic System

- Quiet, PTO mounted variable displacement pump with 130 cc/rev maximum flow supplying both packer circuits.
- Binlift circuits supplied by separate close coupled pump.
- Body mounted 210 litre tank with remote pressure fill.
- Full flow 10 micron supply and return line filters control contaminant levels.
- Engine speed is maintained by electronic throttle control system when hydraulic power consumption increases.
- Integrated control valve for body control functions and tailgate lift/lower circuits.
- Independent tailgate packer mechanism control valves.
- Binlift pressure / flow regulator valve.
- All cylinders are double acting with hard chrome rods for long life.
- Roof mounted tailgate lift cylinders.
- Retention barriers with adjustable pressure.

Safety

-  Approved. Safe by design.
- Circuit designed to enhance Health and Safety features, and installation of lifting devices.
- Prepared for EN1501-1:2009 & prEN 1501-5:2009.
- Two-plate design, automatic body/hopper locks and clean discharge remove the need to approach moving parts.
- Interlocks prevent the mechanism from working unless the tailgates are fully lowered into their locks.
- Automatic gearbox interlocks enhance safe operations.
- Tailgate lift rams are fitted with integral pilot operated load holding valves so that even if a hose fails, or is removed, the tailgate cannot descend unless positively powered downwards.
- Indicator icons show the driver when the mechanism is in operation, and when the hopper is out of its locks.
- In cab discharge controls as standard, with external discharge & hopper lower controls for optimised safety.
- Interlocked access door to each side for safe maintenance operations.

Options

For more details of specifications and options please consult a Dennis Eagle Sales representative.

Dennis Eagle Ltd. (the company) reserves the right to change the specification, design, material, procedures and dimensions of the vehicles described herein without prior notice at any time in the future, in accordance with the company's constant product improvement policy.

OLYMPUS Twin Pack 22 (OLTP22)

EURO 5 - WIDE TRACK

SPECIFICATIONS

OLTP shown, mounted on Dennis Eagle Elite 2 chassis - 6x2RS



Vehicle model		(Olympus Twin Pack) OLTP 22. 65-35 & 50-50 Split
Elite chassis type		6x2 RS, MS or 6x4 Double Drive
Body effective volume (m3)		21.6 Available in 65-35% or 50-50% Split; refer overleaf for details
GVW (Gross Vehicle Weight)		26000
Unladen weight*		16710 (RS). 16680 (MS). 16660 (6x4)
Front axle plated weight		8000
Rear axle/bogie plated weight		19000 - 11500/7500 (RS). 7500/11500 (MS). 9500/9500 (6x4)
Turning circle - overall (metres)		18.1 (RS). 19.6 (MS) 20.5 (6x4)
Air suspension		Parabolic Springs Front, (Air Assist option) / Rear Air (option on 6x4) / Rubber (6x4)
Recycling box type		-
Recycling box volume (m³)		-
Recycler at full height		-
V1	Overall length	9090
	Overall length - tailgate raised	10145
V2	Overall wheelbase	5250 (RS). 5200 (MS). 5300 (6x4)
V3	Front overhang	1665
	Front overhang - cab tilted	3465
V4	Rear overhang	2175 (RS). 2255 (MS) 2125 (6x4)
	Rear overhang - tailgate raised	3055 (RS) / 2955 (6x4)
V5	Front axle to front of body	650
V6	Overall height	3690
	Overall height - tailgate raised	5190
V7	Height at exhaust tip - nominal	3750
V8	Cab roof height	3040
	Cab roof height - cab tilted	3600
V9	Cab floor height	805
V10	First cab step height from ground	435
V11	Rave rail height	1070
V12	Ground clearance at lowest part of vehicle	250
V13	Ground clearance - tailgate	435
V14	Approach angle	15.5°
V15	Departure angle	15°

NOTE: Unless otherwise stated, all dimensions are nominal, in mm and represent an unladen vehicle without a lifting device and fitted with standard tyres; tyre deflection is not included. On vehicles with optional air suspension, heights may differ. All specifications are subject to manufacturers tolerances. An allowance of +/- 2% should be made for all weights. All weights are in kgs and include oil and water, and on diesel fuelled vehicles, AdBlue and 50 litres of fuel.

* Excluding Binlift & Options; additional equipment may alter dimensions and weights quoted.

OLYMPUS Twin Pack 22 (OLTP22)

EURO 5 - WIDE TRACK

SPECIFICATIONS

Chassis

- Elite 2 6x2 Rear Steer, Mid Steer or 6x4 with Double Drive.
- Cab - Low floor with one step entry, Cromwell stainless steel construction, standard seating for driver + 3 crew, optional driver + 1 or driver + 4 seating.
- Engine - Volvo (Euro5 EEV) D7F 300 bhp, 6 cylinder, 7.142 litre in-line diesel.
- Braking system - full air - twin circuit, ABS, 6 wheel parking brake.
- Gearbox - Allison MD3000, 6 speed automatic.
- For detailed specification and options, see relevant Elite 2 Datasheet.

Body

- Constructed from high tensile steel one piece rolled side sheets and braced by front and rear hoops with pressed integral channels and flat floor.
- The Olympus Twinpack 22 has two totally separate body air spaces with a reinforced central partition.
- Sides in 4mm S275 EN10025, Roof in S355 EN10025.
- Floor in 3 sections across width : 5mm S355 EN10025.
- Rear hoop: 5-6mm S355 EN10025.
- Barrier Rails: 8mm Domex 700 (700 N/mm²).
- Rear Cross-member: 6mm Domex 650 (650 N/mm²).
- The body volume of 21.6m³ is divided longitudinally to give the following capacities:-

Body Split	65/35	50/50
Large compartment capacity (m ³)	14.0	10.8
Small compartment capacity (m ³)	7.6	10.8

Tailgate

- Two totally independent tailgates.
- Ideal rake rail height for manual loading and versatile binlift mounting.
- Sides and floor manufactured from high tensile abrasion resistant steel.
- Substantial pressed side plates form integrated channels to guide the packing mechanism.
- Heavy duty automatic body locks.
- Integral full height body seals fitted to prevent liquid leakage from bottom edge and sides.
- Integral tailgate props.
- Floor: 6mm Hardox 400 (400 HB - 1000 N/mm²).
- Sides: 7mm Hardox 400 (400 HB - 1000 N/mm²).
- Rake rail: 4mm Hardox 400 (400 HB - 1000 N/mm²).
- Retainer plate: 4mm Weldox 700 (700 N/mm²).

Size	Narrow	Wide	50/50
Swept volume capacity (m ³)	0.62	1.24	0.93

Packing Mechanism

- Totally independent two-plate packer/carriage design.
- Manufactured from high tensile abrasion resistant steel
- Strong box-girder construction.
- Packer plate pivots on heavy duty phosphor-bronze bearings.
- Slides within hopper channels on low friction self lubricating bearings.

Refuse Ejection Barrier

- Separate ejection barriers.
- Barrier face is manufactured from high tensile abrasion resistant steel, forming a smooth discharge surface.
- Self lubricating bearings guide the ejection barrier along rails within the body.
- Multi-staged double acting hydraulic cylinders, enable efficient ejection and retraction.
- Pressure regulation of the ejection barriers from cab display.


Electrical System

- Fully integrated CANBus system logic (Clean Open).
- Simple display unit in cab for body controls and diagnostics.
- Fully waterproofed junction boxes contained within lockers allowing easy access for diagnostics and maintenance via laptop.
- Number and colour coded wiring for easy identification, maintenance and fault finding.
- Weatherproof switch, plug and socket connectors.

Hydraulic System

- Quiet, PTO mounted variable displacement pump with 130 cc/rev maximum flow supplying both packer circuits.
- Binlift circuits supplied by separate close coupled pump.
- Body mounted 210 litre tank with remote pressure fill.
- Full flow 10 micron supply and return line filters control contaminant levels.
- Engine speed is maintained by electronic throttle control system when hydraulic power consumption increases.
- Integrated control valve for body control functions and tailgate lift/lower circuits.
- Independent tailgate packer mechanism control valves.
- Binlift pressure / flow regulator valve.
- All cylinders are double acting with hard chrome rods for long life.
- Roof mounted tailgate lift cylinders.
- Retention barriers with adjustable pressure.

Safety

-  Approved. Safe by design.
- Circuit designed to enhance Health and Safety features, and installation of lifting devices.
- Prepared for EN1501-1:2009 & prEN 1501-5:2009.
- Two-plate design, automatic body/hopper locks and clean discharge remove the need to approach moving parts.
- Interlocks prevent the mechanism from working unless the tailgates are fully lowered into their locks.
- Automatic gearbox interlocks enhance safe operations.
- Tailgate lift rams are fitted with integral pilot operated load holding valves so that even if a hose fails, or is removed, the tailgate cannot descend unless positively powered downwards.
- Indicator icons show the driver when the mechanism is in operation, and when the hopper is out of its locks.
- In cab discharge controls as standard, with external discharge & hopper lower controls for optimised safety.
- Interlocked access door to each side for safe maintenance operations.

Options

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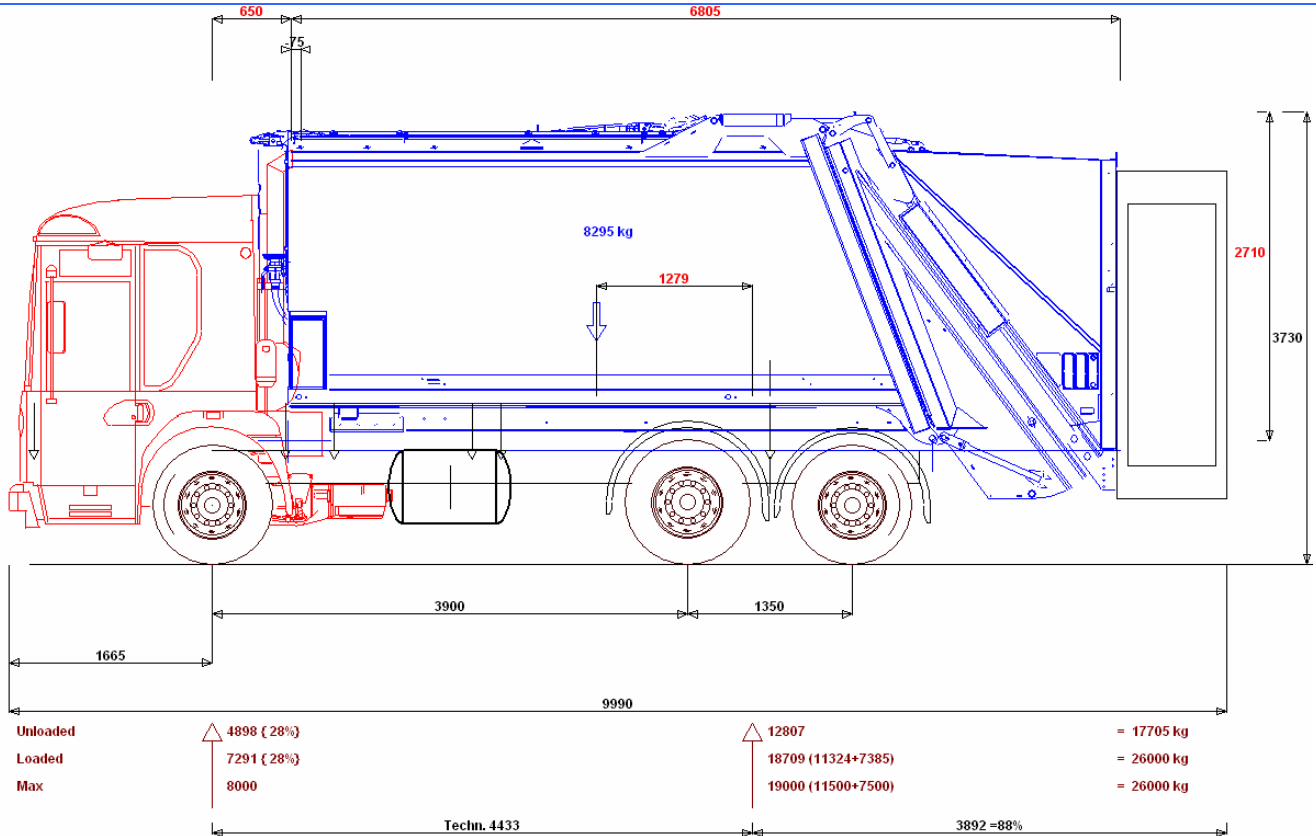
For more details of specifications and options please consult a Dennis Eagle Sales representative.



Weight Prediction Datasheet



WP0173. Elite2, 6x2 Rear Steer 5250 (3900+1350). Olympus Twinpack OLTP22. Terberg OmniDEL Binlift



	x CoG	Fa	Ra	Total
Wheelbase		mm	3900	
bogie wheelbase		mm	1350	
+ Chassis weight		4270	2840	7110
+ number of persons 2 x 85 kg	-400	185	-15	170
+ body weight 1265 kg/m	4252	351	8254	8605
1 Terberg Triple OmniDEL	7875	-668	1528	860
2 Fuel	1950	67	53	120
3 On Board Weighing System	2130	130	120	250
4 Pumps & PTO's	1000	77	23	100
5 Mud Wings and Mtg	4580	-1	41	40
6 Hyd Tank & Oil	600	112	18	130
7 Minor Options	2370	28	32	60
8 Light Counterweight Bumper	-1465	346	-86	260
= weights unloaded :		4898	12807	17705
+ carrying capacity	3154	2393	5902	8295
= Weights loaded :		7291	18709	26000
:: Gross Vehicle Weight		8000	19000	26000

Notes: This payload value is based upon maximum payload refuse density @ 385 kg/m3 limited by GVW; if materials of a lower density are collected a reduce payload can be expected. The payload value is subject to a tolerance of approximately +/- 5%

Dennis Eagle Ltd. Heathcote Industrial Estate Warwick

All weights and dimensions are based on standard Dennis Eagle product and are subject to manufacturing tolerances, an allowance of +/- 2% should be made for all weights. Any additional options will alter dimensions and weights quoted.

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Incremental Weight Prediction Datasheet



WP0173. Elite2, 6x2 Rear Steer 5250 (3900+1350). Olympus Twinpack OLTP22. Terberg OmniDEL Binlift

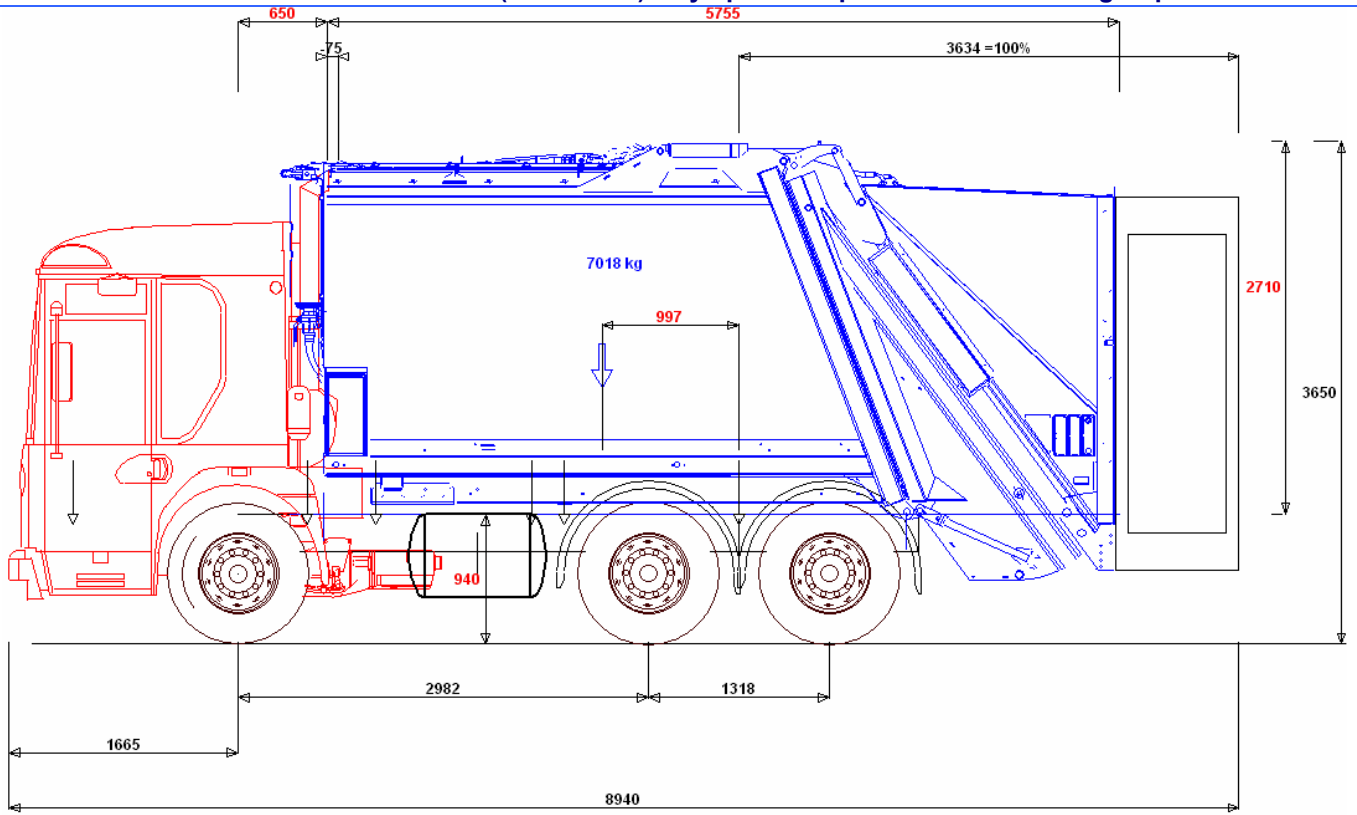
Payload	Kgs	Front Axle	Front Axle %	Axle 2	Axle 2 %	Axle 3	Axle 3 %	Total	GVW %
0%	0	4898	28%	7752	44%	5055	29%	17705	68%
5%	415	4793	26%	8066	45%	5261	29%	18120	70%
10%	830	4711	25%	8367	45%	5457	29%	18535	71%
15%	1244	4653	25%	8653	46%	5643	30%	18949	73%
20%	1659	4619	24%	8925	46%	5820	30%	19364	74%
25%	2074	4608	23%	9182	46%	5988	30%	19779	76%
30%	2489	4621	23%	9425	47%	6147	30%	20194	78%
35%	2903	4658	23%	9654	47%	6296	31%	20608	79%
40%	3318	4719	22%	9868	47%	6436	31%	21023	81%
45%	3733	4803	22%	10069	47%	6566	31%	21438	82%
50%	4148	4911	22%	10254	47%	6688	31%	21853	84%
55%	4562	5042	23%	10426	47%	6799	31%	22267	86%
60%	4977	5197	23%	10583	47%	6902	30%	22682	87%
65%	5392	5376	23%	10726	46%	6995	30%	23097	89%
70%	5807	5579	24%	10854	46%	7079	30%	23512	90%
75%	6221	5805	24%	10968	46%	7153	30%	23926	92%
80%	6636	6055	25%	11068	45%	7218	30%	24341	94%
85%	7051	6328	26%	11153	45%	7274	29%	24756	95%
90%	7466	6626	26%	11224	45%	7320	29%	25171	97%
95%	7880	6947	27%	11281	44%	7357	29%	25585	98%
100%	8295	7291	28%	11324	44%	7385	28%	26000	100%



Weight Prediction Datasheet



WP0186 Elite2 6x2 Mid Lift Wide 4300 (3400+1350). Olympus Twinpack OLTP16. Terberg Triple OmniDEL



Unloaded	4540 (28%)	11942	= 16482 kg
Loaded	6718 (29%)	16782 (5940+10842)	= 23500 kg
Max	7100	17800 (6300+11500)	= 23500 kg

Wheelbase	Mm	2982
Bogie Wheelbase	Mm	1318
Theoretical Wheelbase	Mm	3834

	X Cog	Fa	Ra	Total
+ Chassis Weight		4155	2630	6785
+ Number Of Persons 3 X 85 Kg	-400	282	-27	255
+ Body Weight 1259 Kg/M	3727	215	7537	7752
1 Terberg Triple Omnidel	6825	-671	1531	860
2 Fuel	1740	66	54	120
3 On Board Weighing System	2130	111	139	250
4 Pumps & PTO's	1000	74	26	100
5 Mud Wings And Mtg	3641	2	38	40
6 Hyd Tank & Oil	500	113	17	130
7 Minor Options	2370	23	37	60
8 Belly Pan Weight	-1200	171	-41	130
= Weights Unloaded :		4540	11942	16482
+ Carrying Capacity	2644	2178	4840	7018
= Weights Loaded :		6718	16782	23500
:: Gross Vehicle Weight		7100	17800	23500

Payload Limited By GVW At Density Of 422kg/M3;. Lower densities resulting from collecting recycling materials may reduce payload. A higher payload in the pod will result in a lower compactor body payload and vice versa. The payload value is subject to a tolerance of approximately +/- 5%.

Dennis Eagle Ltd. Heathcote Industrial Estate Warwick CV34 6TE
 All weights and dimensions are based on standard Dennis Eagle product and are subject to manufacturing tolerances, an allowance of +/- 5% should be made for all weights. Any additional options will alter dimensions and weights quoted.

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