

Beduin Scandinavia

Design, comfort and freedom

Loft-style room concepts with unusual layouts and natural materials create a Scandinavian flair with a touch of luxury. The Dethleffs flagship now makes caravanning possible 365 days a year. The powerful hot water heating and the electric floor heating on board guarantee cosy warmth even at sub-zero temperatures.

Upholstery



+ Upholstery
Amposta



+ Upholstery
Badalona ○



+ Upholstery
Tarragona ○

Wood décor



+ Wood décor Amberses Oak

○ optionally available

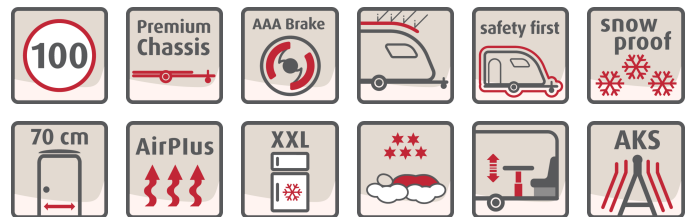
Technical info

Overall length, approx.	768 - 901 cm
Overall width, approx.	230 - 250 cm
Overall height, approx.	265 cm
Headroom in living area, approx.	198 cm

Maximum values partly not possible for all models or only in connection with certain options.

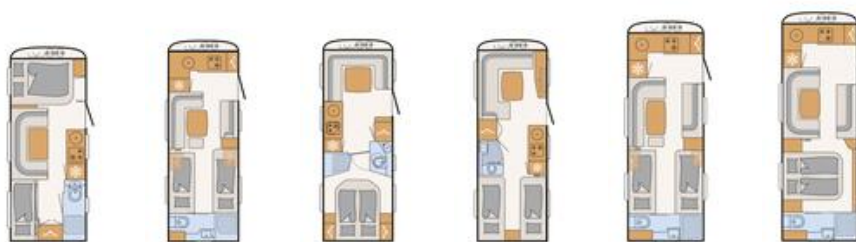
Plus factors

- + Upscale standard equipment: with hot-water heating as standard, electr. floor heating, side panels in smooth white sheet metal and a wide range of other options
- + Gourmet holidays made easy: high-quality kitchen equipment with oven/cooker combination and a lot of space for food prep
- + Inviting ambience: indirect lighting and illuminated kitchen back panel ensure special atmosphere
- + Unsurpassed comfort: high-quality padding and cleverly sewn fabrics encourage you to stick around
- + Step in: comfortable entry thanks to extra-wide entrance door with window
- + Watch out winter campers: be prepared for colder temperatures with the optional Winter Comfort Package Premium



Beduin Scandinavia

Technical info



Beduin Scandinavia		540 QMK	550 BET	550 RD	550 SE	670 BET	690 BQT
Standard chassis		Lightweight chassis, 1800 kg	Lightweight chassis, 1800 kg	Lightweight chassis, 1800 kg	Lightweight chassis, 1800 kg	Lightweight chassis, 2200 kg	Lightweight chassis, 2200 kg
Overall length, approx.	cm	768	812	806	806	872	901
Body length approx.	cm	650	675	675	675	735	765
Overall width, approx.	cm	250	230	230	230	250	250
Overall height, approx.	cm	265	265	265	265	265	265
Circumferential dimension awning approx.	cm	1048	1078	1078	1078	1138	1163
Headroom in living area, approx.	cm	198	198	198	198	198	198
Thickness floor / side walls / roof	mm	42 / 34 / 34	42 / 34 / 34	42 / 34 / 34	42 / 34 / 34	42 / 34 / 34	42 / 34 / 34
Tire size		195 R14C LI106	195 R14C LI106	195 R14C LI106	195 R14C LI106	195/70 R14C LI104	195/70 R14C LI104
Bed dimension: Front bed, L x W, approx.	cm	195 x 135		220 x 110			
Bed dimension: Central / middle bed, L X W, approx.	cm	230 x 115	180 x 110		220 x 110	220 x 110	230 x 115
Bed dimension: Rear bed, L x W, approx.	cm	190 x 75 / 190 x 70	205 x 80 / 190 x 80 / 205 - 190 x 215 ○	195 x 150	2x 200 x 85 / 200 x 210	2x 200 x 85 / 200 x 230 ○	185 - 200 x 155
Sleeping berths standard / max.		5	3	3	3	3	3
Mass in running order (+/-5%)*	kg	1615 (1534 to 1696)*	1645 (1563 to 1727)*	1600 (1520 to 1680)*	1545 (1468 to 1622)*	1845 (1753 to 1937)*	1870 (1777 to 1964)*
Manufacturer-specified mass for optional equipment*	kg	70	58	103	158	252	224
Technically permissible maximum laden mass*	kg	1800	1800	1800	1800	2200	2200
Heating		Hot water heating, 6.4 kW Gas-Electric	Hot water heating, 6.4 kW Gas-Electric	Hot water heating, 6.4 kW Gas-Electric	Hot water heating, 6.4 kW Gas-Electric	Hot water heating, 6.4 kW Gas-Electric	Hot water heating, 6.4 kW Gas-Electric
Refrigerator volume (thereof freezer), approx.	l	137 (15)	137 (15)	137 (15)	137 (15)	156 (29)	156 (29)
Waste water tank, approx.	l	22	22	22	22	22	22
Fresh water tank capacity, total/ Fresh water tank capacity at driving filling	l	53 / 15	53 / 15	53 / 15	53 / 15	53 / 15	53 / 15
Sockets: 12 V / 230 V / USB		0 / 7 / 3	0 / 7 / 1	0 / 8 / 1	0 / 7 / 1	0 / 9 / 1	0 / 8 / 1

○ Optional equipment — Not possible ● Standard equipment ◆ Mandatory △ Not known at the time of publication



* INFO

The specified mass in running order is a standard value defined in the type approval procedure. Due to manufacturing tolerances, the actual weighed mass in running order may deviate from the value stated above. Deviations of up to ± 5% of the mass in running order are legally permissible and possible. The permissible range in kilograms is stated in parentheses after the mass in running order. The mass for optional equipment specified by the manufacturer is an imputed value determined for each type and layout by which Dethleffs specifies the maximum weight available for factory-fitted optional equipment. The purpose of limiting optional equipment is to ensure that the minimum payload, i.e. the legally required free mass for baggage and retrofitted accessories, is actually available for the load capacity of vehicles delivered by

Dethleffs. The actual weight of your vehicle after leaving the factory can only be determined when it is weighed at the end of the line. If, in exceptional cases, the weighing shows that the actual load capacity falls short of the minimum payload due to a permissible weight deviation, despite the limitation of the optional equipment, we will check together with your trading partner and you before delivery of the vehicle whether we should, for example, increase the load capacity of the vehicle or remove optional equipment. The technically permissible maximum laden mass of the vehicle must not be exceeded. For detailed information and explanations on the topic of weight and the configuration of the vehicle, please refer to the "Legal notes" section.

Standard equipment

	540 QMK	550 BET	550 RD	550 SE	670 BET	690 BQT
Chassis						
Single axle premium wheel 195 R14 C L1106 (with steel wheel 1.700 kg and 1.800 kg)	●	●	●	●	—	—
Tandem axle premium wheel 195/70 R14 C L1104 (with steel wheel 2.200 kg to 2.800 kg)	—	—	—	—	●	●
Zinc-plated chassis with inertia braking system with reversing automatic	●	●	●	●	●	●
Chassis features						
AAA self-adjusting brake	●	●	●	●	●	●
ACS stabiliser	●	●	●	●	●	●
Draw bar cover	●	●	●	●	●	●
High-quality brand-name tyres, designed for a speed of 100 km/h	●	●	●	●	●	●
Lightweight corner steadies	●	●	●	●	●	●
Octagon shock absorber	●	●	●	●	●	●
Wheel trims for 14" tyres	●	●	●	●	●	●
Exterior features						
Floor of the gas bottle locker made of rot-resistant and robust corrugated aluminium	●	●	●	●	●	●
Flyscreen door	●	●	●	●	●	●
Front parts in gas locker area made of LFI (long fiber injection) technology, shock resistant, robust and repair-friendly	●	●	●	●	●	●
Fully-insulated wheel houses	●	●	●	●	●	●
Midi Heki clear-view skylight with blackout blind, flyscreen and integrated lights, operation with crank handle	●	●	●	●	●	●
Opening windows, trapezoid, insulated and double-glazed (graphite grey) with blackout and mosquito blinds	●	●	●	●	●	●
Panoramic front window	—	●	—	—	●	●
Robust GRP roof	●	●	●	●	●	●
Sidewall skirts with integrated side-marker lamps	●	●	●	●	●	●
Skylight Mini Heki	●	●	●	●	●	●
Space-saving gas locker door which opens upwards	●	●	●	●	●	●
Spare wheel carrier in gas locker	●	●	●	●	●	●
Storage space for 2 gas bottles with 11 kg filling weight each	●	●	●	●	●	●
Wide, one-piece habitation door with window	●	●	●	●	●	●
Exterior design						
Front and rear in smooth sides white	●	●	●	●	●	●
Manoeuvring handles in chrome design	●	●	●	●	●	●
Smooth sides white	●	●	●	●	●	●
Access locker doors						
Access locker door front left 997x419 mm	●	—	—	—	—	—
Access locker door rear right side 648x348 mm	—	—	●	—	—	—
Access locker door rear right side 997x419 mm	—	●	—	●	●	—
Interior design						
Upholstery Amposta	●	●	●	●	●	●
Wood décor Amberes Oak	●	●	●	●	●	●
Textile equipment						
7-zones double bed mattress, made of heat-regulating material	●	—	●	—	—	●
7-zones mattress left side, made of heat-regulating material	—	●	—	●	●	—
7-zones mattress right side, made of heat-regulating material	—	●	—	●	●	—
Corner head rests for U-shaped seating lounge	●	●	●	●	●	●
High-quality upholstery and materials in the seating group	●	●	●	●	●	●
Furniture layouts						
AirPlus - perfect air circulation in the interior and rear ventilation of the overhead lockers and sideboards	●	●	●	●	●	●
Bunk bed with 2 sleeping berths, not foldable	●	—	—	—	—	—
Bunk beds with safety net and ladder	●	—	—	—	—	—
One-legged telescopic table, height adjustable	●	●	●	●	●	●
Seating lounge converts to bed	●	●	●	●	●	●
Special slatted frame with flexible natural rubber holders, opening for optimal use of storage compartments under the beds	●	●	●	●	●	●
Kitchen						

Standard equipment

	540 QMK	550 BET	550 RD	550 SE	670 BET	690 BQT
Generous drawers with soft closing for absolutely silent closing	●	●	●	●	●	●
High-quality three-cooker hob with electric ignition and built-in oven	●	●	●	●	●	●
Kitchen worktop with indirect lighting	●	●	●	●	●	●
Large fridge with 137 liters capacity and 15 liters freezer compartment	●	●	●	●	—	—
Large fridge with 156 liters capacity and 29 liters freezer compartment	—	—	—	—	●	●
Oven	●	●	●	●	●	●
Practical apothecary drawers (depending on layout)	●	●	●	●	●	●
Bathroom						
Integrated design washbasin made of solid surface material	—	●	●	●	●	●
Shower tray	●	●	●	●	●	●
Skylight with mosquito net	●	●	●	●	●	●
Space-saving fold-away washbasin for easy storage in the bathroom cabinet	●	—	—	—	—	—
Multimedia						
Preparation for flat screen TV (antenna cable and TV bracket)	●	●	●	●	●	●
Heating						
Electric floor heating	●	●	●	●	●	●
Hot water heating	●	●	●	●	●	●
Air Conditioning						
Pre-wiring for A/C	●	●	●	●	●	●
Electrical installation						
Awning light 12V	●	●	●	●	●	●
CEE external output socket for 230V on-board electrics	●	●	●	●	●	●
Illuminated kitchen back panel	●	●	●	●	●	●
Indirect lighting	●	●	●	●	●	●
LED light bar system 12V (on head-side of bed and in seating lounge)	●	●	●	●	●	●
USB port for spotlight bar	●	●	●	●	●	●
Water supply						
Electric water supply	●	●	●	●	●	●
Fresh water tank 38 l	●	●	●	●	●	●
Mobile 22 l waste water tank	●	●	●	●	●	●

Packages Beduin Scandinavia

Package	Mover Autonomy Package (single axle) (5560)	Mover Autonomy Package (tandem axle) (5561)
Mover manoeuvring support for single-axle	x	
Electric Autonomy equipment	x	x
Mover manoeuvring support for tandem-axle		x
Additional weight (kg)*	70	98

Package	Water & Electric Autonomy Package with Combi or hot water heating system (9943)
Electric Autonomy equipment	x
Fresh water tank 70 l	x
Additional weight (kg)*	40.5

Package	Winter Comfort Package Premium (11332)	Winter Comfort Package Premium (11332)	Winter Comfort Package Premium (11332)
Hot water floor heating (only in comb. with option 205)	x	x	x
Heated and insulated 42-litre waste water tank	x	x	x
Waste water pipes insulated and heated	x	x	x
Electric Autonomy equipment	x	x	x
Flush-fitting windows (not possible for front and rear windows)	x	x	x
XPS insulation for front, rear and sides (depending on vehicle size)	x		
XPS insulation for front, rear and sides (depending on vehicle size)		x	
XPS insulation for front, rear and sides (depending on vehicle size)			x
Additional weight (kg)*	82.1	84.8	87

Safety Package (8950)	
ATC Trailer Control	
DuoControl safety gas pressure regulator with crash sensor and EisEx gas regulator heater	
Smoke detector	
Additional weight (kg)*	7

Shower Package (6105)	
Shower equipment with shower fittings and curtain	
City water connection	
Additional weight (kg)*	7

△ Not known at the time of publication



* INFO

The factory installation of optional equipment increases the actual mass of the vehicle and reduces the payload. The specified additional weight for packages and optional equipment shows the additional weight compared with the standard equipment of the respective model or layout. The total weight of the selected optional equipment must not exceed the mass for optional equipment specified by the manufacturer in the model overviews. This is an imputed

value determined for each model and layout that Dethleffs uses to determine the maximum weight available for factory-installed optional equipment. In the event of an increase of load capacity, the mass for optional equipment specified by the manufacturer is increased. For detailed information and explanations on the topic of weight, please refer to the "Legal notes" section.

Optional equipment**

Included in package	Additional weight (kg)*	Code	540 QMK	550 BET	550 RD	550 SE	670 BET	690 BQT
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Chassis									
17" alloy wheels in Dethleffs design (single axle)	—	10	11608	○	○	○	○	—	—
17" alloy wheels in Dethleffs design (tandem axle)	—	0	11609	—	—	—	—	○	○
Tyres on alloy wheels 195 R14 C LI106, 1700 kg and 1800 kg	—	2	838	○	○	○	○	—	—
Tyres on alloy wheels 195/70 R14 C LI104, 2200 kg to 2800 kg	—	4	859	—	—	—	—	○	○
Weight upgrade									
Weight upgrade 1.900 kg (incl. alloy wheel 225/70 R15 C LI112)	—	12.4	394	—	○	○	○	—	—
Weight upgrade 1.900 kg (incl. alloy wheel 225/70 R15 C LI112)	—	17.9	394	○	—	—	—	—	—
Weight upgrade 2.000 kg (incl. alloy wheel 225/70 R15 C LI112)	—	17.9	138	○	—	—	—	—	—
Weight upgrade 2.000 kg (incl. alloy wheel 225/70 R15 C LI112)	—	12.4	138	—	○	○	○	—	—
Weight upgrade 2.500 kg (incl. steel wheel 195/70 R14 C LI104)	—	0	496	—	—	—	—	○	○
Chassis features									
ATC Trailer Control	—	4	748	○	○	○	○	○	○
Breakdown kit	—	1	620	●	●	○	○	●	●
Large support feet, 4 pc.	—	1	6348	○	○	○	○	○	○
Mover manoeuvring support for single-axle ⁸⁾	—	32	946	○	○	○	○	—	—
Mover manoeuvring support for tandem-axle ⁸⁾	—	60	984	—	—	—	—	○	○
Solid rubber support wheel with support load indicator	—	2	10063	○	○	○	○	○	○
Spare tyre with alloy wheel 195 R14 C 8PR-LI 106, 1.700 kg and 1.800 kg	—	19	839	—	○	—	○	—	—
Spare tyre with alloy wheel 225/70 R15 C LI 112 , 1.900 kg and 2.000 kg	—	23.5	1092	—	○	—	○	—	—
Spare tyre with steel wheel 195 R14 C LI 106, 1.700 kg and 1.800 kg	—	19.5	833	—	○	—	○	—	—
Exterior features									
Cassette awning 4500x2500 mm, manual	—	30	6928	○	○	○	○	—	—
Cassette awning 5500x3000 mm, manual	—	50.6	6928	—	—	—	—	○	○
Flush-fitting windows (not possible for front and rear windows) ⁹⁾	—	3	7561	○	○	○	○	○	○
Front window	—	4	982	○	●	●	●	●	●
Rear window	—	4	1108	—	—	○	○	—	—
XPS insulation for front, rear and sides (depending on vehicle size)	—	20.1	179	○	—	—	—	—	—
XPS insulation for front, rear and sides (depending on vehicle size)	—	22.8	179	—	○	○	○	○	—
XPS insulation for front, rear and sides (depending on vehicle size)	—	25	179	—	—	—	—	—	○
Exterior design									
Front moulding with high attachment and roof rails ¹³⁾	—	1	627	○	○	○	○	○	○
Rear light carrier with high attachment and roof rails ¹⁴⁾	—	11	624	○	○	○	○	○	○
Smooth sides titanium silver metallic	—	0	659	○	○	○	○	○	○
Access locker doors									
Access locker door front right side 1069x299 mm	—	2	1084	—	—	○	—	—	—
Access locker door rear left side 648x348 mm	—	2	1073	—	—	○	—	—	—
Access locker door rear left side 997x419 mm	—	2.2	1081	—	—	—	○	—	●
Interior design									
Upholstery Badalona	—	0	11330	○	○	○	○	○	○
Upholstery Tarragona	—	0	11331	○	○	○	○	○	○
Textile equipment									
7-zones double bed mattress, made of heat-regulating material with watergel cover	—	4	8214	○	—	○	—	—	○
7-zones mattress left side, made of heat-regulating material with watergel cover	—	2	8215	—	○	—	○	○	—



The factory installation of optional equipment increases the actual mass of the vehicle and reduces the payload. The specified additional weight for packages and optional equipment shows the additional weight compared with the standard equipment of the respective model or layout. The total weight of the selected optional equipment must not exceed the mass for optional equipment specified by the manufacturer in the model overviews. This is an imputed

value determined for each model and layout that Dethleffs uses to determine the maximum weight available for factory-installed optional equipment. In the event of an increase of load capacity, the mass for optional equipment specified by the manufacturer is increased. For detailed information and explanations on the topic of weight, please refer to the "Legal notes" section.

Optional equipment**

	Included in package	Additional weight (kg)*	Code	540 QMK	550 BET	550 RD	550 SE	670 BET	690 BQT
7-zones mattress right side, made of heat-regulating material with wattergel cover	—	5	8216	—	○	—	○	○	—
Loose carpet	—	8.5	513	○	○	○	○	○	○
Furniture layouts									
Sideboard instead of couch (opposite the central seating group)	—	0	131	—	○	—	●	○	○
Single beds convert to double bed	—	5	685	—	○	—	●	○	—
Slatted bed frame with adjustable head section	—	1	871	—	○	—	○	○	—
Interior features									
2 kg fire extinguisher	—	3.5	843	○	○	○	○	○	○
Smoke detector	—	0.5	8949	○	○	○	○	○	○
Kitchen									
Extractor fan	—	3	785	○	—	○	○	—	—
Kitchen worktop extension, foldable	—	1	1107	—	—	○	—	—	—
Multimedia									
FS-SAT system Voyager 65 Digimatic	—	10	1049	—	—	○	○	—	○
Flat screen TV 22" incl. DVD player and receiver	—	3.5	1103	○	○	○	○	○	○
Flat screen TV 32" ¹⁵⁾	—	5.6	817	—	○	—	—	○	○
Flat screen TV 32" ¹⁷⁾	—	5.6	817	—	—	—	○	—	—
Multifunctional external connection, 12 V, 220 V, TV and SAT	—	1	611	○	○	○	○	○	○
SAT parabol antenna flat 65 Easy 65 Twin	—	14	879	—	—	○	○	—	○
TV lift ¹⁶⁾	—	5.4	7006	—	○	—	○	○	○
Heating									
Hot water floor heating (only in comb. with option 205) ¹⁰⁾	—	10	674	○	○	○	○	○	○
Air Conditioning									
Roof A/C	—	35	8145	○	○	○	○	○	○
Electrical installation									
Electric Autonomy equipment	—	38	492	○	○	○	○	○	○
Water supply									
City water connection	—	2	414	○	○	○	○	○	○
Exterior shower	—	2	396	○	○	○	○	○	○
Fresh water tank 70 l	—	2.5	592	○	○	○	○	○	○
Heated and insulated 42-litre waste water tank ¹⁸⁾	—	6	10067	○	○	○	○	○	○
Shower equipment with shower fittings and curtain	—	5	1097	○	○	○	○	○	○
Waste water pipes insulated and heated	—	5	520	○	○	○	○	○	○
Gas supply									
DuoControl safety gas pressure regulator with crash sensor and EisEx gas regulator heater	—	2.5	784	○	○	○	○	○	○
Gas socket (exterior)	—	1	187	○	○	○	○	○	○
Packages									
Mover Autonomy Package (single axle)	—	70	5560	○	○	○	○	—	—
Mover Autonomy Package (tandem axle)	—	98	5561	—	—	—	—	○	○
Safety Package	—	7	8950	○	○	○	○	○	○
Shower Package	—	7	6105	○	○	○	○	○	○
Water & Electric Autonomy Package with Combi or hot water heating system	—	40.5	9943	○	○	○	○	○	○
Winter Comfort Package Premium	—	82.1	11332	○	—	—	—	—	—



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value determined for each model and layout that Dethleffs uses to determine the maximum weight available for factory-installed optional equipment. In the event of an increase of load capacity, the mass for optional equipment specified by the manufacturer is increased. For detailed information and explanations on the topic of weight, please refer to the "Legal notes" section.

Optional equipment**

	Included in package	Additional weight (kg)*	Code	540 QMK	550 BET	550 RD	550 SE	670 BET	690 BQT
Winter Comfort Package Premium	—	84.8	11332	—	○	○	○	○	—
Winter Comfort Package Premium	—	87	11332	—	—	—	—	—	○
Miscellaneous									
Registration documents (CoC papers)	—	0	15151	◆	◆	◆	◆	◆	◆

○ Optional equipment — Not possible ● Standard equipment ◆ Mandatory △ Not known at the time of publication



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value determined for each model and layout that Dethleffs uses to determine the maximum weight available for factory-installed optional equipment. In the event of an increase of load capacity, the mass for optional equipment specified by the manufacturer is increased. For detailed information and explanations on the topic of weight, please refer to the "Legal notes" section.

LEGAL NOTES ON WEIGHT-RELATED INFORMATION

The weight specifications and tests for caravans are regulated uniformly throughout the EU in EU Implementing Regulation No. 2021/535 (until June 2022: EU Regulation No. 1230/2012). We have summarized and explained the essential terminology and legal requirements from this regulation for you below. Our dealers and the Dethleffs configurator on our website are there to give you additional assistance in configuring your vehicle.

1. Technically permissible maximum laden mass

The **technically permissible maximum laden mass** of the vehicle (e.g. 2,000 kg) is a mass specification defined by the manufacturer that the vehicle must not exceed. You can find information on the technically permissible maximum laden mass of the model you have selected in the technical data. Driving the vehicle even if it exceeds the technically permissible maximum laden mass constitutes an administrative offense that may result in a fine.

2. Mass in running order

In simple terms, the mass in running order is the basic vehicle with standard equipment. This essentially includes the following items:

- the unladen weight of the vehicle together with the bodywork, including operating fluids;
- the standard equipment, i.e. all equipment and standard fittings included when the vehicle leaves the factory;
- the 100% filled water tank or driving tank according to the manufacturer's specifications and a 100% filled aluminum gas cylinder.

You can find information on the mass in running order for each model in our sales documents. It is **important to note** that the value specified in the sales documents for the mass in running order is a **standard value** determined in the type approval process and verified by the authorities. It is legally permissible and possible for the mass in running order of the vehicle delivered to you to deviate from the nominal value specified in the sales documents. The **legally permissible tolerance** is $\pm 5\%$. This allows EU legislation to account for the occurrence of certain fluctuations in the mass in running order due to weight fluctuations in components supplied by third-party suppliers as well as process and weather-related factors.

These weight deviations can be illustrated using the following example calculation:

- Mass in running order according to sales documents: 1,600 kg
- Legally permissible tolerance of $\pm 5\%$: 80 kg
- Legally permissible range of mass in running order: 1,520 kg to 1,680 kg

The specific range of permissible weight deviations can be found in the technical data for each model.

Dethleffs makes great efforts to reduce weight variations to the minimum level that is unavoidable for production reasons. Deviations at the upper and lower ends of the range are therefore very rare; however, they cannot be completely ruled out technically, even after carrying out all possible optimization measures. For this reason, Dethleffs checks the actual weight of the vehicle and compliance with the permissible tolerance by weighing each vehicle at the end of the line.

3. Optional equipment and actual mass

According to the legal definition, optional equipment (also including special or additional equipment) includes all optional equipment parts not included with the standard equipment that are fitted to the vehicle under the responsibility of the manufacturer – i.e. at the factory – and can be ordered by the customer (e.g. awning, smooth panel, Alde heating system, oven, etc.). For information on the individual or package weights of the optional equipment that can be ordered, please refer to our sales documents. In this meaning, optional equipment does not include other accessories that are retrofitted by you or your dealer personally after the vehicle has been delivered from the factory.

The mass of the vehicle in running order (see no. 2 above) and the mass of the optional equipment installed on a specific vehicle at the factory are together referred to as the actual mass. You will find the corresponding information for your vehicle after handover under item 13.2 of the Certificate of Conformity (CoC). Please note that this information also represents a standardized value. Since the mass in running order – as an element of the actual mass – is subject to a legally permissible tolerance of $\pm 5\%$ (see no. 2), the actual mass may also deviate accordingly from the specified nominal value.

4. Payload and minimum payload

The installation of **optional equipment** is also subject to technical and legal limits: It is only permissible to order an amount of optional equipment for installation at the factory that will leave sufficient free weight for baggage and other accessories (i.e. "payload") without exceeding the technically permissible maximum laden mass.

The payload is obtained by deducting the mass in running order (nominal value according to sales documents; see no. 2 above) and the mass of the optional equipment from the technically permissible maximum laden mass (see no. 1 above). The EU regulations stipulate a fixed minimum payload for caravans that must remain as a minimum for baggage or other accessories not installed at the factory. This minimum payload is calculated as follows:

Minimum payload in kg $\geq 10 \cdot (n + L)$

where "n" = maximum number of sleeping berths and

"L" = total length of the vehicle body (without drawbar).

The maximum number of sleeping berths corresponds to the actual configured sleeping berths of the individual vehicle. For a caravan with 6 designated sleeping berths and a total length of the vehicle body of 7 m, the minimum payload is calculated as follows: $10 \text{ kg} \cdot (6 + 7) = 130 \text{ kg}$.

To ensure that the minimum payload is maintained, there is a maximum combination of optional equipment that can be ordered for each vehicle model. In the above example with a minimum payload of 130 kg, the total mass of the optional equipment for a vehicle with 6 designated sleeping berths and a mass in running order of 1,750 kg should not exceed 120 kg:

- 2,000 kg technically permissible maximum laden mass**
- 1,750 kg mass in running order
- 130 kg minimum payload
- = **120 kg maximum permissible mass for optional equipment**

It is important to note that this calculation is based on the standard value for the mass in running order specified in the type approval procedure and does not account for permissible weight deviations for the mass in running order (see no. 2 above). If the maximum permissible value of 120 kg for the optional equipment is nearly or fully exhausted in this example and the standard value of the mass in running order is applied, it is possible for the minimum payload of 130 kg to be complied with mathematically in the event of an upward weight deviation even if the vehicle has no load capacity.

Here is another example calculation for a vehicle with 6 sleeping berths whose actual weighed mass in running order is 2% above the nominal value:

- 2,000 kg technically permissible maximum laden mass**
- 1,785 kg actual weighed mass in running order
(in the example: 2% higher than the specified value of 1,750 kg)
- 120 kg optional equipment (maximum permissible value)
- = **95 kg actual load capacity**
(< minimum pay-mass of 130 kg)

To avoid such a situation, Dethleffs further reduces the maximum permissible weight of the total optional equipment that can be ordered depending on the specific model. The limitation of optional equipment is intended to ensure that the minimum payload, i.e. the legally prescribed free mass for baggage and retrofitted accessories, is actually available for the load capacity of the vehicles delivered by Dethleffs.

Since the weight of a specific vehicle can only be determined when it is weighed at the end of the line, in very rare cases a situation may arise in which the minimum payload is not guaranteed at the end of the line despite this limitation of optional equipment. In order to guarantee the minimum payload even in these cases, Dethleffs will check together with your trading partner and you before delivery of the vehicle whether, for example, the load capacity of your vehicle is to be increased or optional equipment removed.

5. Effects of tolerances of the mass in running order on the remaining load capacity

Irrespective of the minimum payload, you should bear in mind that unavoidable production-related fluctuations in the mass in running order – both upwards and downwards – have a corresponding effect on the remaining load capacity: If, for example, you order our example vehicle with optional equipment with a total weight of 90 kg, the calculated payload based on the standard value for the mass in running order is 160 kg.

The load capacity actually available may deviate upwards or downwards from this value due to tolerances. If the mass of your vehicle in running order is approximately 2% higher than specified in the sales documents, the load capacity is reduced from 160 kg to 125 kg:

- 2,000 kg technically permissible maximum laden mass**
- 1,785 kg actual weighed mass in running order
(in the example: 2% higher than the specified value of 1,750 kg)
- 90 kg ordered optional equipment of the specific vehicle
- = **125 kg actual load capacity**

In order to ensure that the calculated payload is actually adhered to, you should therefore take the possible and permissible tolerances for the mass in running order into account as a precaution when configuring your vehicle.

We also recommend weighing the loaded caravan on a scale before each journey to check whether the technically permissible total weight is adhered to. In addition, we recommend checking the actual drawbar load of the loaded vehicle. This must not be higher than the max. drawbar load of the towing vehicle. Furthermore, the technically permissible maximum laden mass of the vehicle combination must be observed when loaded, i.e. the maximum mass of the combination of your motor vehicle and your caravan.