

Special work calls for special tools.

Loader. Volumer. Grounder.

Industry-specific vehicle concepts for long-haul, distribution and construction transport.



### Is payload your prime priority?

Fully focused on maximum payload in long-haul, distribution and construction transport: the Loader concept. Page 4–7.

### Do you need to shift particularly large volumes?

For maximum transport volumes in long-haul and distribution transport: the Volumer concept. Page 8-9.

### Is extreme robustness a must for you?

Construction vehicles for deployment in extreme conditions: the Grounder concept. Page 10-11.

# We can't influence the requirements specific to your industry. But we can equip you to meet them with success.

Vehicles tailored especially to the needs of certain sectors of industry mean added economic efficiency. With the Actros for long-distance haulage, the Antos for heavy-duty distribution transportation and the Arocs for construction

distribution transportation and the Arocs for construction transport we offer three first-class model series designed to assure you of extremely economical operations.

To ensure that you are also able to meet high requirements in terms of payload, transport volume and robustness, we have gone one step further to evolve the Loader, Volumer and Grounder. These are special vehicles equipped with the full range of assets for the respective sectors of industry. And boasting additional benefits when the focus is on payload, transport volume or robustness.

With the Loader in the Actros, Antos and Arocs model series the focus is very clearly on payload – it is simply built to carry more from the word go. Grain, gas or ready-mixed concrete, for example.

The Volumer stands for vast transport volumes. The Actros and Antos Volumers are semitrailer tractors and platform vehicles which can be used, for example, for the particularly efficient transportation of components for supply to the automotive industry or "white goods" such as refrigerators or washing machines.

The Grounder stands for exceptional robustness and load-bearing capacity. Arocs Grounders are designed for extreme operations of the type that push conventional construction vehicles up against their limits – such as mining operations and all types of applications in which bulk materials such as gravel and sand require to be transported in particularly difficult conditions.

In a nutshell, Loader, Volumer and Grounder provide you with three vehicle concepts whose common strength is their capacity to meet special requirements, thereby providing the ideal basis for your success. Climb aboard!

	Actros	Antos	Arocs
Loader	х	х	х
Volumer	х	х	-
Grounder	-	-	х

## The Loader concept: more payload, more economy.

Loader stands for payload-optimised trucks of the Actros, Antos and Arocs model series which enable efficient transportation as lightweights from Mercedes-Benz in long-haul, distribution and construction transport.

	Actros	Antos	Arocs
Loader	х	х	х
Volumer	х	х	-
Grounder	-	-	х

Loader. We have developed the Loader concept with a special emphasis on even greater economic efficiency for payload-sensitive transport in the long-haul, distribution and construction sectors, examining and exploiting every means of cutting kerb weight in the process. The fruits of our efforts are payload-optimised trucks which, despite the weight-intensive Euro VI technology on board, are among the lightweights from Mercedes-Benz in long-haul, distribution and construction transport. The Actros Loader is substantially lighter than the established Actros to Euro V standard, for example. As a 4 x 2 semitrailer tractor, the Antos Loader weighs in at only around 6000 kg, depending on the specified equipment. And thanks to a maximum kerb weight of 9250 kg, the Arocs Loader<sup>1)</sup> 8 x 4/4 concrete mixer with a permissible gross vehicle weight of 32 t enables you to deliver 8 m<sup>3</sup> of ready-mixed concrete on every trip.

Payload optimisation ex factory. A whole range of major and minor weight-reducing measures on all Loader vehicles ensure that you can carry more payload on every trip in long-haul, distribution or construction transport operations. To give you maximum flexibility in configuring the vehicle, some measures can also be deselected. In short, you decide for yourself the extent to which you wish to exploit your Loader's payload potential for particularly profitable operations with an extremely low kerb weight or rather with an emphasis on comfort. Driving comfort features as standard for all Actros and Antos Loader vehicles thanks to a broad selection of job-matched cabs measuring 2300 mm in width and Mercedes PowerShift 3 with 12-speed direct-drive transmission<sup>2)</sup>. Semitrailer tractors feature aluminium wheels fitted with super-wide tyres as standard. What's more, the full range of safety and assistance systems is available to ensure that a Loader is not only particularly economical in operation, but also especially safe.



**Payload optimisation in detail.** To make the Actros Loader even lighter, the cab is only equipped with an exterior stowage compartment door on the right upon request.

Loader engines. Actros and Antos Loader semitrailer tractors are powered by Euro VI engines in the 7.7I displacement category in output ratings beginning at 235 kW (320 hp)<sup>3)</sup>. Depending on the model variant, nine efficient 6-cylinder in-line engines are available in all for payload-sensitive long-haul and distribution transport operations, with outputs ranging between 175 kW (238 hp) and 315 kW (428 hp).



**Super-wide tyres.** Loader vehicles in long-haul and distribution transport are fitted as standard with super-wide tyres on aluminium wheels. In addition to the higher payload capacity, this also contributes to reduced tyre wear and low fuel consumption.



Weight reduction as standard. Actros, Antos or Arocs – all Loaders are lighter from the word go, because many components and equipment features have been designed specifically for use in payload-sensitive sectors. We nevertheless appreciate that payload is not "everything", and you can deselect certain standard payload optimisation features.

<sup>1)</sup> Further details on the Arocs Loader are to be found on pages 6-7.

<sup>&</sup>lt;sup>2)</sup> Platform vehicles: Mercedes PowerShift 3 with 9-speed transmission as standard up to 260 kW (354 hp).

<sup>3)</sup> Actros/Antos platform vehicles: from 175 kW (238 hp).

Arocs Loader. From concrete mixer to semitrailer tractor – the Arocs Loader is available with six job-matched cab variants. Mercedes PowerShift 3 and application-matched driving programmes support driving comfort and efficiency. As do the light, fuel-efficient engines with a displacement of 7.7 or 10.7I and an output of up to 315kW (428 hp).

8 m³ of ready-mixed concrete per trip. The Arocs Loader 8 x 4/4 concrete mixer with a permissible gross vehicle weight of 32 t provides a perfect combination of economy and robustness for construction site use. The Arocs Loader concrete mixer comes as standard with S-cab

ClassicSpace, an output of **235 kW** (320 hp) and two widened hypoid rear axles for single tyres. This enables the transportation of 8 m³ of concrete – half a cubic metre more than comparable concrete mixers are able to handle. In short: an investment which is sure to pay off in the short term.

Low kerb weight, high traction. Tyres and wheels are a highly important factor not only with regard to increased payload capacity. Apart from lower costs resulting from reduced wear and lower fuel consumption, the single tyres also boast excellent traction on a par with that of twin tyres.

This is particularly crucial for the Arocs Loader 8 x 4/4 concrete mixer, which also offers optimum traction in off-road use with its widened hypoid rear axles and its tyres offering particularly high load-bearing capacity.



**Arocs Loader semitrailer tractor.** Despite the low kerb weight of the Arocs Loader semitrailer tractors, a solid, heavy-duty vehicle design with robust chassis and suspension components forms part of the standard specification.



Payload-optimised tyre concepts. To enable the transportation of 8 m³ of ready-mixed concrete, the Arocs Loader 8 x 4/4 concrete mixer is equipped with two widened hypoid rear axles for singe tyres and 385/65 R 22.5 wide tyres offering particularly high load-bearing capacity.



Weight-optimised parabolic springs. Low kerb weight, high load-bearing capacity and high ride and suspension comfort are not mutually contradictory features but advantages resulting from the two-leaf front springs on 4-axle Arocs Loaders.

#### Loader concept. Presentation by reference to example of Arocs Loader concrete mixer.

- 1 Omission of roof hatch/ roof ventilation flap
- 2 10 t hypoid rear axle for single tyres with 385/65 R 22.5 wide tyres\*
- 3 Low-maintenance 140 Ah batteries
- 4 Omission of co-driver's seat
- Deselectable items

- 5 Weight-optimised windscreen
- 6 Omission of engine mount eyelets
- 7 Weight-optimised floor covering
- 8 Aluminium compressed air tank
- \* Concrete mixer only
- Non-deselectable items



- Right-hand cab sidewall closed in conj. with lowered bottom bed, (L-cab only)
- Rear axle optionally with 495/45 R 22.5 super-wide tyres on aluminium wheels
- Omission of stabiliser on front axle

Arocs Loader. As an 8 x 4/4 concrete mixer for transporting 8 m<sup>3</sup> of ready-mixed concrete or as a semitrailer tractor, every Arocs Loader boasts a particularly low kerb weight and makes payload-sensitive transport operations even more economical – without compromising the necessary robustness in construction site operations in any way.



- Particularly high payload resulting from job-matched vehicle configurations and weight-reducing measures
- Weight-saving equipment items deselectable in some cases
- Light, fuel-efficient Euro VI in-line engines with a displacement of 7.7 or 10.71
- Nine output ratings<sup>1)</sup> between
   175 kW (238 hp) and 315 kW (428 hp)
- Mercedes PowerShift 3 as standard
- Choice of job-matched cab variants measuring 2300 mm in width
- High standard of safety thanks to availability of the full range of safety and assistance systems
- Arocs 8 x 4/4 concrete mixer: transportation of up to 8 m³ of ready-mixed concrete per trip
- Widened rear axles with 385/65 single tyres for outstanding payload and traction combined with low fuel consumption

<sup>1)</sup> According to model designation.

## The Volumer concept: more volume, more economy.

Volumers are special semitrailer tractors and platform vehicles of the Actros and Antos model series. They offer the ideal basis for particularly profitable large-volume transport operations in the long-haul and distribution sectors.

	Actros	Antos	Arocs
Loader	Х	Х	х
Volumer	х	х	-
Grounder	-	-	х

**Volumer.** The Actros Volumer and Antos Volumer are tailor-made for deployment in large-volume transport and enable optimum utilisation of the maximum transport volume in long-haul and distribution operations. The lowest coupling point and frame heights in the segment provide for a clear loading height of 3 m - enabling three standard skeleton boxes to be stacked one on top of the other without any problem, for example. Other advantages include fuel-saving powertrain configurations and a wide range of tank variants for low fuel consumption and a particularly large range. Volumers can always be equipped with a direct-drive transmission, for example - also when running on 315/45 tyres. Compared with an overdrive transmission this means fuel savings of up to 1%. And fuel tanks with a capacity of up to 9901 on semitrailer tractors and up to 1000 I on platform vehicles highlight the manner in which these trucks are tailored specifically to large-volume transport in the long-haul and distribution segments.

Efficiency-boosting engineering and technology. In addition to their capacity to shift vast transport volumes, the Actros Volumer and Antos Volumer also feature a whole range of technical details ex factory which are designed for particularly economical operation. These include the economical 6-cylinder in-line engines, for example, which are available in 13 output ratings ranging from 175kW (238 hp) to 375 kW  $(510 \text{ hp})^{1)}$ . The standard-fit Mercedes PowerShift 3 automatic gearshift system, numerous transmission and rear axle variants, the comprehensive range of different wheelbases and frame overhangs available ex factory further boost efficiency in large-volume transport. Another boon is a range of cabs covering practically every need in national and international largevolume transport - a choice of eleven cabs in all for the Actros Volumer and six for the Antos Volumer.



Large range. A diverse spectrum of job-matched tank variants is available ex factory for all Volumers. A particularly large range is provided by Volumer semitrailer tractors with a tank capacity of up to 9901 and Volumer low-frame platform vehicles with a tank capacity of up to 10001.

**Volumer concept.** Presentation by reference to example of Actros Volumer.

- 1 Actros: 11 job-matched cab variants
- 2 Euro VI engines with 13 output levels
- 3 Fuel-saving powertrain configurations
- 4 Increased tank capacity (in comparison to predecessor)
- 5 Coupling point height of under 900 mm
- 6 Clear loading height of 3 m



**Enormous transport volume, enormously economical.** With their low coupling point and frame heights, Actros Volumer and Antos Volumer offer the ideal basis for economical large-volume transport in the long-haul and distribution segments. A clear loading height of 3 m, fuel-saving, job-matched powertrain configurations, the comprehensive range of wheelbases, the choice of different frame overhangs ex factory and a broad range of cabs round off the list of special merits.

- Advantages at a glance.
  - Particularly low coupling point height on 4x2 semitrailer tractors, low frame height on platform vehicles
  - Clear loading height of 3 m
  - Fuel-saving, job-matched powertrain configurations for all tyre types
  - Large range due to tank capacity of up to 9901 for semitrailer tractors and up to 10001 for low-frame platform vehicles
  - Fuel-efficient Euro VI in-line engines in 13 output ratings ranging from 175 kW (238 hp) to 375 kW<sup>1)</sup> (510 hp)
  - Mercedes PowerShift 3 as standard
  - Actros Volumer: eleven cab variants in widths of 2500 and 2300 mm
  - Antos Volumer: six cab variants of 2300 mm in width

<sup>1) 6</sup> x 2 air-sprung low-frame platform vehicle only.

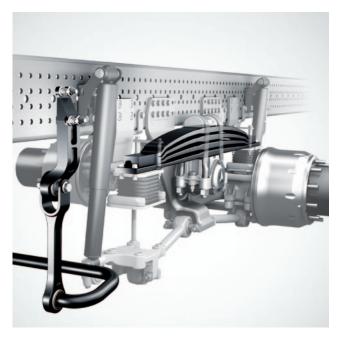
## The Grounder concept: more robustness, more economy.

Grounders are Arocs construction vehicles boasting exceptional robustness and load-bearing capacity, enabling them to cope reliably and economically with particularly tough and heavy tasks in construction transport.

	Actros	Antos	Arocs
Loader	х	х	х
Volumer	х	х	-
Grounder	-	-	х

**Grounder**. Factory-made for heavy-duty operations, Arocs Grounders boast extreme robustness and stability. The basis for their enhanced stability and load-bearing capacity is the extremely robust frame, whose longitudinal members measure 9 mm in thickness on the Arocs Grounder. Robust multi-leaf parabolic springs with a hard compliance characteristic are fitted on the front and rear axles for particularly high stability and good ride comfort. Specially configured shock absorbers and stabilisers are additionally deployed on the rear axles. A high level of load-bearing capacity and robustness also characterises the axles. Front axles with a load capacity of up to 9 t are optionally available for heavy-duty operations, for example. Proven planetary axles offering high ground clearance and an axle load capacity of 13t or optionally 16t are available for the rear axles. The wheels and tyres are similarly designed for extreme operations. Depending on the model designation and the planned type of deployment, the Grounder features robust, durable 15-degree tapered rims or optionally available wide-base rims, together with the robust tyres with very high load-bearing capacity which are obligatory for this type of operations.

For particularly tough deployment in the construction sector. The Grounder concrete mixers, tippers, semitrailer tractors and platform vehicles of the Arocs model series combine exceptional robustness with high efficiency. With high-torque, economical and reliable Euro VI engines which are available in 16 output ratings culminating in 460 kW (625 hp) and up to 3000 Nm of torque. And with the standard-fit Mercedes PowerShift 3 automatic gearshift system, which supports simple, precise handling and an economical driving style. The Arocs Grounder is also optionally available with manual transmission<sup>1)</sup>. Job-matched cabs boasting robustness, high functionality and an ergonomic, comfortable workplace further boost the high level of efficiency.



**Reinforced rear-axle stabilisers.** For extreme operations, Arocs Grounders such as the 8 x 8/4 all-wheel-drive tipper can optionally be fitted with reinforced stabilisers on the 2<sup>nd</sup> rear axle.

#### Grounder concept.

- 1 Front and rear axle suspension with multi-leaf parabolic springs for extreme load-bearing capacity
- 2 Tyres for particularly high load-bearing capacities
- 3 Planetary axles with load-bearing capacity of up to 16 t
- 4 Extremely robust frame offering good torsional flexibility with members of 9 mm in thickness
- 5 15-degree tapered rims, optionally particularly robust wide-base rims
- 6 Stabilisers for 1st and 2nd rear axle



Grounder – built for extreme operations. From concrete mixers through tippers to semitrailer tractors or platform vehicles – all Arocs Grounders offer even greater robustness, higher stability and enhanced load-bearing capacity. For full performance. Under full load. And in extreme conditions.

- Advantages at a glance.
  - Construction vehicles for extreme operations, also in demanding terrain
  - Highly stable frame offering extreme torsional flexibility with longitudinal members of 9 mm in thickness
  - Reinforced chassis and suspension components for enhanced load-bearing capacity
  - Rear axle suspension: multi-leaf parabolic springs with hard compliance characteristic, optionally with load-bearing capacity up to 18 t
  - All-wheel-drive vehicles optionally available with stabilisers on the 1<sup>st</sup> and 2<sup>nd</sup> rear axle for enhanced load-bearing capacity and stable handling
  - Proven robust planetary axles offering high ground clearance and load-bearing capacity of 13t, optionally 16t
  - Robust, durable 15-degree tapered rims, optionally wide-base rims
  - Tyres for particularly high load-bearing capacities
  - Job-matched cabs
  - Efficient, high-torque Euro VI engines rated at up to 460 kW (625 hp)
  - Mercedes PowerShift 3 as standard, manual transmission optionally available<sup>1)</sup>

<sup>1)</sup> Depending on engine variant.

Please note: Changes may have been made to the product since going to press (18.12.2013). The manufacturer reserves the right during the delivery period to with respect to the purchaser. Where the vendor or the manufacturer uses symbols or numbers to describe an order or the subject of an order, no rights may be may differ slightly from those shown in the brochure, owing to the limitations of the printing process. This brochure may also contain models and services which

make changes to the design, form, colour or specification, provided these changes, while taking into account the interests of the vendor, can be deemed reasonable derived solely from these. The illustrations and texts may include accessories and optional extras which do not form part of the standard specification. Colours are not available in certain countries. This brochure is distributed internationally. Information given regarding statutory regulations, legal requirements and taxation and the consequences thereof applies to the Federal Republic of Germany only and is correct at the time of going to press. Please consult your Mercedes-Benz truck dealer for the final details of local provisions and the effects thereof.

#### www.mercedes-benz.com

Daimler AG, Mercedesstr. 137, 70327 Stuttgart TE/SM3 4500 · 9023 · 02-00/0314 Printed in Germany