



INNOVATION. PROGRESS. DIGITIZATION.

## Trailers for heavy haulage. Meeting the greatest challenges.

WE ARE ALREADY BUILDING TRAILERS FOR TOMORROW.

SERVICEPRO |

Reliable partner. Around the clock. Worldwide.

## Digitization in heavy haulage

A NEW LEVEL OF OPERATING CONVENIENCE.

INTELLIGENTLY THOUGHT OUT, PERFECTLY DESIGNED.

Our intelligent electronic assistance systems use extensive sensor systems and innovative CAN bus technology to simplify key tasks in your day-to-day work. They automate complex tasks and make the vehicle and its important

components easy to operate. The epitome of userfriendliness and driver support. Maximum simplification of everyday work.



DOLL tronic®

The DOLL® Standard. All functions at the push of a button via the keypad.



**DOLL** connect®

Operation of all trailer functions via radio remote control - in addition to DOLL tronic®.



- 1. facilitation of the daily work routine
- 2. time saving
- 3. increase in safety
- 4. reduction of operating errors
- 5. minimization of downtime
- 6. greatest possible flexibility in personnel deployment
- 7. enjoyment of work through advanced technology



DOLL<sup>®</sup> EEP

Electronic axle realignment independent of truck and trailer position.



**DOLL** control<sup>®</sup>

Intuitive control and monitoring via 7" screen. Supplemented with DOLL connect® radio remote control.

#### **DOLL** tronic<sup>®</sup>

### Intelligent and easy operation and control.

Intuitive and transparent. Tucked away behind the rugged keypad on the rear and the gooseneck of your vehicle is DOLL tronic® – an intelligent operating and control system based on CAN bus technology. Featuring sophisticated sensor technology, it is used to operate all central trailer functions simply and safely. Coloured LEDs clearly indicate the position of your vehicle. The result? Your trailer is significantly easier to handle – enabling you to save time with each loading or unloading procedure.



Watch now on YouTube.



#### **DOLL tronic®**

- Steering and automatic tracking EEG
- Automatic and individual change of the driving level
- Raise, lower and uncouple gooseneck

- Operation of all hydraulic ramp functions incl. stabilisers
- Monitoring of the central lubrication system
- Monitoring of the gooseneck bead breaking cylinders
- Spirit level function: automated driving level compensation on both sides

#### **DOLL** connect®

You have it in your hands.

Imagine controlling steering and driving level at the touch of a button, with no need to get out of the cab. Or tracking position information and error messages on a display at all times. Completely unique. And it's all thanks to the DOLL connect® trailer management system with radio remote control. This intelligent technology uses the sophisticated, tried-and-tested sensors of the DOLL tronic® CAN bus system to combine the operation and monitoring of all your trailer functions, allowing you to optimise your work processes and view your vehicle data more transparently at the touch of a button. Not only that, but error messages and warning signals also actively prevent incorrect operation and unscheduled downtime.



Watch now on YouTube.

#### DOLL® EEP

On the right track.

The track adjustment EEP determines the correct steering angle of the axles for you. You only press one button on your radio remote control - the rest happens automatically. No matter if straight line or curve.





#### **DOLL** connect®

Including all functions of DOLL tronic® as well as the following:

- Tire pressure and temperature display
- Kilometer display
- Warnings in case of discrepancies of all trailer functions
- Steering and automatic tracking DOLL® EEG and DOLL® EEP

- Operation of the main frame lock and parking brake
- Weighing function with axle load display for perfect load positioning

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## DOLL control®: One system for all vehicle data and functions

- Steering and automatic tracking DOLL® EEG and DOLL® EEP
- Automatic and individual change of the driving level
- Raise, lower and uncouple gooseneck

- Weighing function with axle load display for perfect load positioning
- Operation of the main frame lock and parking brake
- Tire pressure and temperature display



- Kilometer display
- Spirit level function: automated driving level compensation on both sides
- Monitoring of the central lubrication system
- Monitoring of the gooseneck bead breaking cylinders
- Warnings in case of discrepancies of all trailer functions in plain text
- Multilingual

# The DOLL® heavy haulage vehicles

PIONEER OF THE DIGITAL AGE



#### Low-bed trailer X

Payload: up to 52.000 kg

Axles: 1-4

Telescopic mechanism: single and double extension

Axles system: DOLL vario® DOLL panther®, DOLL tera®

#### Semi trailer

Payload: up to 70.000 kg

Axles: 2-5

Telescopic mechanism: single and double extension Axles system: DOLL vario® oder DOLL panther®

## rapid

All models also available at short notice.

The DOLL rapid® series program

- Short delivery time
- Attractive series advantage price
- Top equipment

Find out now at rapid.st.doll.eu





#### Flat-bed trailer

Payload: up to 50.000 kg

Axles: 1-4

Telescopic mechanism: single and double extension

Axles system: DOLL vario®

### Self steering dolly trailer combination

Payload: up to 85.000 kg

Axles: 3-5

Axles system: DOLL vario®

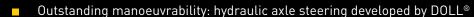
Expandable by dolly with 2-3 axles

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EVEN MORE INTELLIGENT. EVEN MORE ERGONOMIC. EVEN SAFER.

#### Features + advantages



- Tried-and-tested axle technologies to choose from: DOLL vario®, DOLL panther® and DOLL tera®
- Retractable gooseneck for easy loading and unloading
- User-friendly, smooth telescoping mechanism
- A high-quality coating of your choice: two-layer painting or zinc spraying (metallization)
- Added safety and ergonomics. This is ensured by an optimized hydraulic quick coupling on the gooseneck, user-friendly operation of the connecting lines, the practice-oriented ramp deposit and a safe access. Floor covering with anti-slip sanding in the same color as the trailer.



Watch the lowloader X in action on YouTube.





Depending on the axle technology: total stroke of  $600 \, \text{mm}$  (-70 mm to +530 mm) you benefit from maximum ground clearance.



Your area of application decides - and we offer you the optimum loading height.



THE BEST TRANSPORT SOLUTION FOR FORESTRY MACHINES

#### Features + advantages

- 2 and 3 axles
- Reinforced running gear with grip bars and drive-in slopes
- Weight-optimized vehicle design for maximum payload
- Extremely maneuverable: DOLL's in-house hydraulic steering systems

- Rigid or telescopic
- High-quality paint structure according to choice: two-layer painting or zinc spraying (metallization)
- Proven axle technologies to choose from:
   DOLL vario<sup>®</sup>, DOLL panther<sup>®</sup> and DOLL tera<sup>®</sup>
- Added safety and ergonomics. This is ensured by an optimized hydraulic quick coupling on the gooseneck, user-friendly operation of the connecting lines, the practice-oriented ramp deposit and a safe access. Floor covering with anti-slip sanding in the same color as the trailer



#### THE RIGHT DESIGN FOR EVERY APPLICATION

Whether a laterally lowered driving surface or a flat bed. Whether a detachable neck or a trailer that can be driven over from behind.

#### LOWEST LOADING HEIGHT

Your area of application decides. And we offer you the optimum, lowest loading height of 135 mm.

#### LARGE TOTAL STROKE

Depending on the axle technology: total stroke of 600 mm (-70 mm to +530 mm) you benefit from maximum ground clearance.



OPERATE AND CONTROL BY RADIO.







THE BEST TRANSPORT SOLUTION FOR THE CONSTRUCTION INDUSTRY

#### Features + advantages

- Load floors reinforced and braced for drive-on operation of tracked and wheeled vehicles
- Fully field-tested: high axial and point loads can be achieved
- An extremely wide range of construction vehicles can be transported with just one type of trailer
- Additional construction-specific features such as wheel recesses, laterally lowered driving surfaces, wheel loader slopes and excavator recesses
- A choice of tried-and-tested axle technologies: DOLL vario®, DOLL panther®
- Floor covering with anti-slip sanding in the same color as the trailer



### FACTS + COMPONENTS

- Gooseneck with outer beams or central frame
- User-friendly, smooth telescoping mechanism

- A high-quality coating of your choice: two-layer painting or zinc spraying (metallization)
- Hydraulic single or double ramps



### Flat-bed trailer

UNIVERSALLY APPLICABLE FOR LONG, BULKY AND HEAVY GOODS

#### Features + advantages

- Robust, continuous loading area
- Outstanding manoeuvrability: hydraulic axle turntable steering developed by DOLL®
- Tried-and-tested DOLL® vario axle technology with a 45° steering angle on the last axle
- User-friendly, smooth telescoping mechanism with single and double extension
- A high-quality coating of your choice: two-layer painting or zinc spraying (metallization)
- Various storage packages to choose from



Unbeatable combination of smooth telescoping DOLL® pre-tensioning system. Both ensure that you achieve a robust loading area of up to 30 meters.



With the radio remote control, you can always readjust when things get tight. For extra control in tight conditions.





#### Absolute maneuverability

Thanks to the hydraulic turntable steering, the platform semitrailer is incredibly maneuverable and can even achieve a steering angle of up to 45°.



#### Comprehensive load securing package

With numerous combination lashing strips, combination lashing rings and stanchion pockets in the front, rear and intermediate table, the platform semi-trailer ensures the safe transport of your transported goods.



UP TO THE GREATEST CHALLENGES

Having started in timber transport, we understand this special transport technology inside out. With their stability, tracking accuracy and manoeuvrability, DOLL® self-steering trailers set the standard across the market. And they prove their worth anew every day in transport assignments for our customers across the world.



#### **DOLL®** wind blade transport system 4.0

In addition to classic long material, the DOLL® self-steer trailer is also suitable for transporting wind blades. Therefore, the self-steer trailer and hydraulic lifting adapter becomes the heavy-duty DOLL® wind blade transport system. With interfaces for any wind blade up to 100 m in length and 35 t in weight.

More information at windblade.doll.eu



- For long products up to 100 m in length and 85 t in weight
- Extremely agile: hydraulic axle and turntable steering developed by DOLL®
- Extraordinary ground clearance and outstanding manoeuvrability
- From 3 to 5 axles, can be extended with a dolly with 2 to 3 axles

- Various loading heights available
- A high-quality coating of your choice: two-layer painting or zinc spraying (metallization)
- A market-leading load securing concept
- Especially for concrete parts: spindle-adjustable stakes and inclined braces
- Smart storage concept in the platform

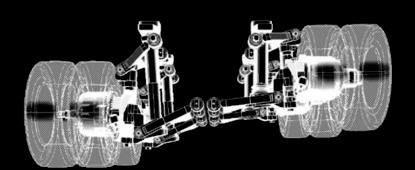
## DOLL® axle technologies

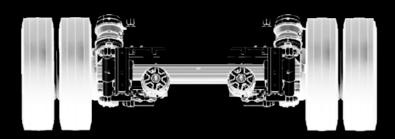
Perfectly synchronized with DOLL tronic®,
DOLL connect® and DOLL control®



The leading, innovative axle technology with independent wheel suspension.

- Ideal for on-site use thanks to 55° steering angle
- 12 t axle approval for maximum payload
- Low loading height with high axle compensation of 315 mm
- Hydraulic axle balancing ensures that platform remains horizontal at all times
- Easy control of steering and driving level via DOLL connect® radio remote control or the 7" display DOLL control®
- High-quality, low-wear components
- All bearing positions connected to the central lubrication system for ease of maintenance





#### DOLL vario®

- 45° steering angle
- up to 10 t axle approval for maximum payload
- High-quality components with maximum corrosion resistance
- Pneumatic suspension for high driving comfort
- Convenient operation of steering and driving level via DOLL connect® remote control or the 7" DOLL control® display
- All bearing positions connected to the central lubrication system for ease of maintenance

#### **DOLL** tera<sup>®®</sup>

The most robust axle for use in tough on- and off-road conditions and extremely difficult terrain.

25 years of know-how in the military use of pendulum axle systems.

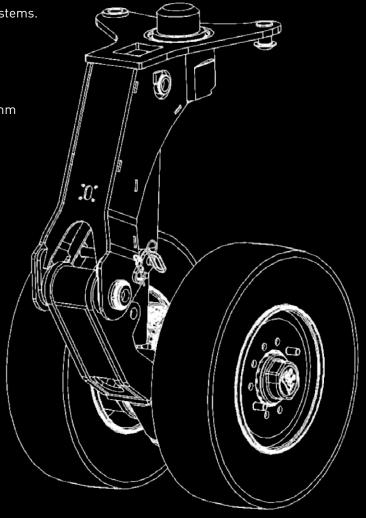
- 17.5" tires
- Steering angle of 60° for maximum manoeuvrability
- 12 t axle load for maximum payload
- Low loading height with high axle compensation of 600 mm
- Very robust upper arm and swingarm, derived from military use
- All bearings connected to central lubrication system for high ease of maintenance
- Convenient operation of steering and driving level via DOLL connect® radio remote control or the 7" DOLL control® display

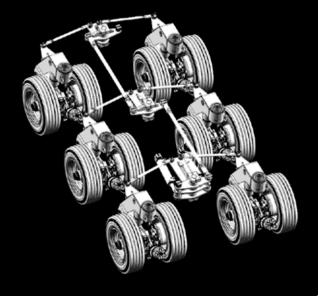
### FEATURES + ADVANTAGES

- Optimised geometry for heavy terrain provides maximum swing clearance
- Minimal wear of bearings and other power components
- Maximum ground clearance of the brake cylinder to prevent damage
- Large hydraulic cylinder for minimum system pressures and low maintenance requirements
- Continuous excavator trough with 700 mm internal width

### Trend-setting steering technology

- Excellent cornering properties
- Excellent driving performance
- Particularly direct steering and accurate tracking
- Very low maintenance, low tire wear
- Manual steering via radio remote or cable control for additional safety
- Highest reliability thanks to two independent steering circuits
- Use of high-quality components and renowned brand products







Many talk about quality and a long service life. But we actually deliver it. It goes without saying that we are fully compliant with standards such as DIN EN ISO 9001; in fact, we've been ISO-certified since 1995. But what's even more important to us is our employees' understanding and attitude to quality – from development and production through to personal customer service. In every single thing we do,



we work towards our vision of achieving the very best. The combination of user-orientated development, perfectly constructed individual components and service-optimised assembly is what makes a vehicle exceptional throughout its life. This holistic approach is what our vehicles are known for by customers across the world.

But true DOLL® quality is also all about usefulness; it's about satisfaction, being ahead of your game, taking pride in what you do. And it's about reliability and safety.

Our quality sets the standard mile after mile on any terrain.

# DOLL® SERVICE PRO

# Service at DOLL®. Around the clock. Worldwide.

24h
Servicehotline

+49 7804 49-163 service@doll.eu

Choosing a DOLL® product means much more than just buying a vehicle. It also marks the beginning of a reliable partnership. A partnership based on our promise to do everything in our power to help you fulfil your potential. Your vehicle and our staff are your companions, reliable partners for your business. Day by day. Kilometre by kilometre. With our comprehensive range of services, we'll provide the support you need whenever and wherever you need it, so that you can focus entirely on your core business.



#### Repairs + maintenance.

#### In professional hands.

Your DOLL® vehicle is your daily business companion and you need to be able to rely on it without any restrictions. That's why we're committed to exceptional quality here at DOLL® – and it's also why we recommend securing regular care, maintenance and repairs for your vehicle. Whether that's at our plant's own service workshop in Oppenau, at one of our service partners or – thanks to our mobile service team – at a location of your choice. Whichever option you choose, you'll be dealing with highly qualified specialists who only use original DOLL® parts and specialist tools. This means your vehicle's downtime will be kept to a minimum and you'll be quaranteed a high level of workmanship.



#### Spare parts + accessories.

#### Top quality, down to the smallest part.

DOLL® vehicles are extremely robust and durable. That also goes for all of their parts and components. Nevertheless, the wear and tear caused by the demands of daily use, maintenance or repairs may mean that some parts need to be replaced.

We'll manufacture the original DOLL® component or procure the spare parts or accessories you need. We guarantee that we can retrofit any technical or organisational feature on your vehicle. And since a big commitment to quality starts with the small things, every part that leaves our warehouse is subject to the exact same quality standards that we apply to our fully assembled, ready-to-drive vehicles. The value and safety of your DOLL® vehicle are our top priorities.



#### Technical support.

#### Support that gets you further.

It's often the little yet valuable tips from experts that help us right away – whether that's with identifying a fault or solving a problem. On our service hotline, you can speak to DOLL® experts who know your vehicle better than anyone else. We provide instant support over the phone, helping you avoid long periods of downtime. And if we're not available outside our business hours, we'll refer you to our capable external partner.



#### DOLL® Academy.

#### Get qualified. Improve your skills.

If your employees and drivers have a perfect command of their vehicles, you're guaranteed to improve safety and reduce costs in wear and tear. And what's more, your transports are guaranteed to go smoothly. In our training courses, we'll show you and your employees how to use your vehicles efficiently – either before they're driven for the first time or during annual training sessions. For this purpose, we'll create and design a training concept tailored specifically to your needs and field of activity.



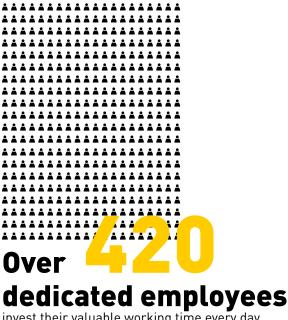
Over 120 partners worldwide: partner.doll.eu



#### When visions turn into a head start.

## More than 145 years experience in vehicle construction

Since 1878, we have been developing and producing sophisticated vehicles made for everyday use at three locations.



invest their valuable working time every day in our exceptional products and services.

## 35 engineers and specialists

think of intelligent, practice-oriented solutions in detail. This is precisely why we are always one step ahead with our technological innovations.

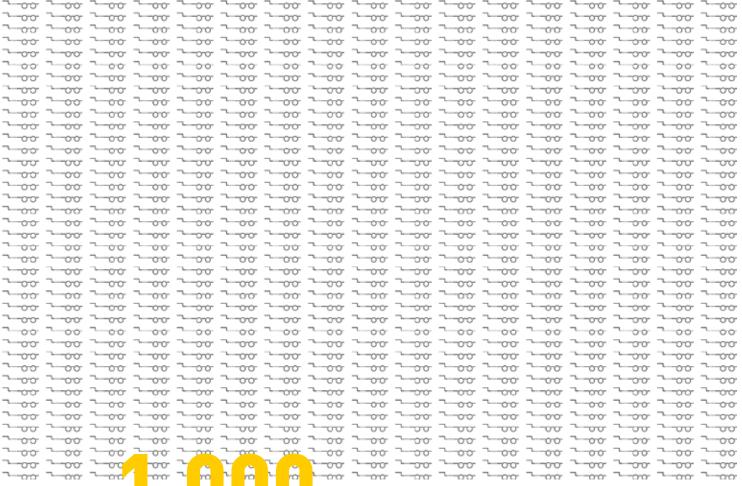


#### DOLL® IN FACTS AND FIGURES.

# Business areas: Defence, Heavy Haulage, Airport Equipment, Timber Transport, Service

## plants on continents

Oppenau in the Black Forest, Mildenau in Saxony, New Jersey in North America and Hungary.



## Over **vehicles** per year

delivered every year and reliably master every transport challenge. Day after day. Kilometre after kilometre. Worldwide.



We are happy to advise and support you and demonstrate our vehicles to you at any time.

For information and advice call +49 7804 49-530 or schwer@doll.eu.

More information on www.doll.eu.