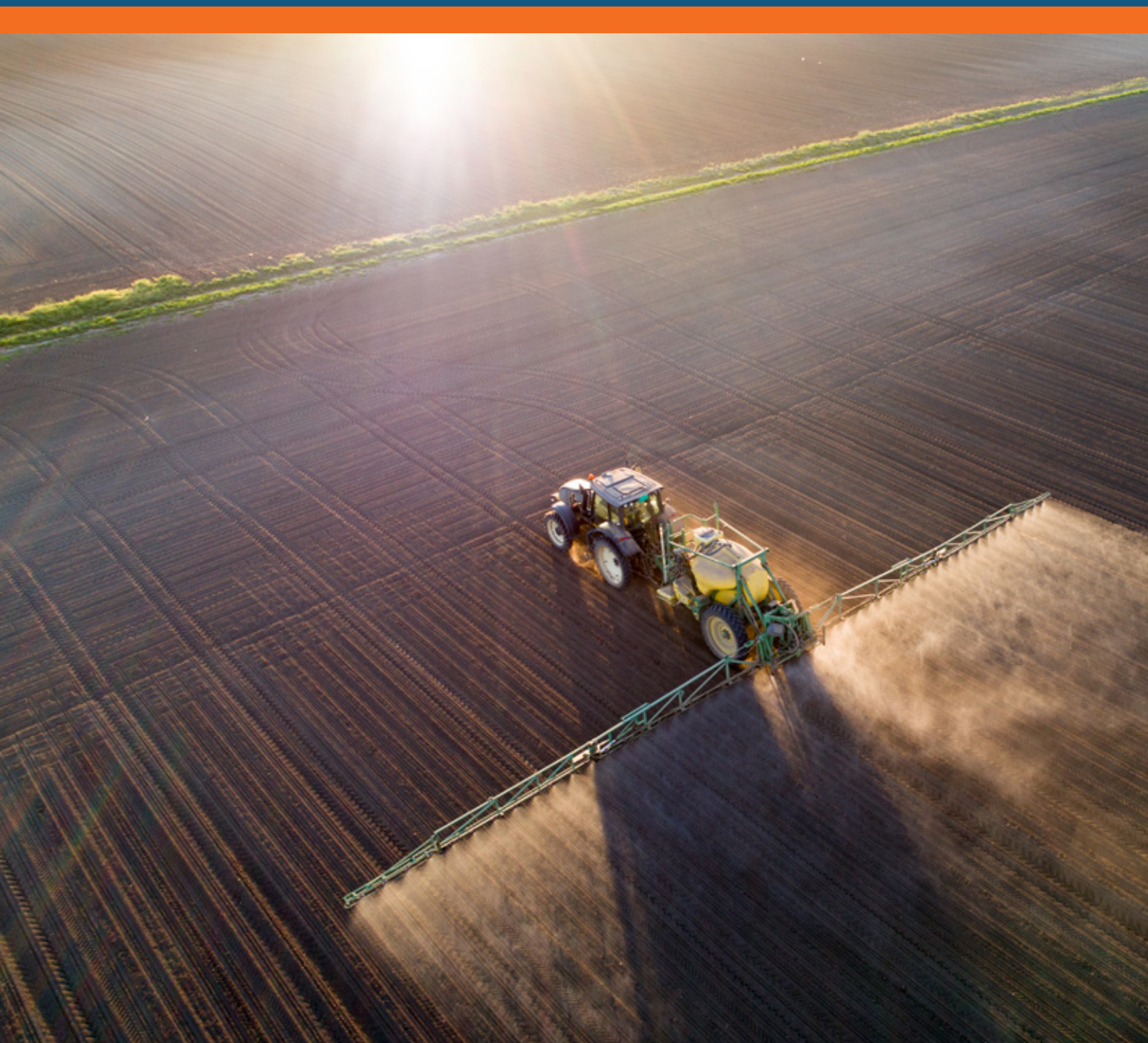


BPW Agricultural Solutions

Collection of arguments

Field of application: Plant protection

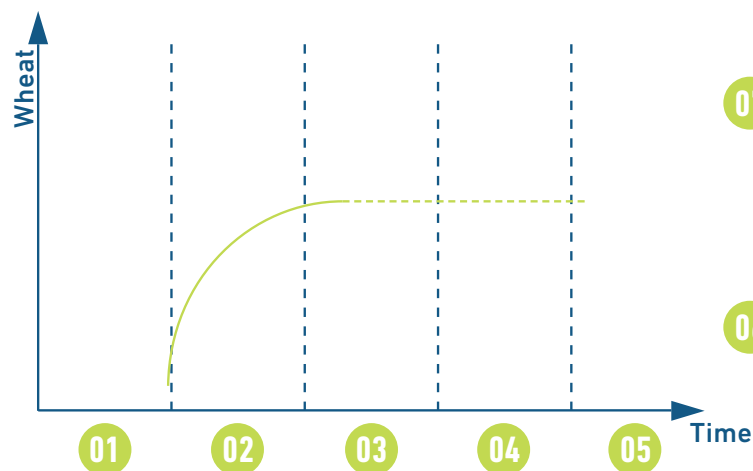
EN



Customised Solutions



FIELD OF APPLICATION



07



01 Soil cultivation and seeding

02 Fertilizing

03 Plant protection

04 Harvest and grassland technology

05 Transport

06



06 Livestock farming

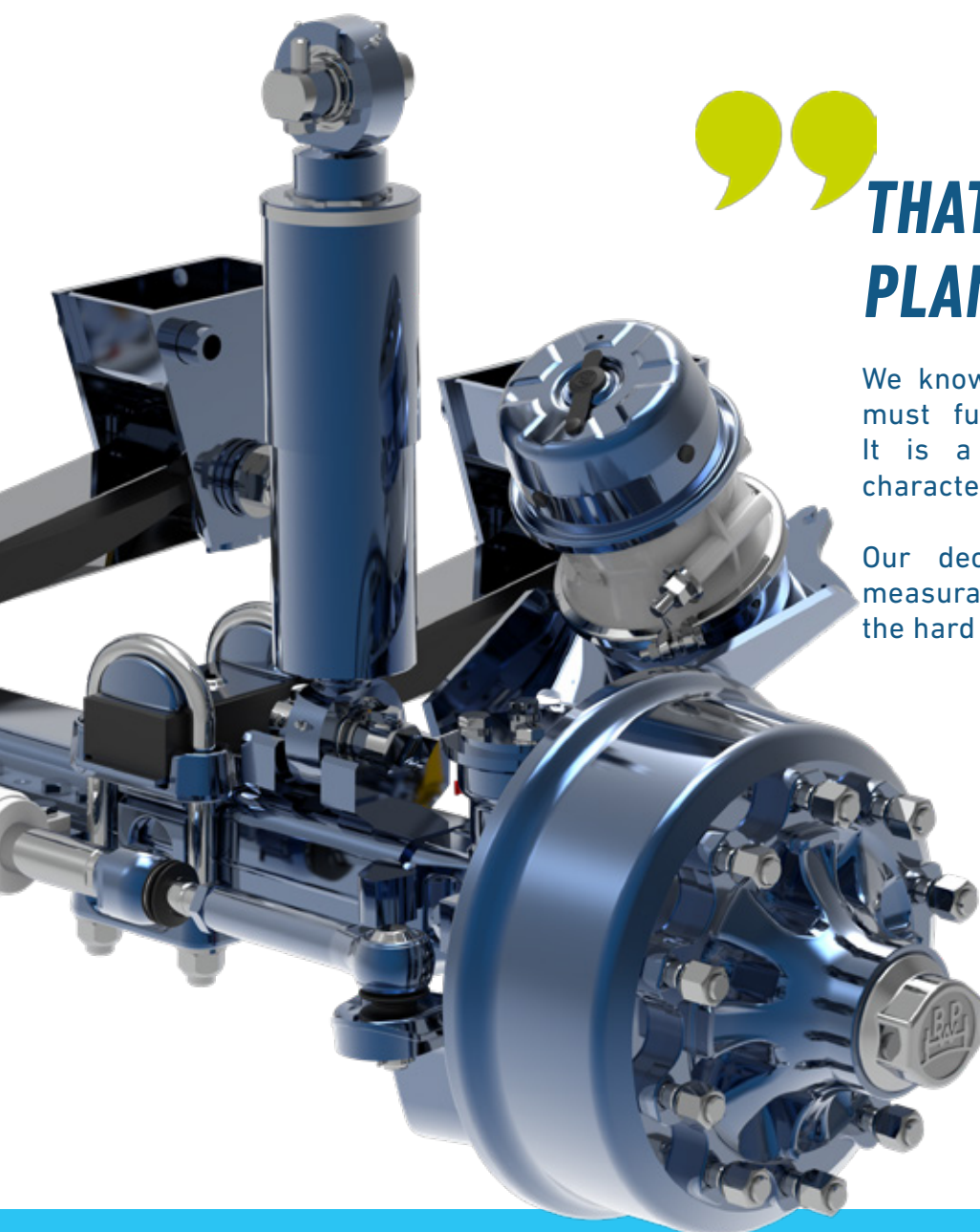
07 Forest technology



THAT'S HOW WE THINK PLANT PROTECTION

We know what a versatile role a sprayer must fulfil in the agricultural segment. It is a special vehicle with individual characteristics.

Our decades of experience guarantees measurable advantages of the axles during the hard work.



Partnership through a lifetime



SALES AND ORDER LOGISTICS

- Comprehensive support and flexibility in ordering
- Professional organization for optimized lead time
- Personal contact person



APPLICATION CONSULTATION

- Technical support to identify the most suitable solution for the application
- Ensuring compatibility between components and systems used
- Navigate through the diverse range of products on the market
- Assistance during commissioning



CONSTRUCTION

- Development in partnership with the vehicle manufacturer
- Development of components, axles and suspension units
- FEM designed components and systems
- Brake and bearing calculation
- In-house test vehicle and brake test bench
- Lifetime, and fatigue tests



PRODUCTION

- High competence in mechanical fabrication
- Surface treatment and assembly
- Quality assurance certificates
- Product specific assembly points



CUSTOMER SERVICE

- Comprehensive customer services
- Complete maintenance documentation
- In the scope of a technical agreement, the deployment of our fitters on-site is possible



SPARE PARTS SUPPLY

- Longer service life due to perfectly matched individual components
- More than 3.200 service station world wide with original BPW parts
- Individual spare parts lists and drawings
- Spare parts groups for standard products
- Every axle and running gear is documented, for easy component identification

General product benefits



Minimal corrosion damage and longer service life of the complete chassis due to the KTL surface treatment



Large safety reserves in case of a temporary and extreme overloading



EU compliant brakes



FEM designed, tried and tested components

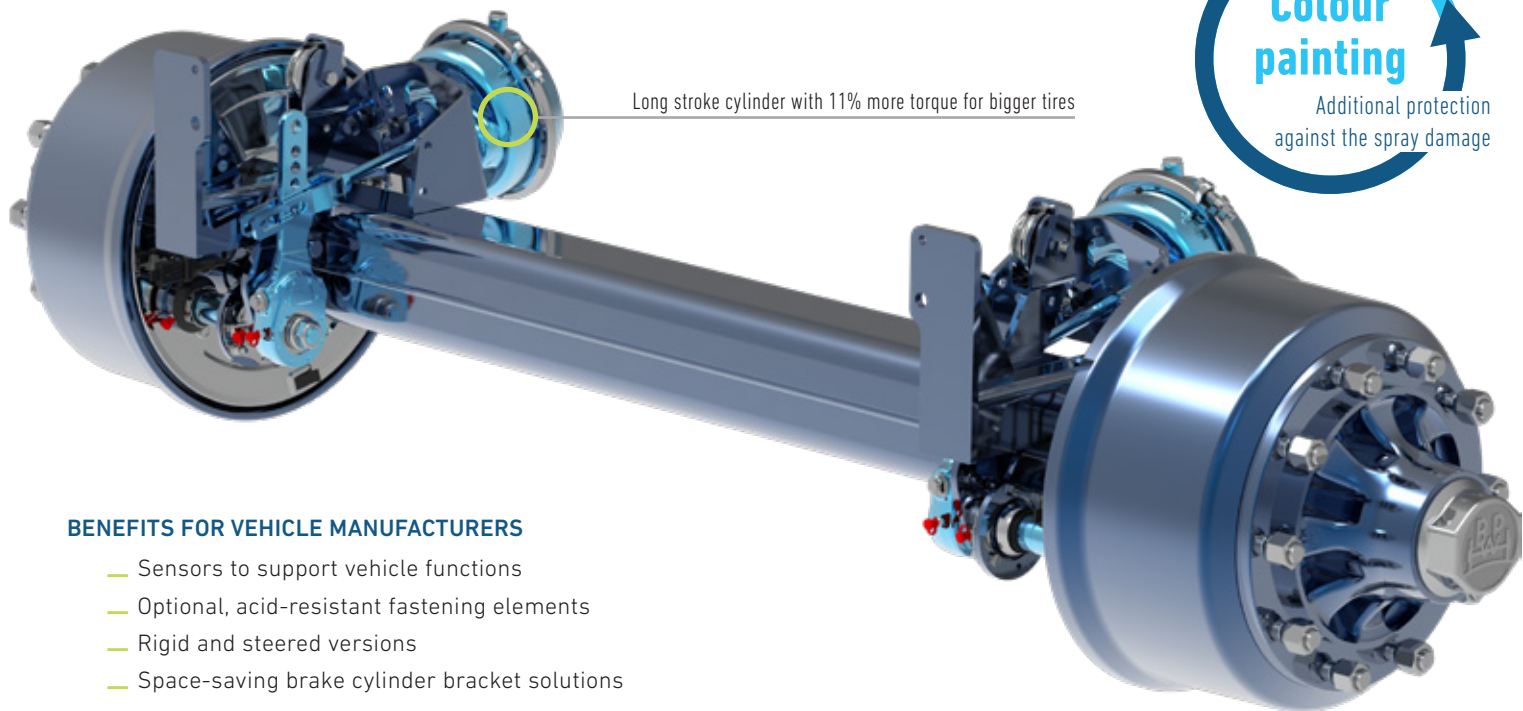


Axles are either being supplied with the latest sensor technology or prepared for their installment

SERVICES

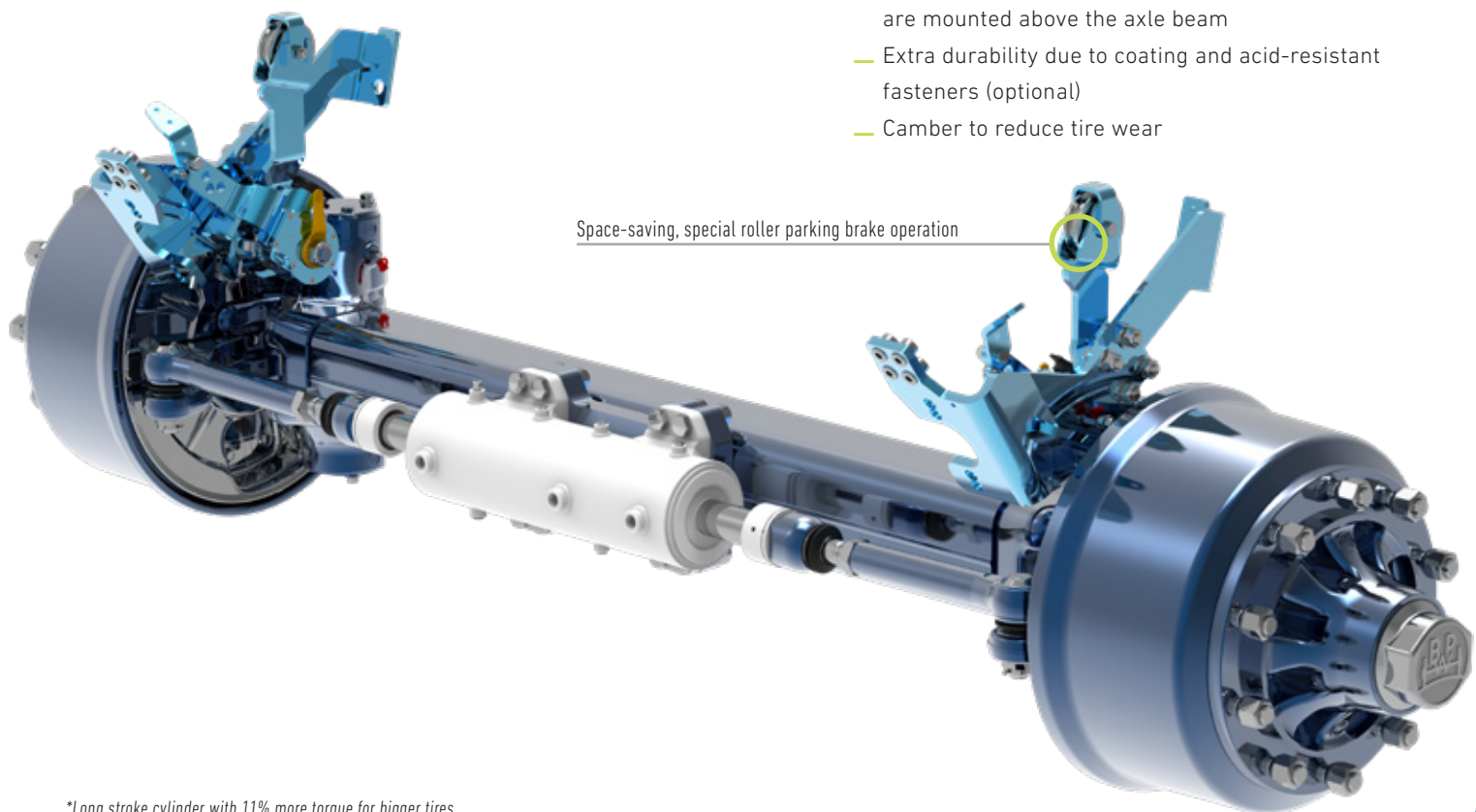
UNSPRUNG SOLUTIONS

Single axles



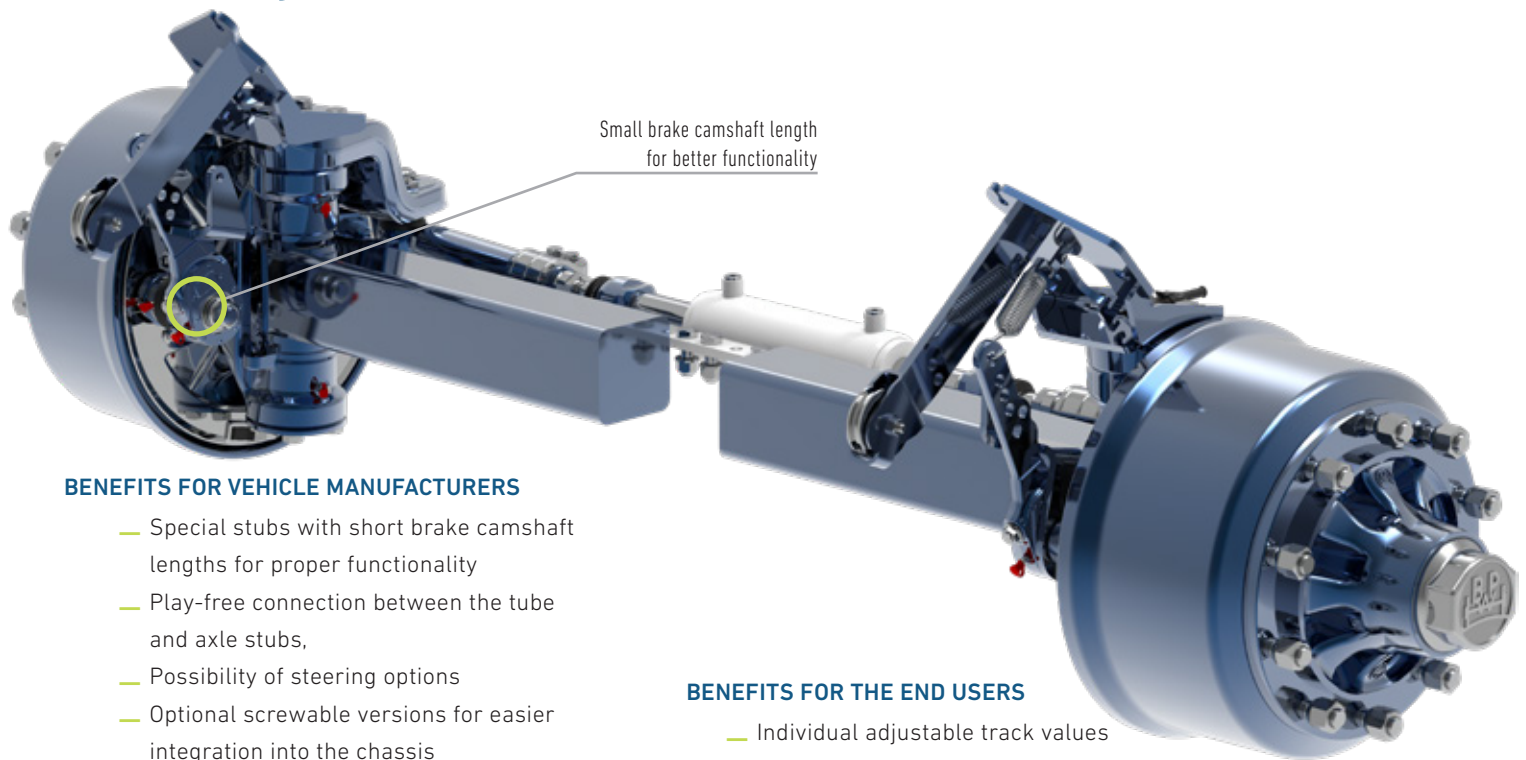
BENEFITS FOR THE END USERS

- Extra plant protection, all functional components are mounted above the axle beam
- Extra durability due to coating and acid-resistant fasteners (optional)
- Camber to reduce tire wear



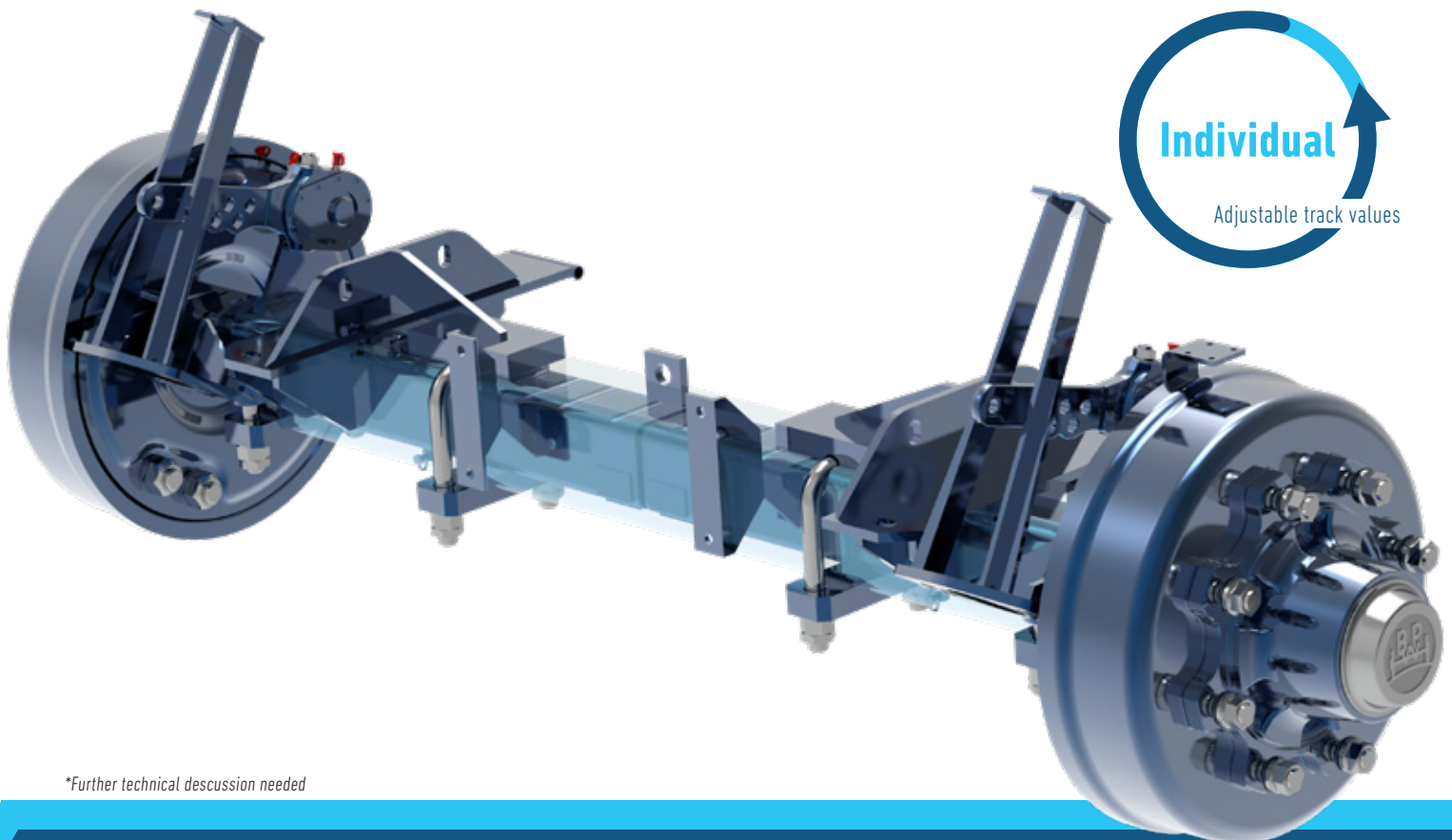
*Long stroke cylinder with 11% more torque for bigger tires

Track adjustable axles- and axle stubs*



BENEFITS FOR THE END USERS

- Individual adjustable track values for plant-specific use
- Easy handling and adjustability
- Provided camber to reduce tire wear

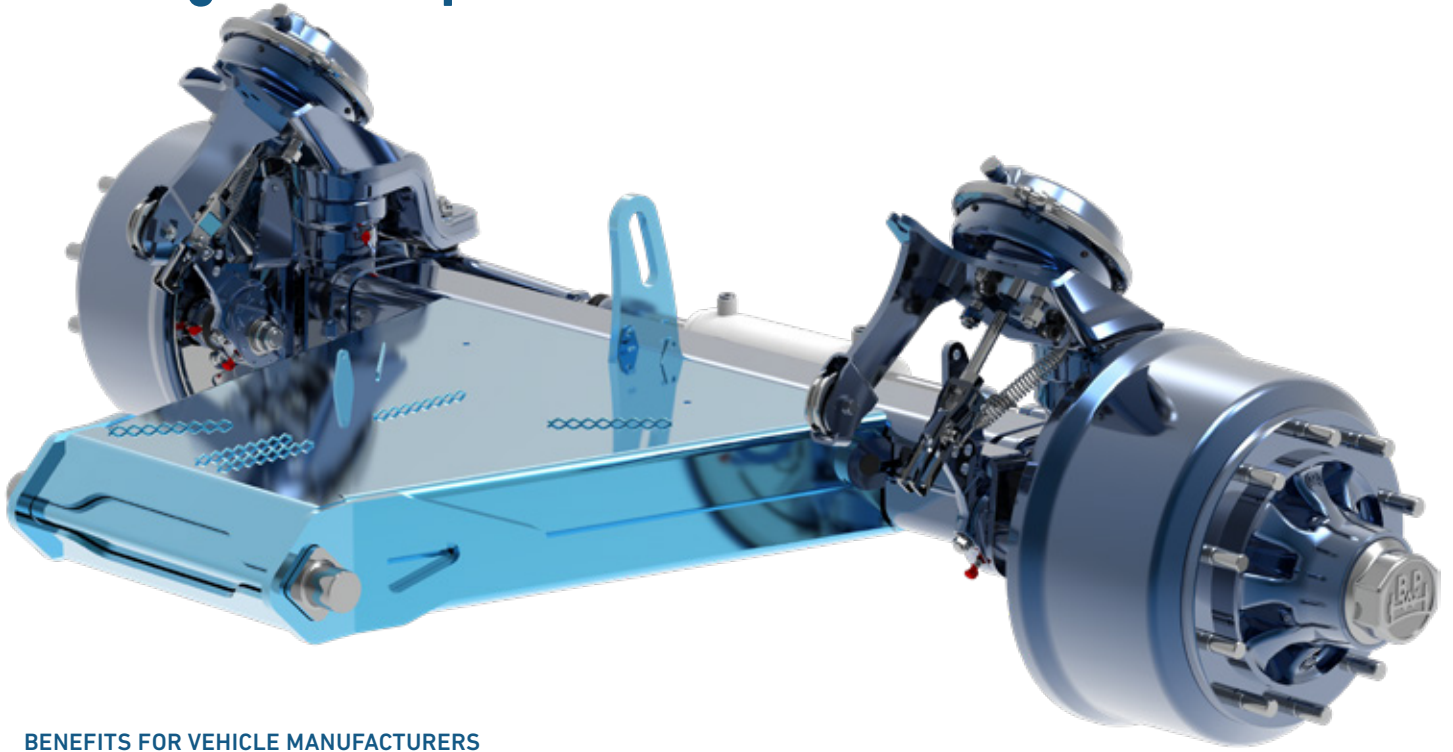


*Further technical discussion needed

UNSPRUNG SOLUTIONS

SUSPENSION UNITS

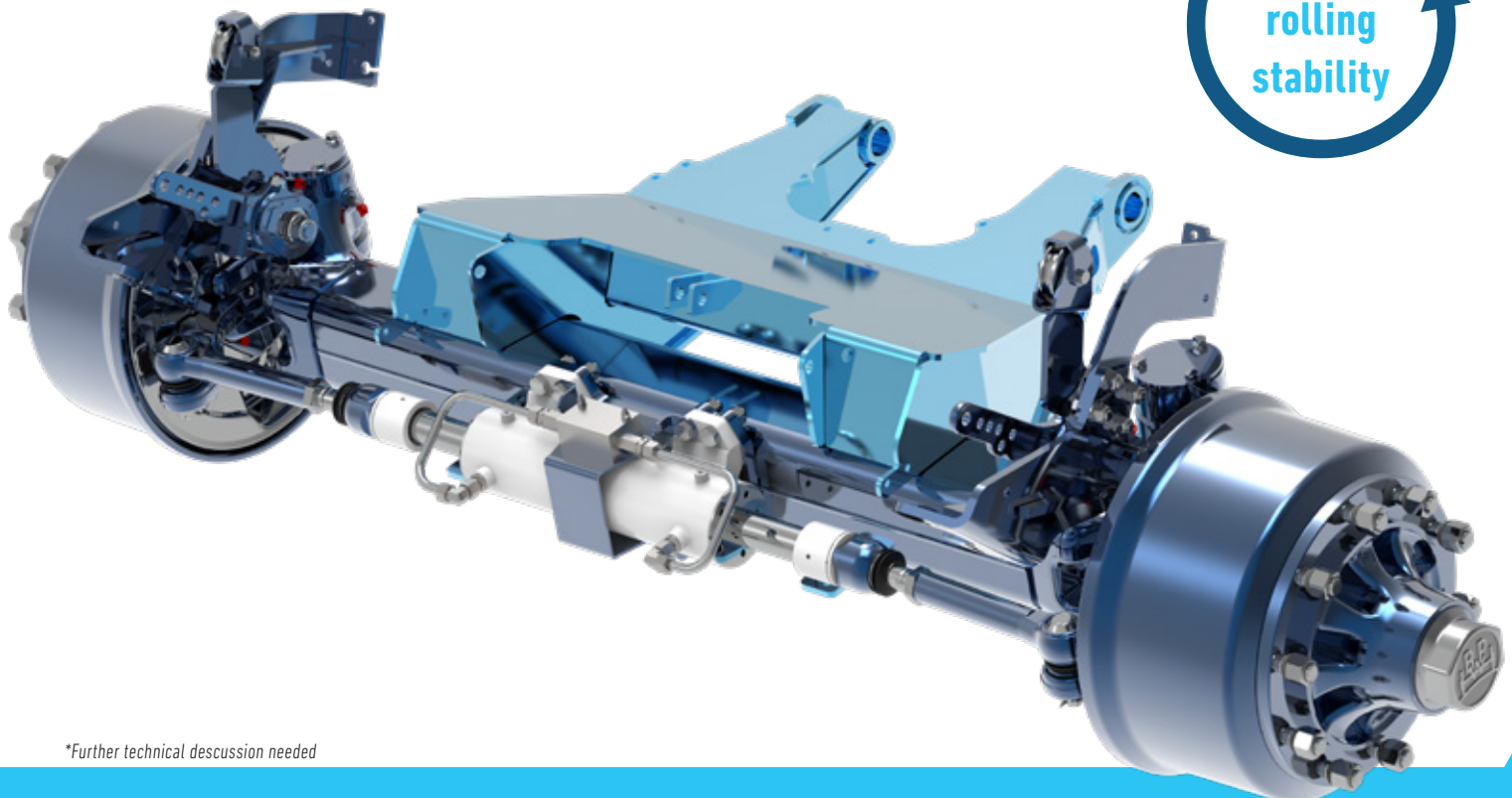
Trailing arm suspension unit*



BENEFITS FOR VEHICLE MANUFACTURERS

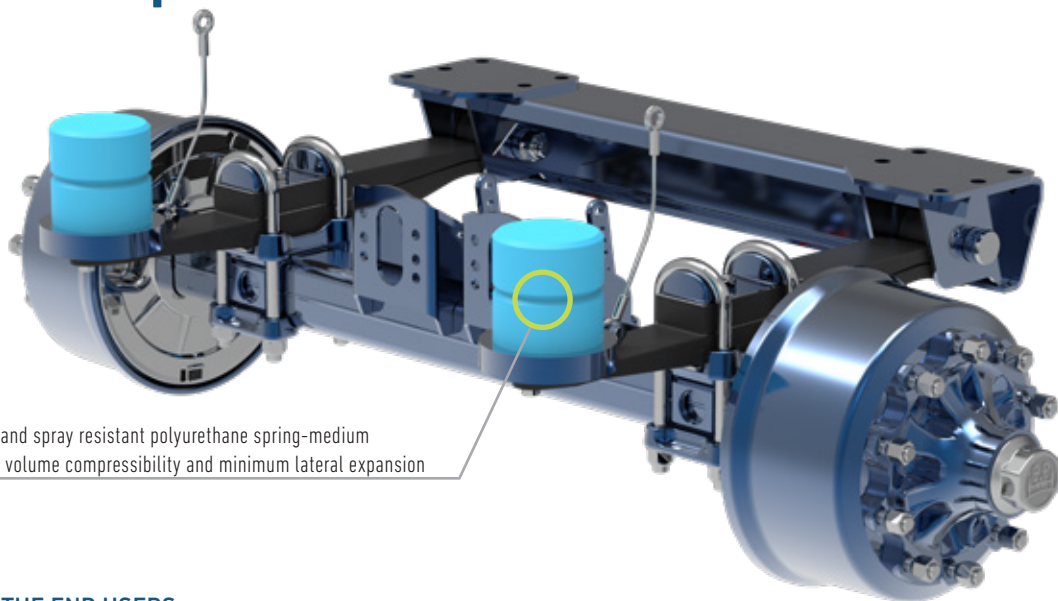
- Very rigid box construction against torsional stress for extreme stability
- Prepared for cellasto-, air- or hydropneumatic suspension
- No overhanging components designed under the lower plane of the axle
- Possibility of steering

High
rolling
stability



**Further technical discussion needed*

Cellasto suspension unit



Abrasion and spray resistant polyurethane spring-medium with high volume compressibility and minimum lateral expansion

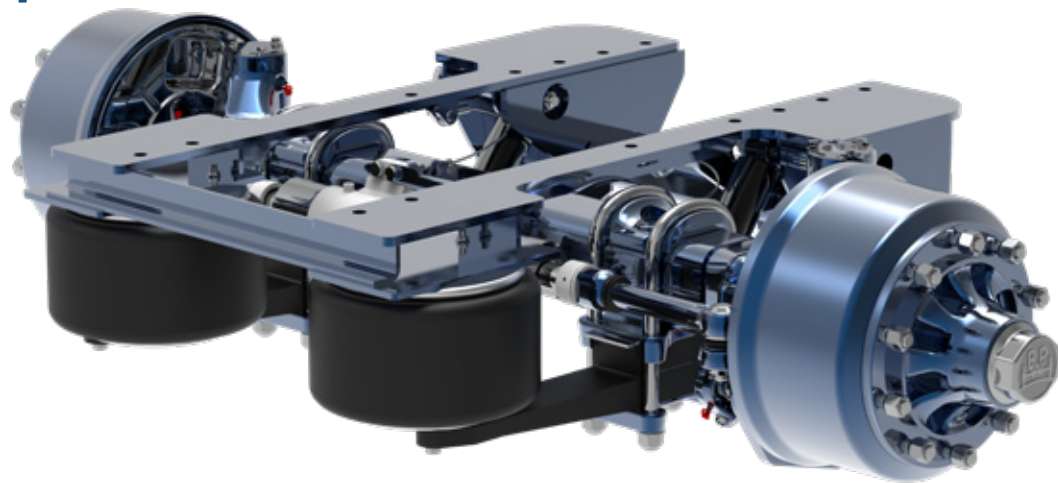
BENEFITS FOR THE END USERS

- Maintenance-free suspension
- Optimum transmission of forces due to a special trailing arm and formfitting axle connection for lower service costs and service life

BENEFITS FOR VEHICLE MANUFACTURERS

- Simple and cost-optimised suspension
- Can be operated without external medium or control
- Optionally with frame for easy installation

Air suspension unit



BENEFITS FOR THE END USERS

- Outstanding driving comfort for on-road and off-road use
- Constant ride height even with different loading conditions
- Optimum transmission of forces due to a special trailing arm and formfitting axle connection for lower service costs and service life
- Maintenance free suspension

BENEFITS FOR VEHICLE MANUFACTURERS

- Optional with frame and complete braking system
- Possibility for steering
- Well-known and proven BPW components and solutions based on the semi-trailer program
- Even load distribution over all wheels

**Further technical discussion needed*

SUSPENSION UNITS

SUSPENSION UNITS

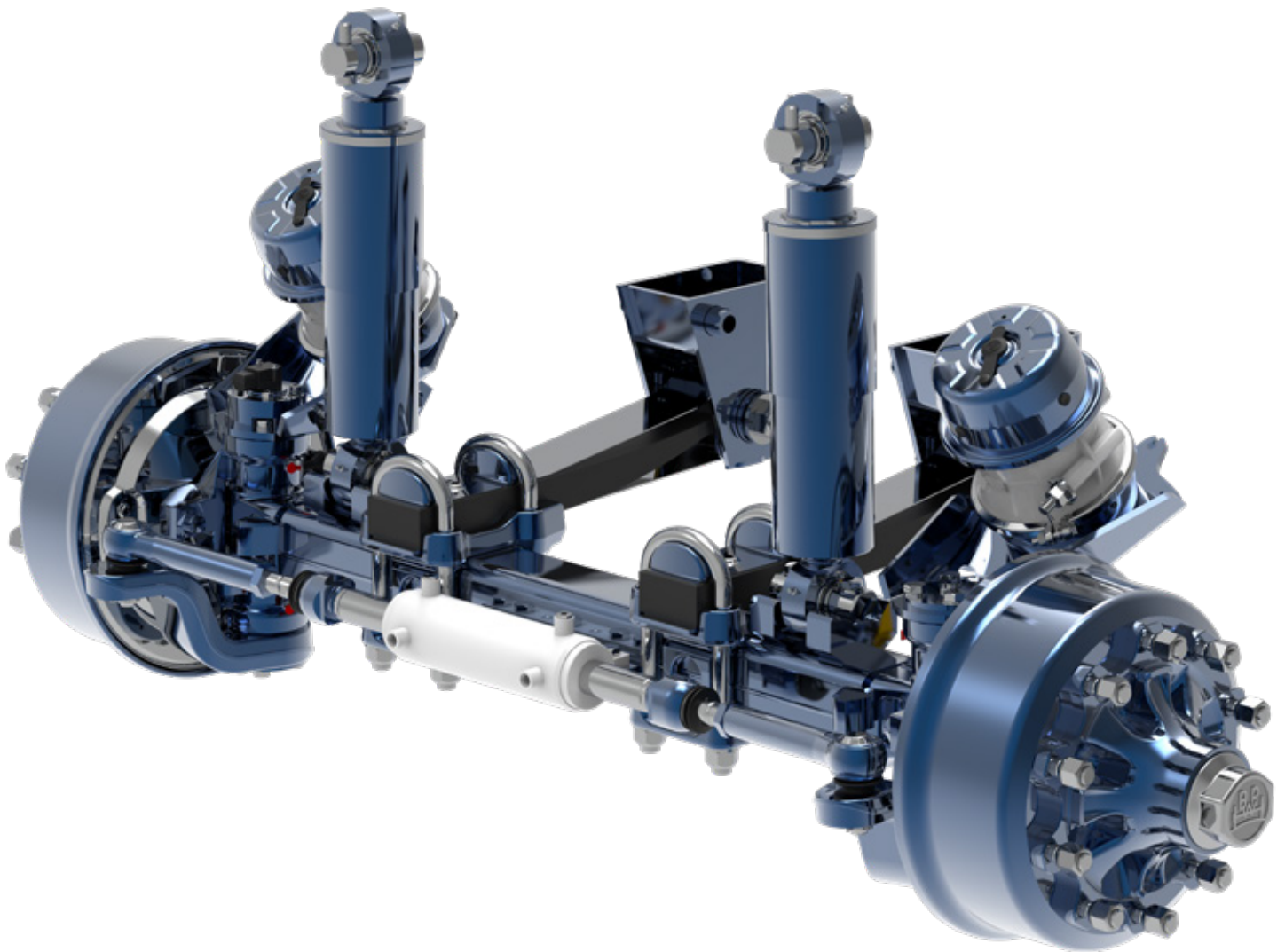
Hydropneumatic suspension unit

BENEFITS FOR VEHICLE MANUFACTURERS

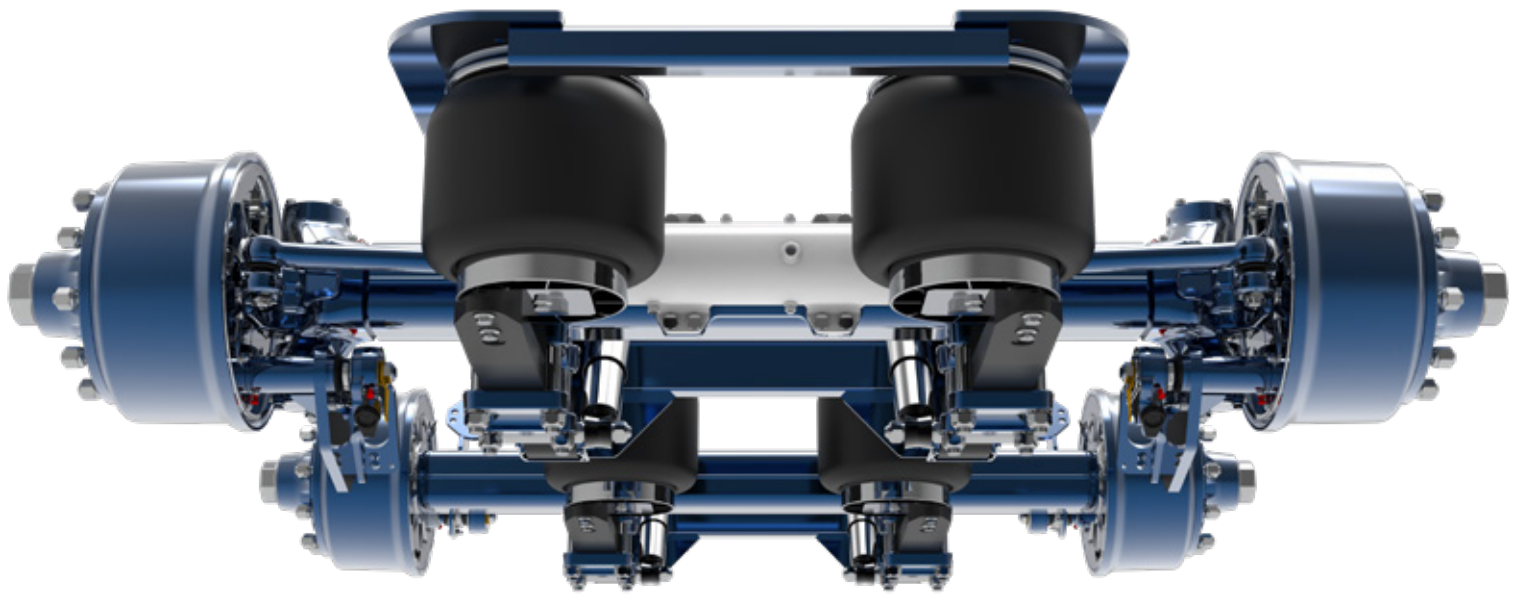
- Uncompromising driving safety
- High spring travel and complete dynamical equalisation
- Optional individual frame solutions with little assembly effort
- Prepared for electronic force-steering
- Possibility of steering

BENEFITS FOR THE END USERS

- Better driving comfort due to the wide support of the hydraulic cylinders
- Safe and comfortable driving even with a high center of gravity of the vehicle
- Outstanding driving comfort for on-road and off-road use
- Constant ride height even with different loading conditions



Multi axle applications

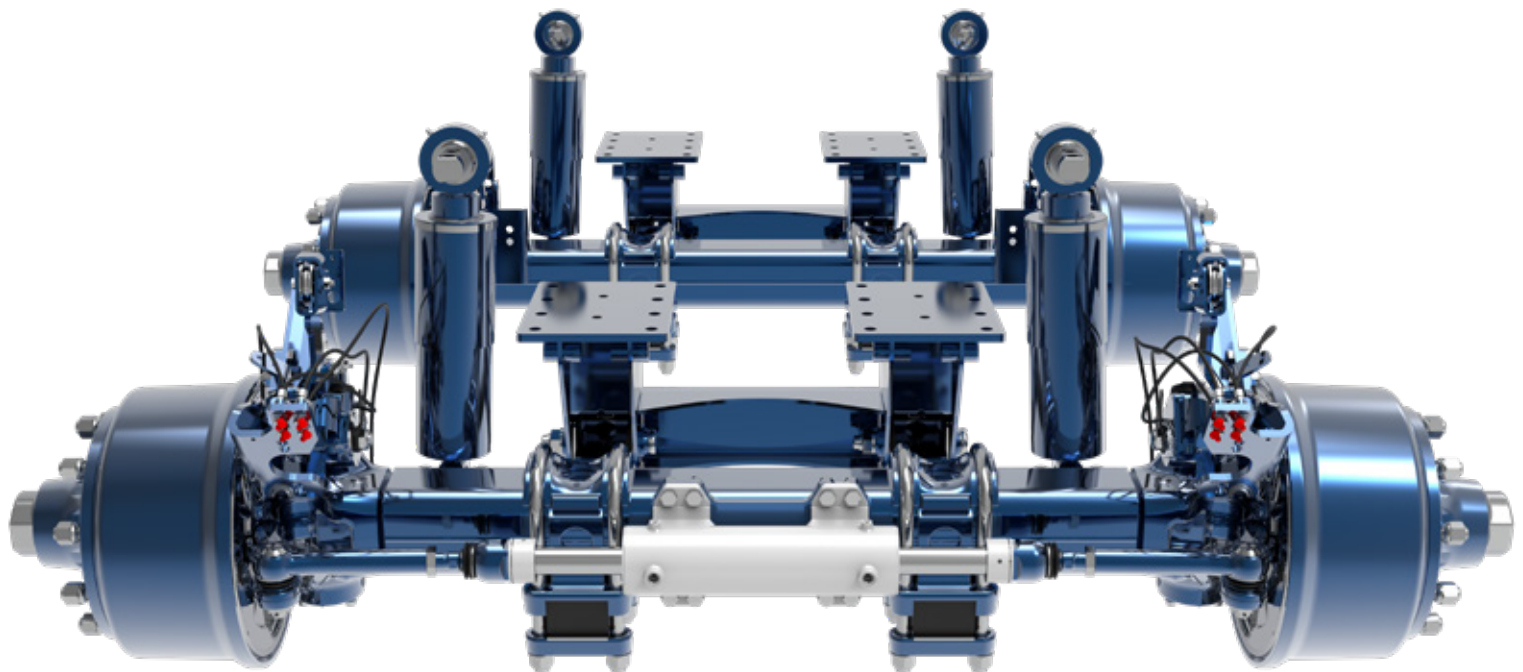


BENEFITS FOR VEHICLE MANUFACTURERS

- With hydropneumatic- or air-suspension
- Optional with frame and complete braking system
- Wide range of design options through modules (rigid – self steering, rigid – force steering, force steering – force steering)
- Sensors to support vehicle functions

BENEFITS FOR THE END USERS

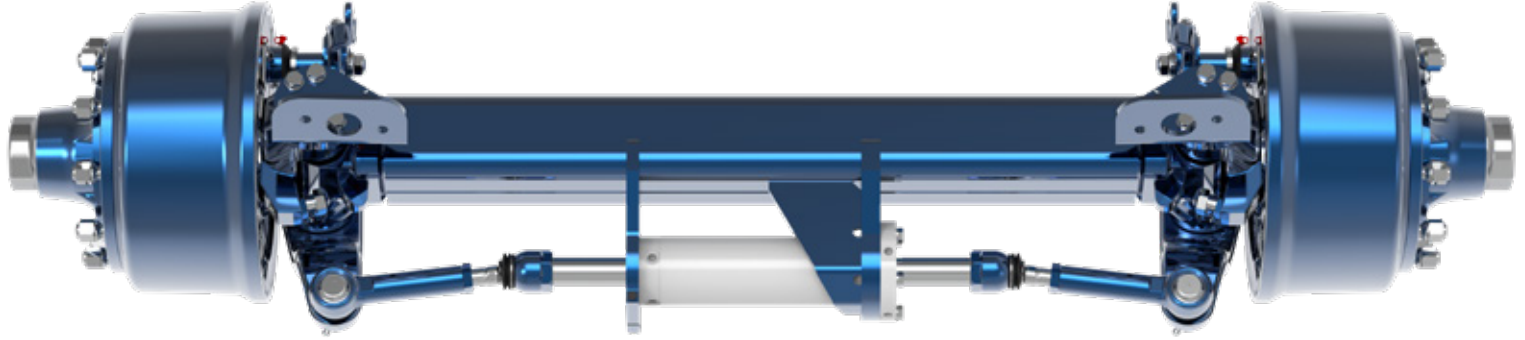
- Even brake and tire wear
- Even ground pressure
- Optimum transmission of forces due to a special trailing arm and formfitting axle connection for lower service costs and longer service life



SUSPENSION UNITS

OPTIONS

Axles with force-steering geometry



BENEFITS FOR VEHICLE MANUFACTURERS

- Designed for hydraulically or electronically controlled force-steering
- 28° maximale steering angle with force-steering cylinder
- Prepared for Elobau Steering angle sensors
- Optimal Steering force due to the steering geometry
- Flat thrust washer for low force effort turning behaviour
- Smaller turning radius



Axles with self-steering geometry

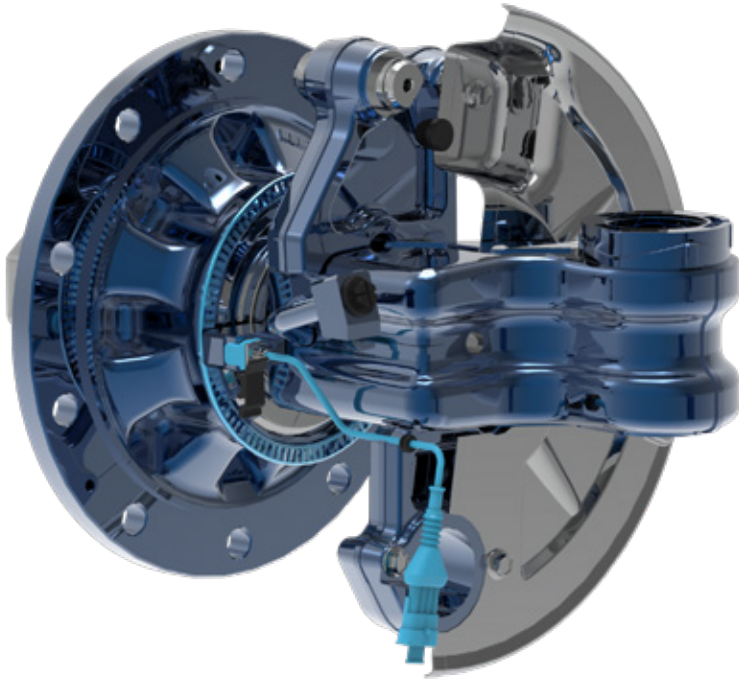


BENEFITS FOR VEHICLE MANUFACTURERS

- With combination cylinder for self-steering or force-steering mode
- 28° maximale steering angle with force-steering cylinder
- Prepared for Elobau & Mobil Elektronik Steering angle sensors
- 200h maintenance intervalls
- Several opportunities for brake cylinder bracket positioning
- Better driving behaviour due to the waved thrust washer



SDS* and ABS sensor

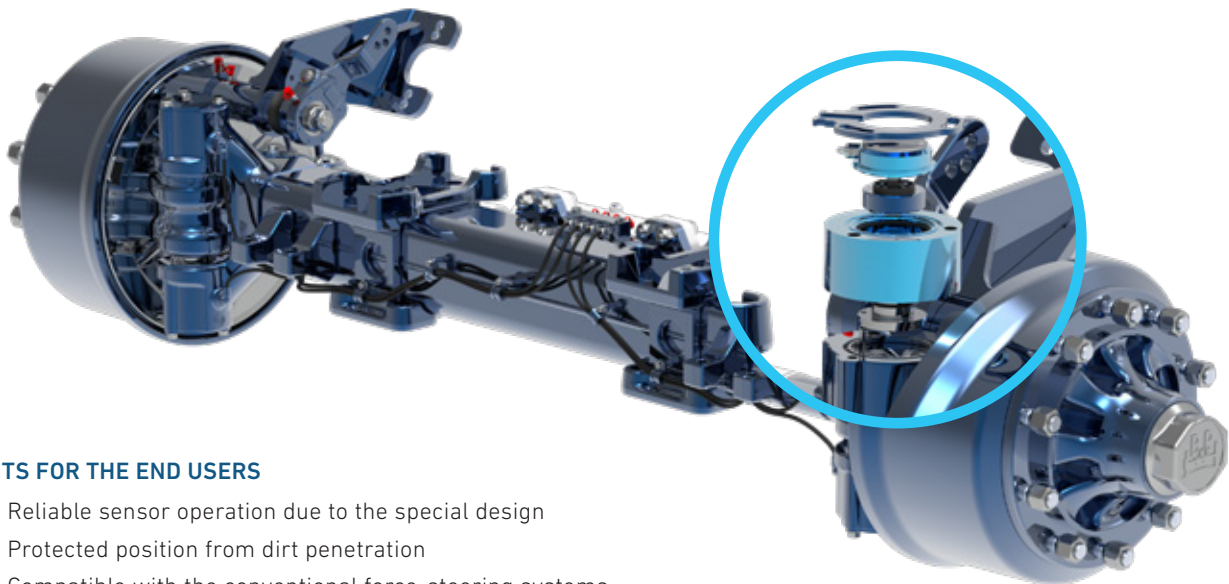


BENEFITS FOR THE END USERS

- Speed measurement from just 1 km/h (SDS)
- Determines the direction of the rotation (SDS)
- BPW patent: extra protection against twisting (SDS)
- Optional spreading rate adjustment (SDS)
- Highway compliance (ABS)
- Special protection design for sensors against dirt, water and mud: uninterrupted and reliable sensor signal

Uninterrupted
and reliable
sensor signal

Integrated steering angle sensor



BENEFITS FOR THE END USERS

- Reliable sensor operation due to the special design
- Protected position from dirt penetration
- Compatible with the conventional force-steering systems
- Possible to retrofit

**BPW Speed & Direction of rotation Sensor*

OPTIONS

The brands of the BPW Group:



BPW Bergische Achsen Kommanditgesellschaft

Postbox 12 80 · 51656 Wiehl, Germany · Telephone +49 (0) 2262 78-0

info@bpw.de · www.bpwagrar.com · www.bpw.de