

BPW Agrar Solutions

Collection of arguments

Field of application: Fertilizing

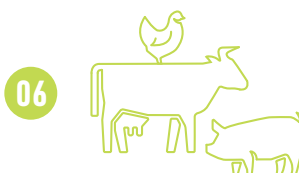
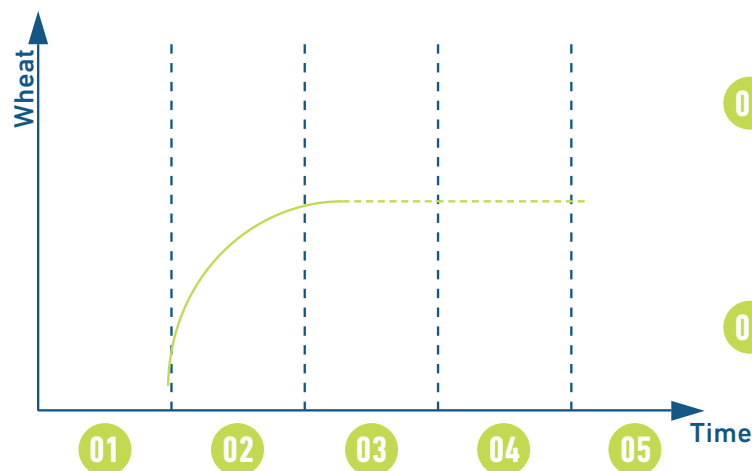
EN



Customised Solutions



FIELD OF APPLICATION

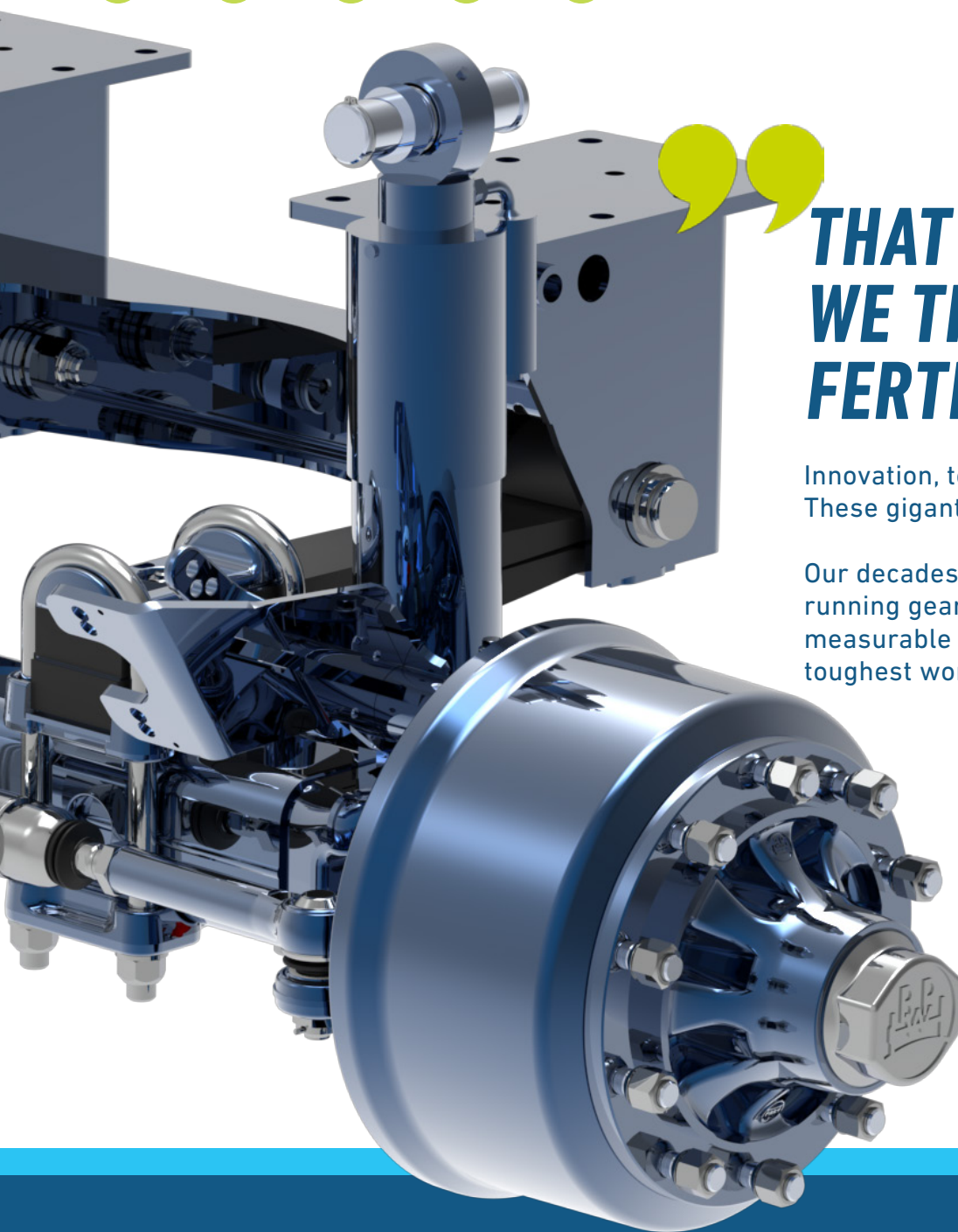


- 01 Soil cultivation and seeding
- 02 Fertilizing
- 03 Plant protection
- 04 Harvest and grassland technology
- 05 Transport
- 06 Livestock farming
- 07 Forest technology

THAT'S HOW WE THINK FERTILIZING

Innovation, top quality, extreme reliability.
These gigantic machines accept no less.

Our decades of experience in axles and running gear technology guarantee measurable advantages even in the toughest work environment.



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



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



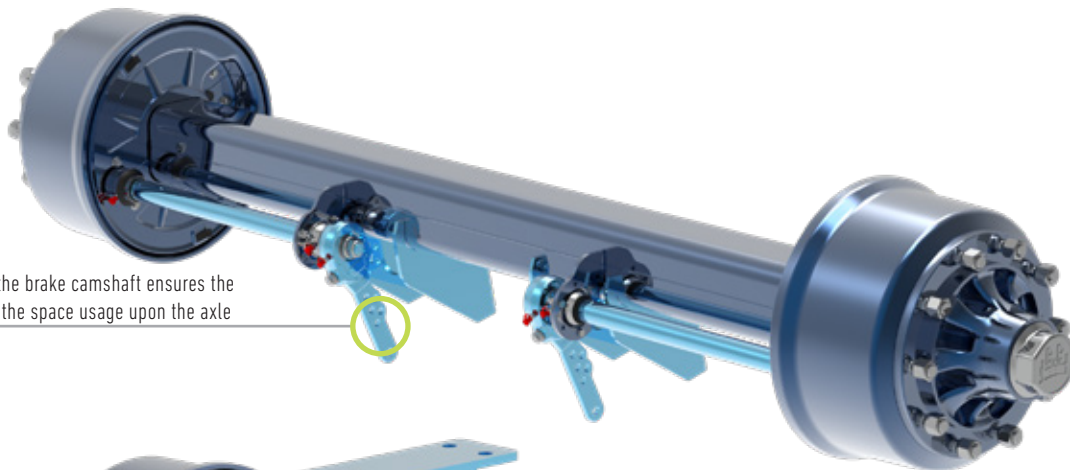
Axles are either being supplied with the latest sensor technology or prepared for their installment

SERVICES

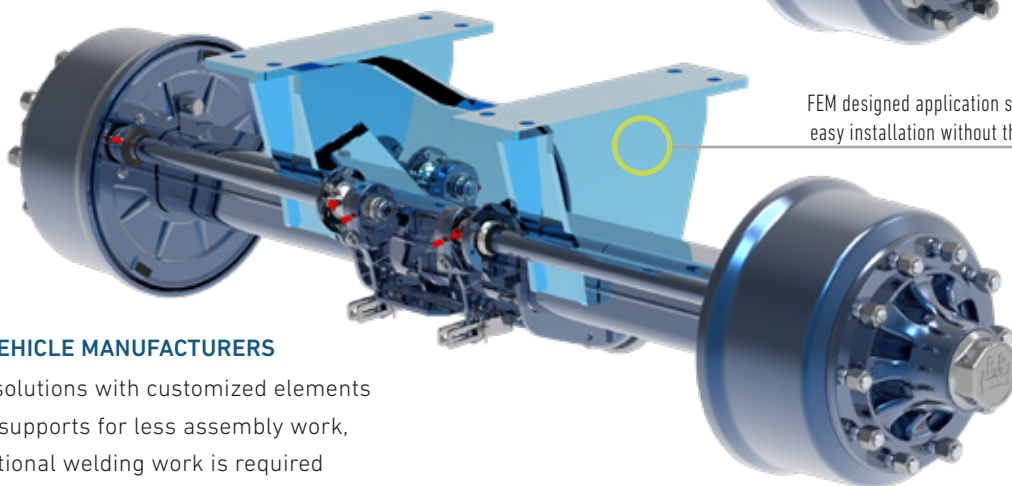
UNSPRUNG SOLUTIONS

Single axles

Lower position of the brake camshaft ensures the maximalisation of the space usage upon the axle



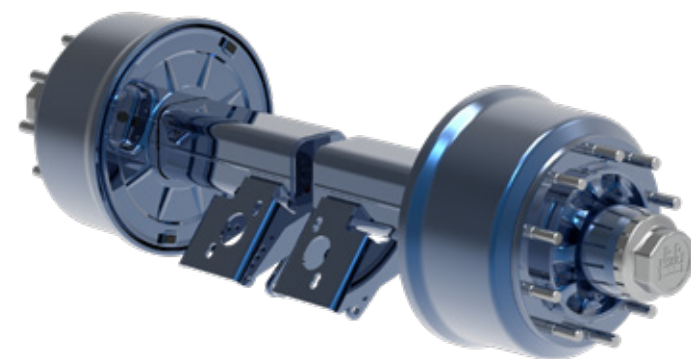
FEM designed application specific supports for easy installation without the need of welding*



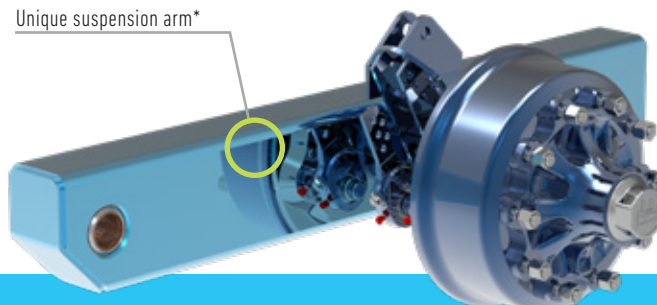
BENEFITS FOR VEHICLE MANUFACTURERS

- Standard solutions with customized elements
- Individual supports for less assembly work, so no additional welding work is required when installing them into the chassis

Axle stubs



Unique suspension arm*

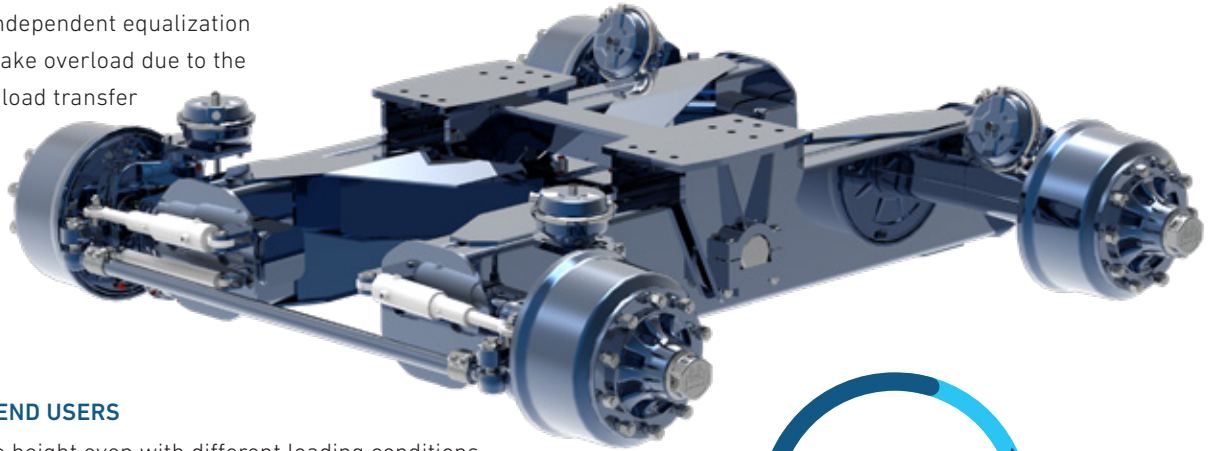


*Further discussion necessary

Pendle suspension

BENEFITS FOR VEHICLE MANUFACTURERS

- Large side-independent equalization
- Negligible brake overload due to the optimal axle load transfer



BENEFITS FOR THE END USERS

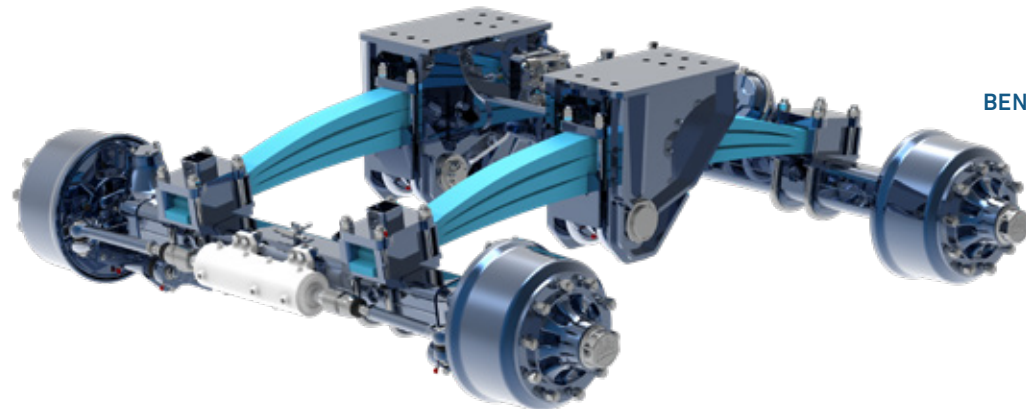
- Constant ride height even with different loading conditions
- Minimal downtimes due to the low maintenance sliding bearings
- High reliability and loading capacity due to the heavy-duty sliding bearing bushing of the centre axle beam
- Low drag resistance and excellent driving characteristics due to the asymmetrical pendulum structure
- Good ground adaptation and optimal ground compaction
- Rolling stability in difficult offroad-use



Bogie suspension

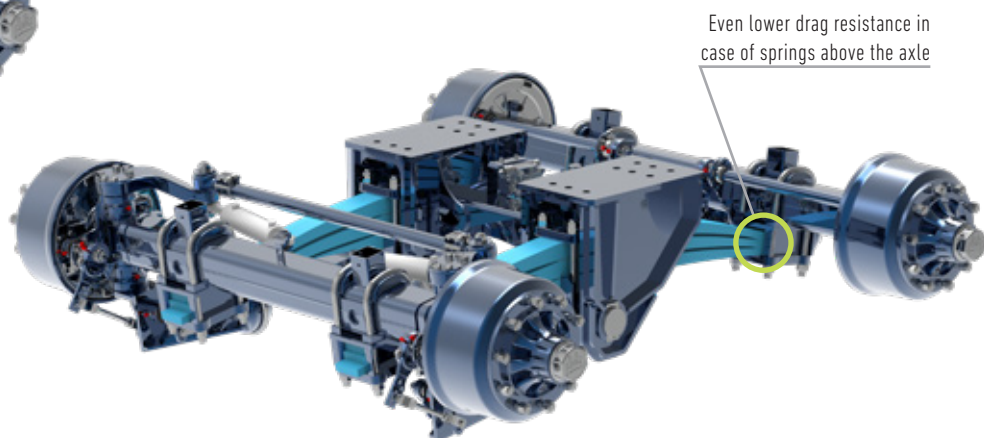
BENEFITS FOR THE END USERS

- Low drag resistance and good ground adaptation due to the asymmetrical mounted springs
- Highway compliance



BENEFITS FOR VEHICLE MANUFACTURERS

- Negligible brake overload due to the optimal axle load transfer
- Optimized design for better flow of forces between axle and chassis
- Easy variable track and support centre values



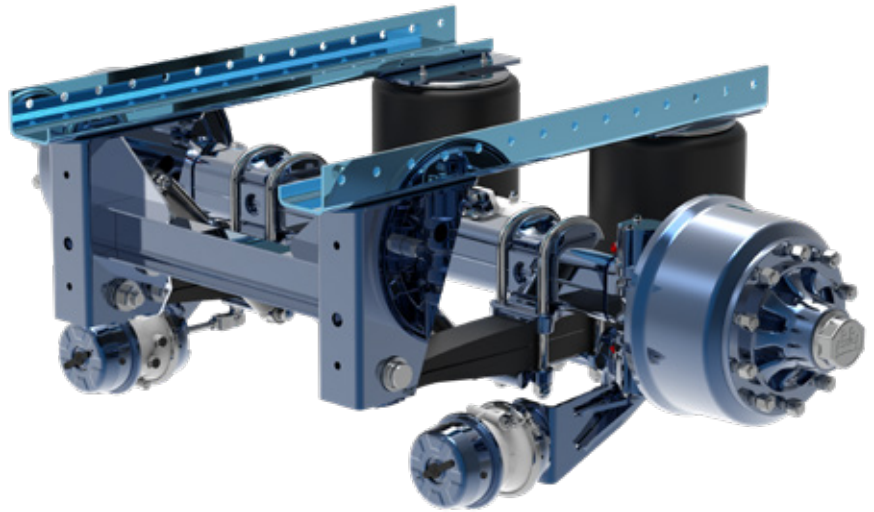
TANDEM SOLUTIONS

SUSPENSION UNITS

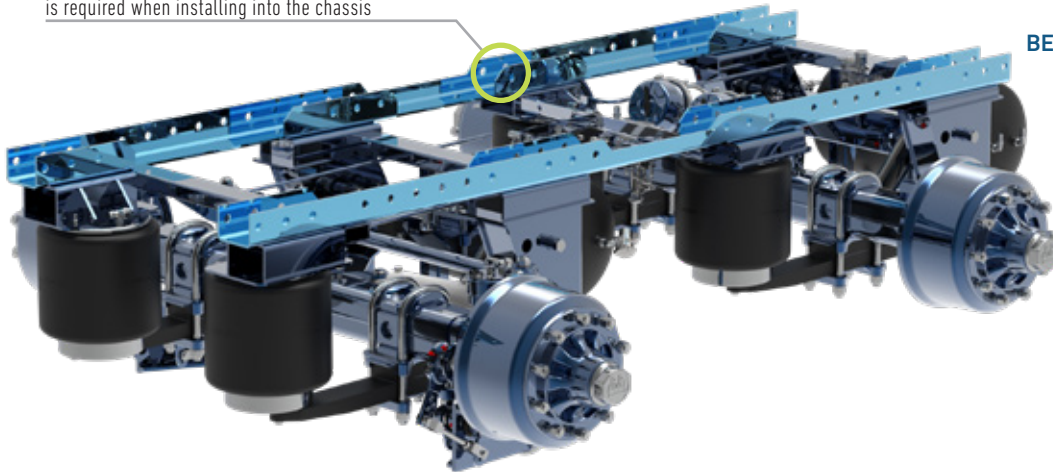
Air suspension

BENEFITS FOR THE END USERS

- Outstanding driving comfort for on-road and off-road use
- Even brake and tire wear
- Even ground pressure
- 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



Less assembly effort, so no additional welding work is required when installing into the chassis



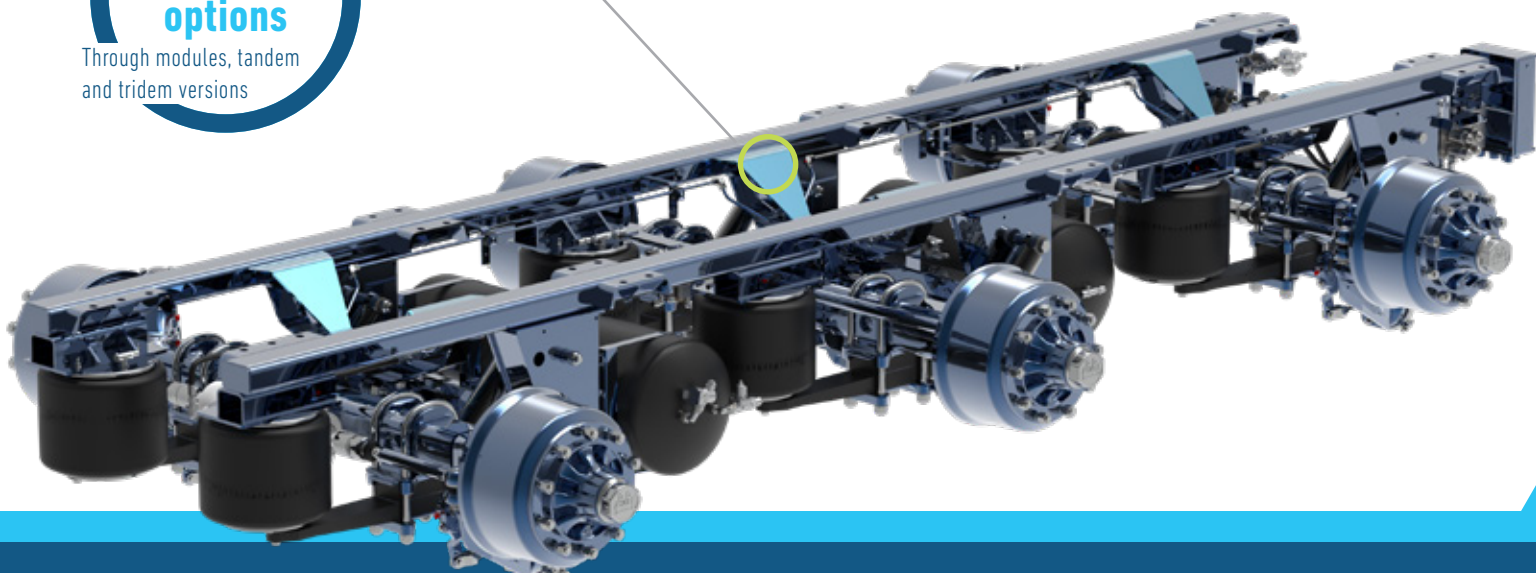
BENEFITS FOR VEHICLE MANUFACTURERS

- Various control functions:
 - Leveling valve
 - Axlelift
 - Lifting & lowering function
 - Traction help
- Optional with frame and complete braking system
- Steering variations
- Well-known and proven BPW components and solutions based on the semi-trailer program

**Universal
application
options**

Through modules, tandem
and tridem versions

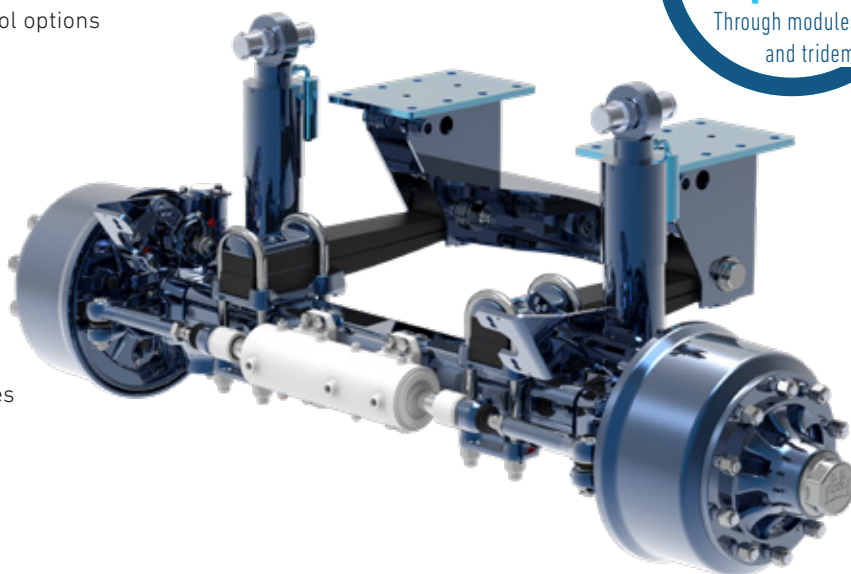
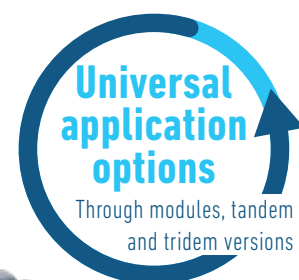
Special portal cross member developed for slurry tankers



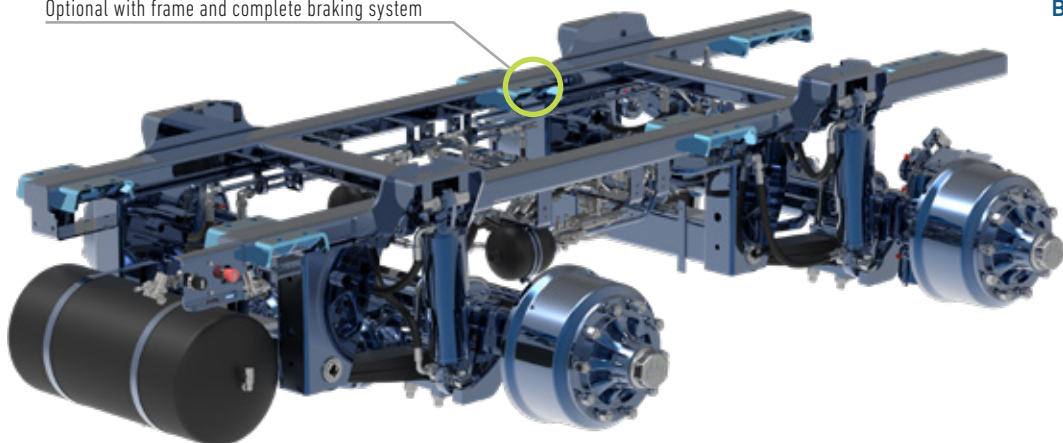
Hydropneumatic suspension

BENEFITS FOR VEHICLE MANUFACTURERS

- Optional individual frame solutions with little assembly effort
- Passive and electronic suspension control options
- Preparation for electronic force-steering
- Various control functions:
 - Leveling valve
 - Axlelift
 - Lifting & lowering function
 - Traction help
- Steering options
- Good driving comfort and good manoeuvrability even with narrow frames

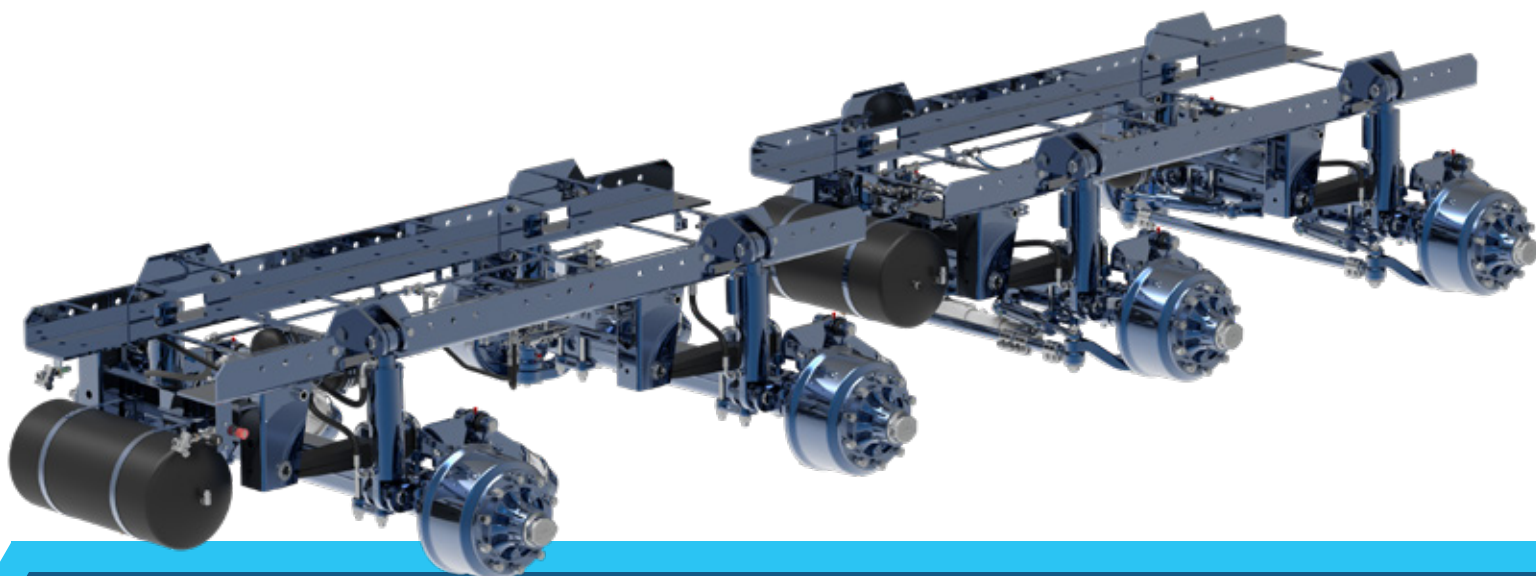


Optional with frame and complete braking system



BENEFITS FOR THE END USERS

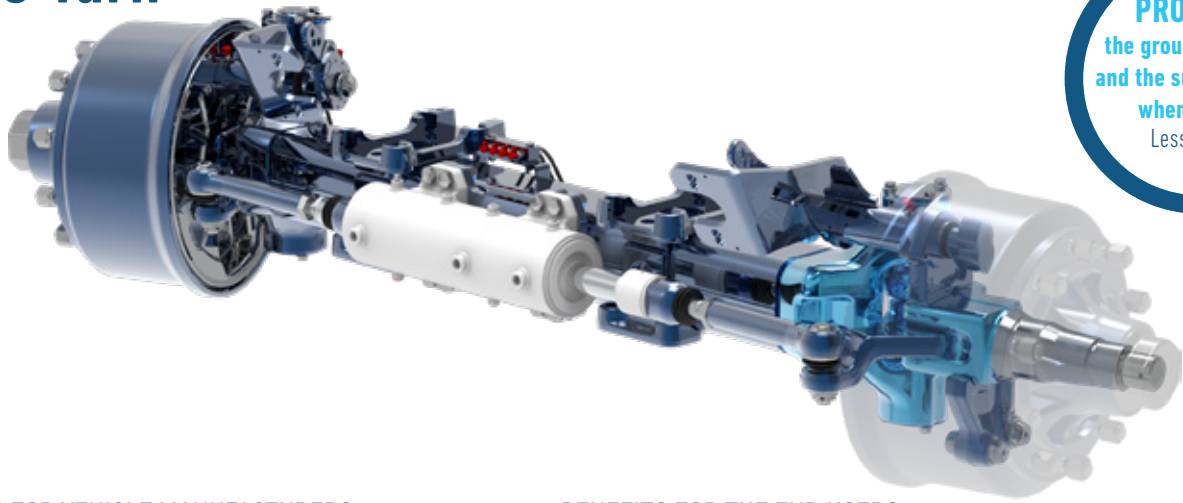
- Better driving comfort due to the wide support of the hydraulic cylinders
- High roll stability due to the cross circuit of the hydraulic system
- Safe and comfortable driving even with a high center of gravity of the vehicle
- Outstanding driving comfort for on-road and off-road use



SUSPENSION UNITS

OPTIONS

AGRO Turn



PROTECTS
the ground, the tires
and the superstructure
when turning
Less fuel consumption
Less CO₂ emission

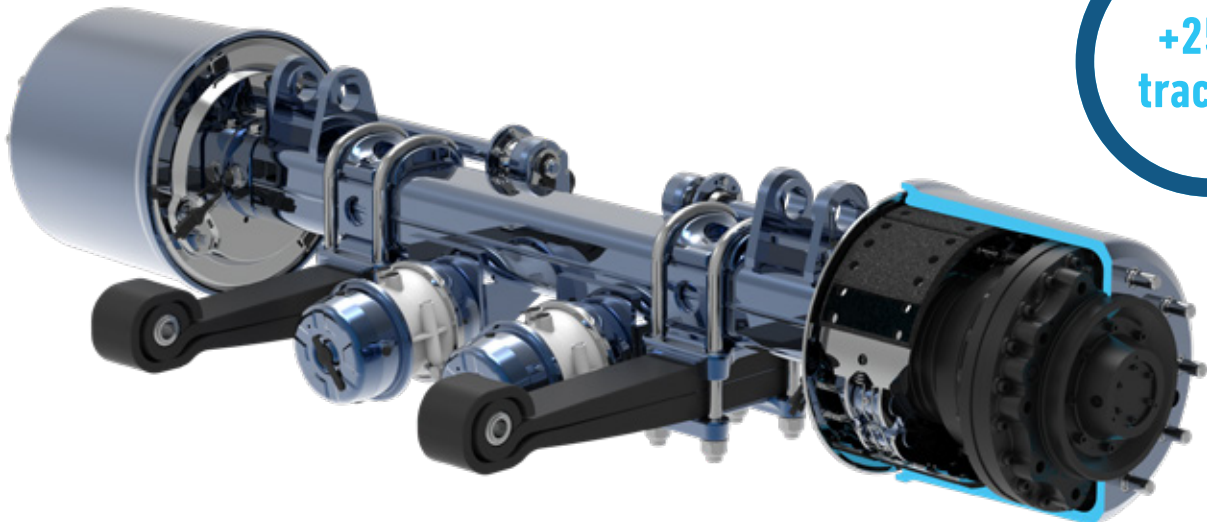
BENEFITS FOR VEHICLE MANUFACTURERS

- Variable position of brake cylinder bracket
- Protected brake camshaft
- Patented steering cylinder, that functions in self steering and also force steering mode
- Prepared for electronic force steering
- Integrated adapter for steering angle sensor

BENEFITS FOR THE END USERS

- The AGRO Turn steering design allows sharp turning and accurate trailing under all driving circumstances
- Less steering force due to the reduced caster offset
- Excellent maneuverability with 28° maximal steering angle in force steering mode
- Fluted thrust plate for better steering properties

AGRO Drive



**+25%
traction**

BENEFITS FOR THE END USERS

- Better ground protection due to the reduced slippage of the tractor drive wheels
- Tractors with less power can pull heavier loads
- Better „driving force to total weight“ ratio
- The brake pad service is carried out according to the well-known BPW method without dismantling the drive motor.

BENEFITS FOR VEHICLE MANUFACTURERS

- Compact design
- Can be combined with all suspension systems due to different brake shaft positions
- High torque and wide speed range
- With CTIS preparation as standard
- Usable with tractor hydraulics or additional hydraulics
- Freewheel when driving on-road

AGRO FlexModul

L frame with application-specific hole pattern

integrated HP attachment

More flexibility

in the assembly

with hydropneumatic suspension

with air suspension

BENEFITS FOR VEHICLE MANUFACTURERS

- Identical frames for HP and air suspension
- Screwable suspension module, therefore no additional welding work required when installing into the chassis
- Long service life due to the optimal connection between the axle and chassis
- Rigid or steered versions are available for modular use
- Custom hole patterns possible if required

AGRO Flexframe

BENEFITS FOR VEHICLE MANUFACTURERS

- Ready to use complete system with suspension unit, suspension control, brake system, sensors and steering system
- Available for HP and Air suspension
- Screwable frame solution, so no additional welding work is required when installing into the chassis

Plug & play solution

Application specific frame concept

CTIS as standard

Integrated HP attachment

**Further discussion necessary*

OPTIONS

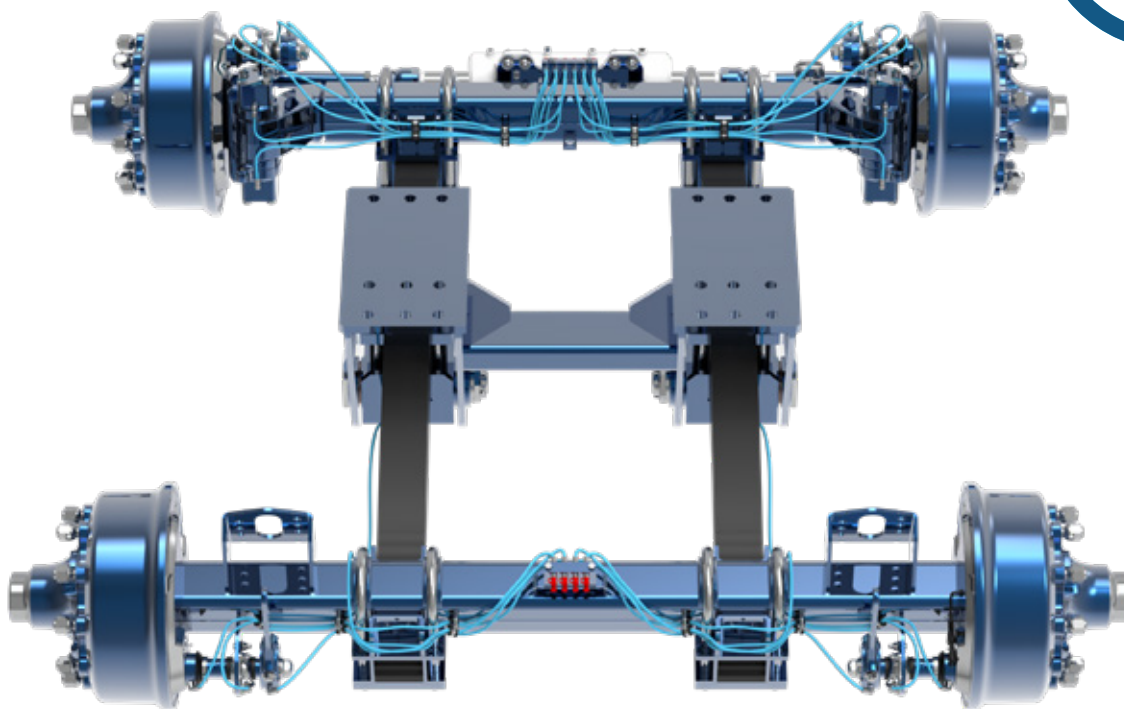
OPTIONS

Central lubrication system

BENEFITS FOR THE END USERS

- One centralised point for lubrication
- Less time required for lubrication
- Possibility of automatic progressive lubrication

Longer
lasting
components

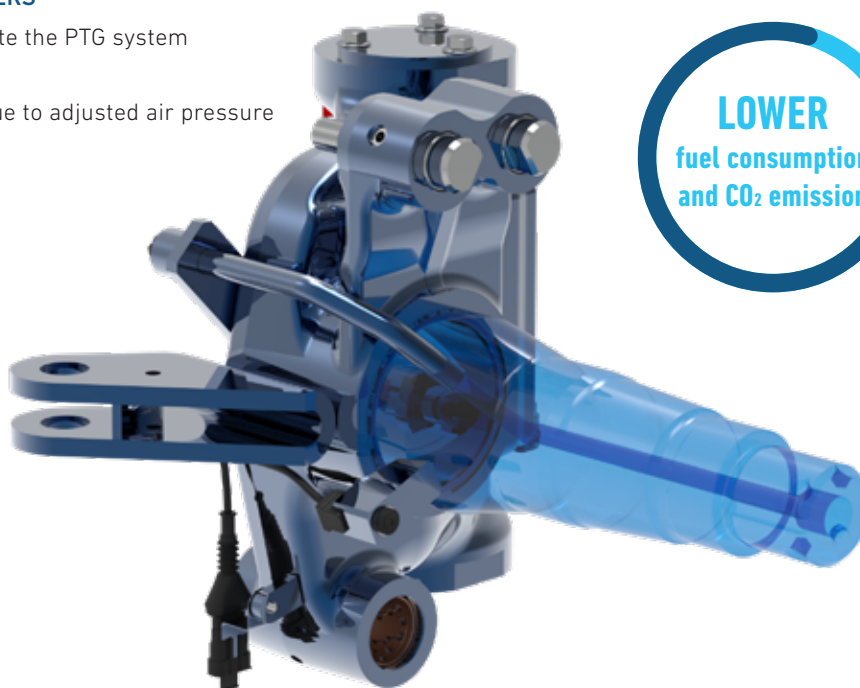


Central tyre inflation system preparation

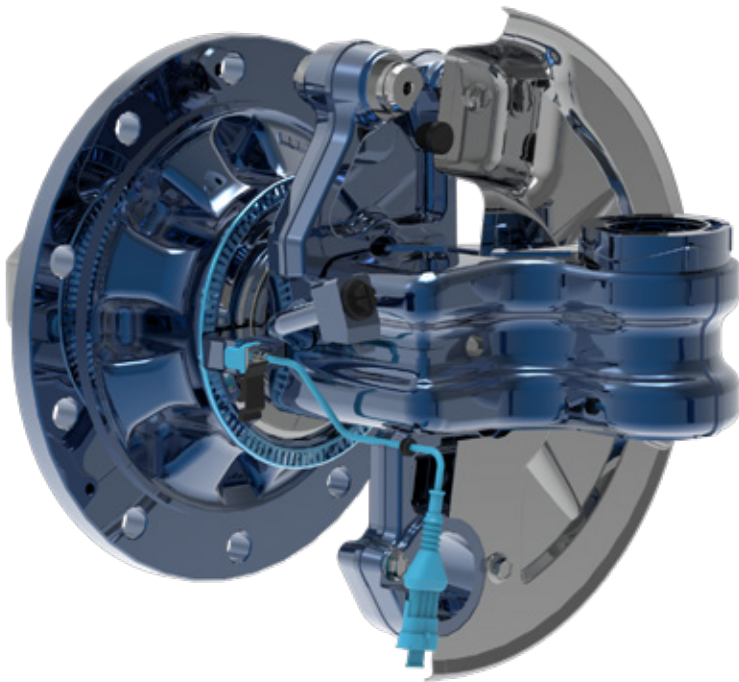
BENEFITS FOR THE END USERS

- Possibility to integrate the PTG system
- Ground protection
- Optimal tyre wear due to adjusted air pressure

LOWER
fuel consumption
and CO₂ emission



SDS* and ABS sensor

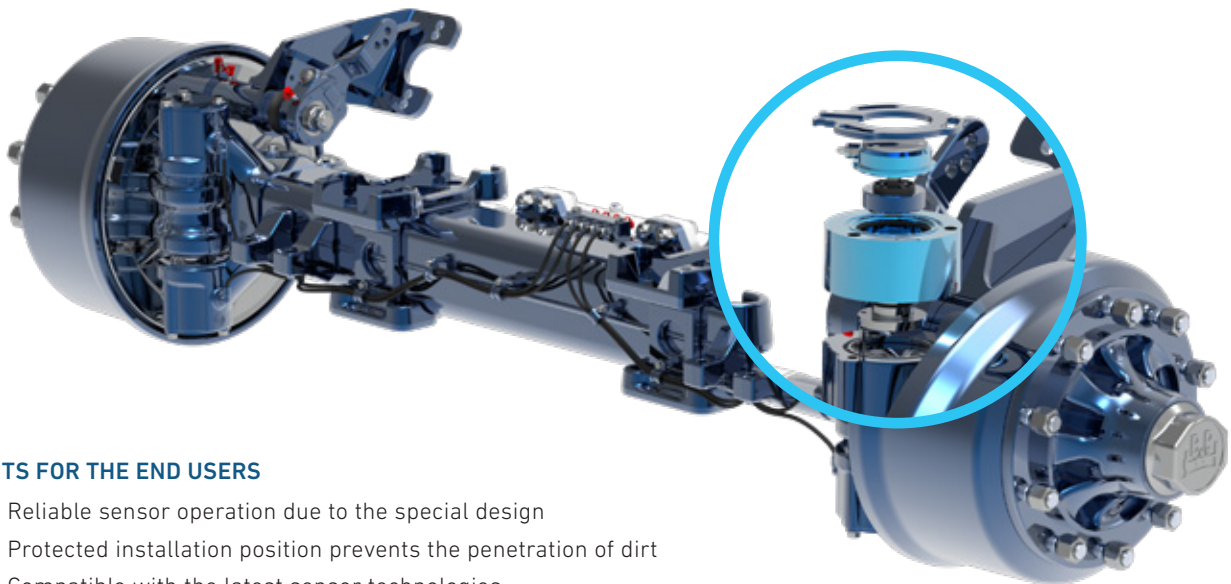


BENEFITS FOR THE END USERS

- 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

Integrated steering angle sensor



BENEFITS FOR THE END USERS

- Reliable sensor operation due to the special design
- Protected installation position prevents the penetration of dirt
- Compatible with the latest sensor technologies
- Possible to retrofit

**BPW Speed & Direction of rotation Sensor*

OPTIONS

The brands of the BPW Group:



BPW Bergische Achsen Kommanditgesellschaft

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