



**FAYMONVILLE**   
TRAILERS TO THE **MAX**



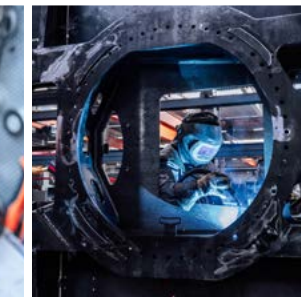
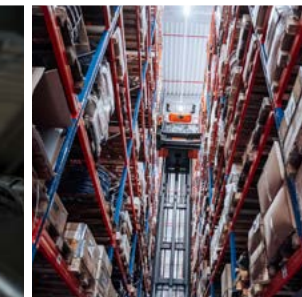
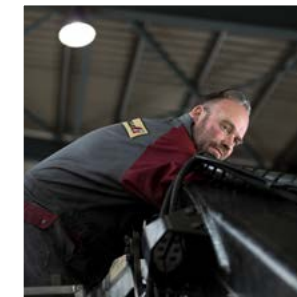
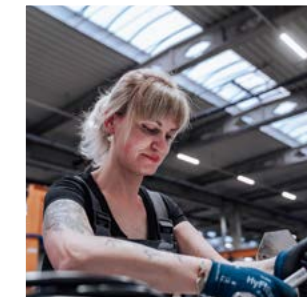
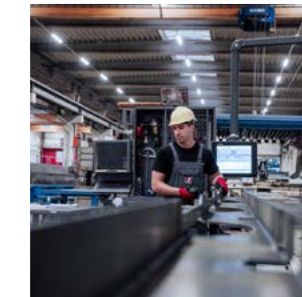
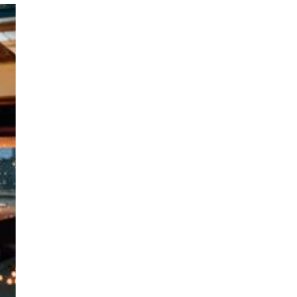
**MODULARITY IN MOTION**

Powered by **FAYMONVILLE**   
GROUP

**COMBIMAX**

**COMBIMAX PA-X**





With our three vehicle brands, MAX Trailer, Faymonville and Cometto,  
we are the worldwide leading full-range manufacturer of vehicles for heavy load and special transport.  
The semi-trailers, low-loaders, modular vehicles and self-propelled trailers that we produce are used to transport anything exceptionally heavy, long, wide or tall!  
Our brand portfolio includes transport solutions for payloads from 15t to 25,000t ... and beyond.  
The excellent facilities in a production space of 175,000 m<sup>2</sup> form the foundation for qualitatively unique, high-tech products.





## TRADITION & VISION

As a seventh-generation family business, we've evolved from a small forge in Belgium to the industry leader. Alexander Fickers took the helm as CEO of the Faymonville Group in 2024. The Faymonville family remains actively involved and continues to shape the company.

## WE OFFER SOLUTIONS

Thanks to an outstanding mix of experience, flexibility and know-how, we provide sophisticated solutions for any transport challenge. From development to production, we offer the necessary expertise every step of the way.



## HIGHEST QUALITY 100% IN-HOUSE

We place our trust in our optimized production processes, the high-end infrastructure and machinery park and our team of highly skilled employees. As a company committed to quality, we strive to uphold the highest standards to ensure the excellence of our products.

## FAST SPARE PARTS DELIVERY

Faymonville Logistics ensures a reliable supply of spare parts to keep your vehicles operational. Our team of experts is ready to provide knowledgeable guidance and ensure rapid delivery of the components you need.



## INTENSIVE DRIVER TRAINING

We offer a customized driver training for your specific vehicle, both practical and theoretical. Drivers receive documents and user manuals in their language, along with self-explanatory visual materials. It's a comprehensive support package to ensure drivers are familiarized with their new vehicle efficiently.

## ALWAYS & ANYWHERE 24/7

The Faymonville Service team ensures worldwide support, 24/7. The Faymonville Group is proud to offer the industry's most sustainable and comprehensive customer service.



**Service Hotline**

+32 80 64 01 88







# MODULARITY IS THE KEY

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Success is not a coincidence, but the result of carefully considered decisions. Modularity is the key to success in times of rapid innovation. Modular vehicles provide the flexibility to react quickly to changing requirements.

This revolutionary new approach creates room for continuous adaptation and extension. The combination of modular components not only shapes the present, but also provides a flexible framework for the future. A future that builds on unlimited possibilities and endless flexibility.

The Faymonville CombiMAX combines modularity, flexibility and profitability in a single concept. It stands for the revolution in the heavy duty transport sector!

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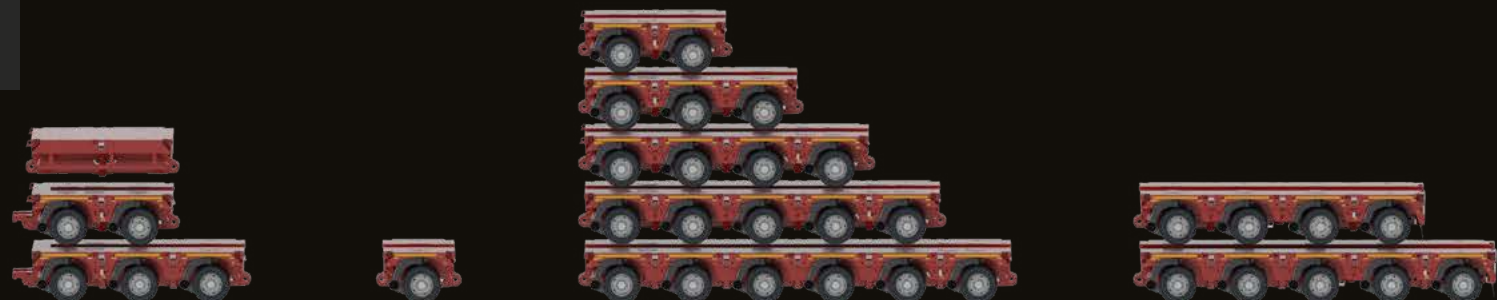




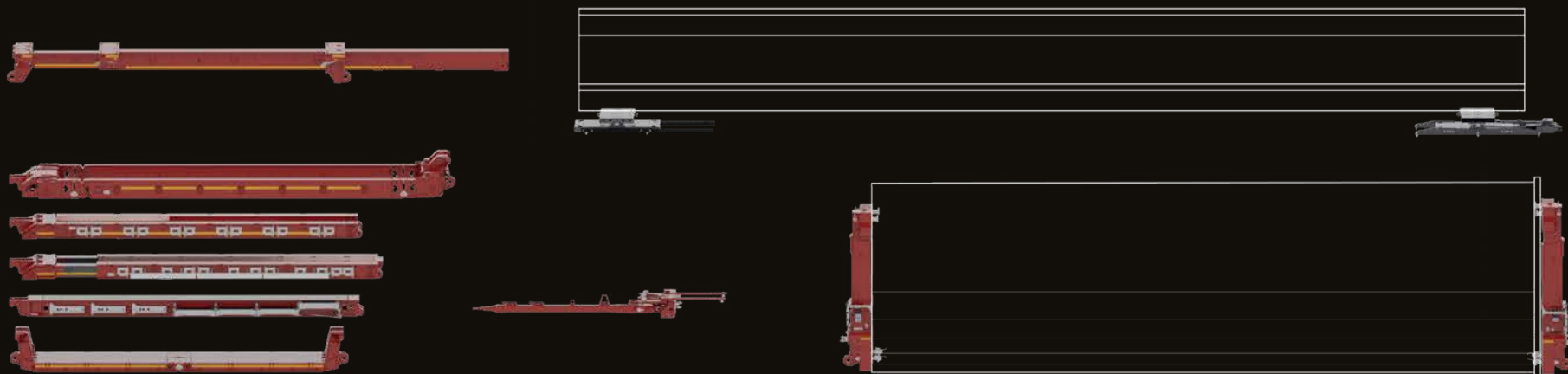
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12



18



34



54



58

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# AN OVERVIEW OF THE GOOSENECKS

The gooseneck for the CombiMAX has a universal design.  
A variety of bogies as well as the Add-On-Beam, lowbeds and other components can be easily attached with the integrated hook receptacle and bolt coupling.  
All this is determined according to the tractor unit used, and the everyday projects for which the modular road vehicle is expected to be employed.



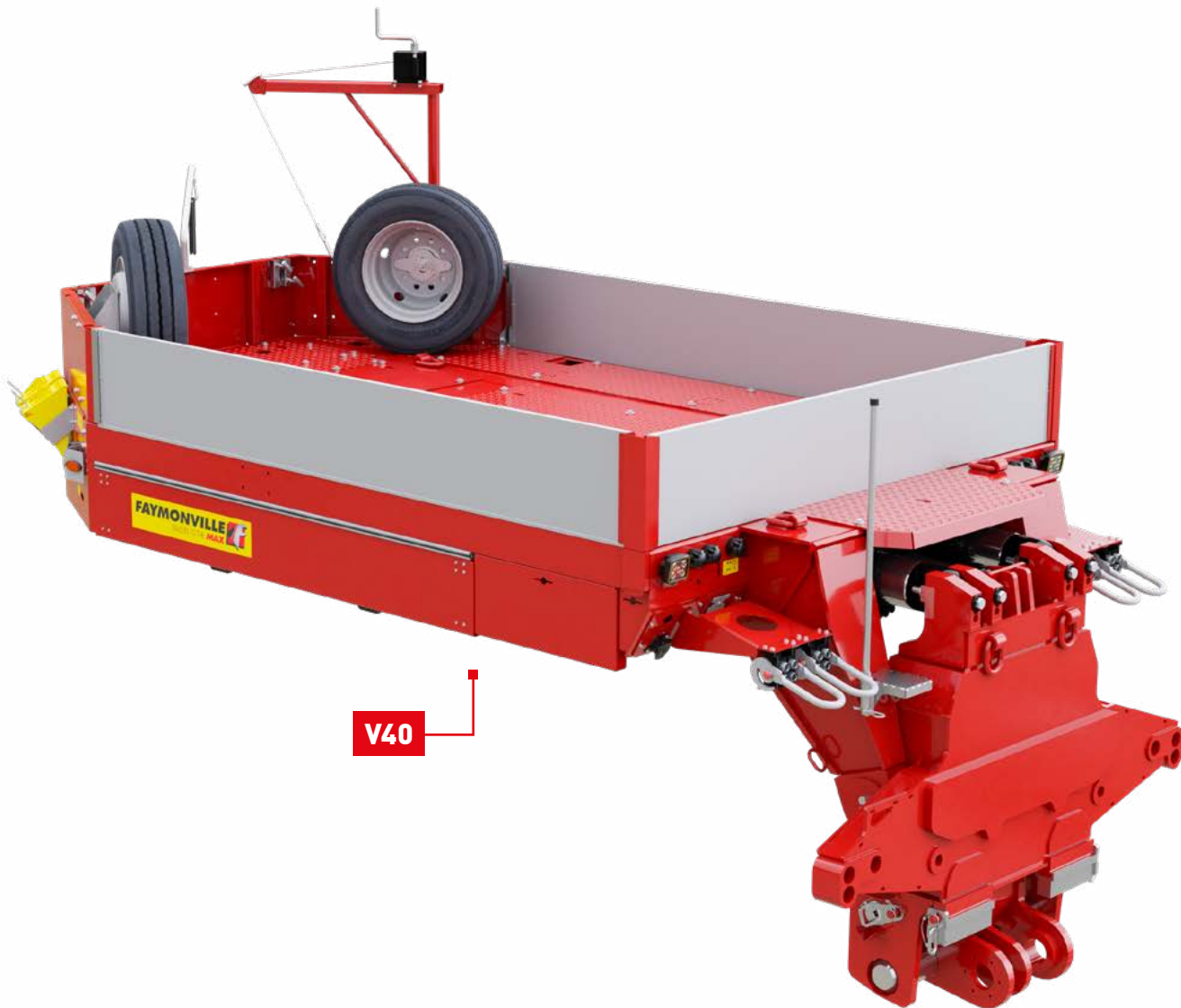


V30 & V40 GOOSENECKS

Two basic types of gooseneck are available for the CombiMAX, depending on the required king pin load: the V30 gooseneck and the V40 gooseneck. The turning radius varies depending on the choice. Compared to a gooseneck on classic heavy load modules, the operation is incredibly simple and intuitive. The control and monitoring functions are designed in a clear and functional way.

- Four basic functions: removable, hydraulically compensating, can be raised and lowered, rigid
- Double steering connection for different configurations
- Fifth wheel pressure adjustable under load
- Booster cylinder for high fifth wheel loads

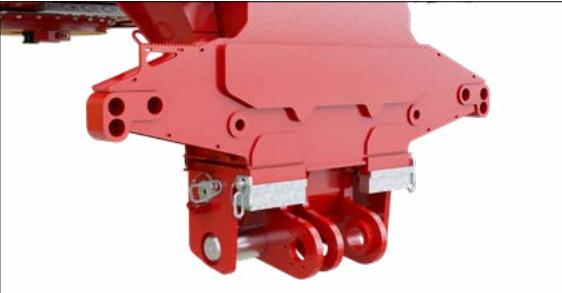
|      | Turning radius    | Technical king pin load |
|------|-------------------|-------------------------|
| V-30 | 2,700 millimetres | 37.5 tons               |
| V-40 | 3,350 millimetres | 50 tons                 |





PERFECTLY EQUIPPED

Standard



Universal coupling head



Mechanical fine tuning for the gooseneck cylinder



User-friendly operating unit



Hydraulic screw couplings



Central lubrication



Cable remote control for the power steering system



Spare wheels with holder and winch



Working spotlight



Mechanical landing gear at the front

Options



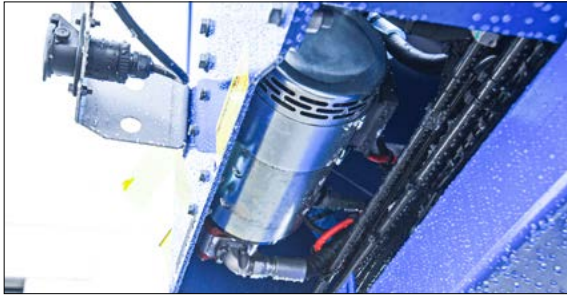
Third gooseneck cylinder



Multiple hydraulic couplings



Diesel power pack



Electro-hydraulic power pack for the power steering system



Radio remote control for the power steering system



Toolbox



# AN OVERVIEW OF THE **BOGIES**

The patented combination of universal coupling heads and a full-length trough makes the CombiMAX bogies a unique concept.  
All attachments such as lowbeds, the Add-On-Beam or lighting elements are designed so that they can be combined with bogies of different basic widths and overall heights.





## FRONT BOGIE WITH HOOK RECEPTACLE: 2 TO 3 AXLES

Integrated front bogies are used to increase the payload in the front area of a lowbed combination.

They are featured by quick coupling and uncoupling using a hook receptacle on the gooseneck. The track rod alignment is usually hardly adjusted, as the bogie is always installed just behind the gooseneck. The universal coupling head at the end of the bogie is used to connect the front bogie to lowbeds, the Add-On-Beam or other bogies.

- Quick and easy coupling procedure

- Save time when combining

- Easy loading onto the lowbed for unladen journeys





## JOKER AXLE

The ace up your sleeve! A single-axle module - the so-called joker axle - is combined quickly and easily with other bogies via a universal coupling head with a bolt coupling.

The axle provides endless combination possibilities and has the same design, regardless of whether it is coupled to a front, centre or rear bogie. That is truly unique on the market!

This technology makes it possible to adapt the combination according to the load, legal payloads and routing. This is a real asset for every user, as it gives them unlimited flexibility when it comes to deployment planning.

One identical element for all applications

Quick and straightforward installation

Increases the payload capacity

Prevents overloading





## CENTRAL BOGIE: 2 TO 6 AXLES

Central bogies can be installed at any position in a vehicle combination using bolt couplings on both sides.

The installation of a central bogie delivers maximum efficiency and an optimum vehicle configuration. The continuous full-length trough facilitates easy installation of the Add-On-Beam.

This means that the vehicle can be adapted very swiftly either to the load length or to the legally required overall combination length. The bogie loading platform is designed for high point loads.

- Quick and easy coupling procedure

- Universally applicable

- Always equipped with an excavator trough





## REAR BOGIE: 4 TO 5 AXLES

Thanks to the streamlined design, the rear bogie impresses with its optimised tare weight and consistently high load limit. The continuous trough also received special attention here. It has a remarkable width of 900 millimetres and therefore permits the transport of large construction machines with attached booms. The rear area is designed with the future in mind and equipped for the attachment of access ramps. There are also fixed tail lights and an underride guard.

- Optimised tare weight
- Quick and easy coupling procedure
- Save time when combining thanks to pre-adjusted tie rods
- Equipped with an extra wide excavator trough





PERFECTLY EQUIPPED

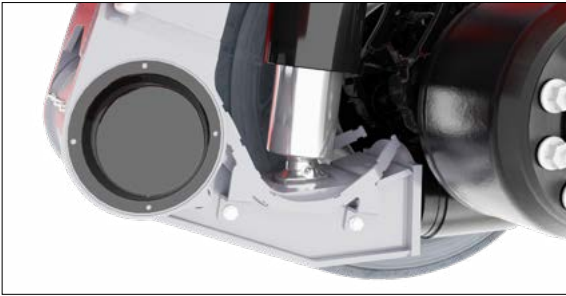
Standard



Hose rupture valve with on-off valve



Pendle-axle – tower bearing



Pendle-axle - cylindrical ball bearing



Central lubrication



Hydraulic coupling pins



Lashing rings and stake pockets

Options



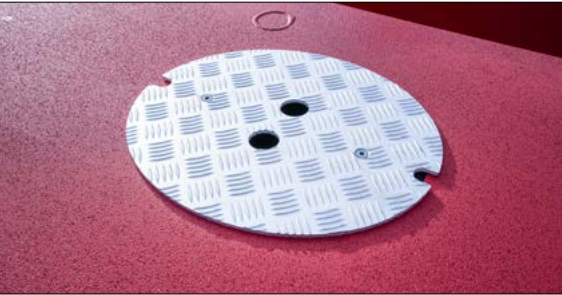
Hydraulic ramps



Extendable widenings



Screwable lashing rings



Covers for the tie rods



Tail lights for central bogies



Working spotlight



Warning signs





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# AN OVERVIEW OF THE AXLES

The CombiMAX is always equipped with pendle-axles, which are designed to tackle particularly difficult track and terrain profiles.

There is a choice between 17.5" and 19.5" single wheels and 17.5" dual wheels. The difference between the two sizes is the maximum possible axle load and the loading height.

Thanks to the pendular movements, they ensure optimal load compensation between the individual axles on uneven roads. The loading platform remains in horizontal equilibrium, with the load safely in position.





TYRES

4x245/70 R17.5



4x285/70 R19.5



8x215/75 R17.5



|                          |                     |                     |                     |
|--------------------------|---------------------|---------------------|---------------------|
| AXLE LOAD (30KM/H)       | 14.18 t             | 17.42 t             | 22.68 t             |
| FRONT BOGIE              | ✓                   | ✓                   | ✗                   |
| CENTRAL BOGIE            | ✓                   | ✓                   | ✓                   |
| END BOGIE                | ✓                   | ✓                   | ✗                   |
| NOMINAL DRIVING POSITION | 1060 mm [-200/+400] | 1160 mm [-200/+400] | 1060 mm [-225/+375] |
| WIDTH/TRACK WIDTH        | 2550/1690 mm        | 2550/1690 mm        | 3000/1800 mm        |
|                          | 2850/2000 mm        | 2850/2000 mm        | 3200/2000 mm        |
|                          | 3000/2150 mm        | 3000/2150 mm        |                     |
| WHEELBASE                | 1360/1500 mm        | 1360/1500 mm        | 1500 mm             |
| AXLE COMPENSATION        | 600 mm              | 600 mm              | 600 mm              |
| BASIC WIDTH/TROUGH WIDTH | 2550/400 mm         | 2550/400 mm         | 3000/n.a.           |
|                          | 2850/700 mm         | 2850/700 mm         | 3200/470 mm         |
|                          | 3000/850 mm         | 3000/850 mm         |                     |





# OVERVIEW OF OTHER COMPONENTS

The outstanding Add-On-Beam comes into play for long loads, while lowbeds of all kinds optimise transport height.

Wind tower adapters are a favourite accessory in the wind power industry. Spacer platforms or drawbar combinations cover yet more specialised fields of application.





## ADD-ON-BEAM

The Add-On-Beam is an elongation beam that can be inserted or slid into the bogie recesses. This component is available in single or double extendable versions and for bogie widths from 2,850 to 3,200 millimetres.

This Add-On-Beam turns the CombiMAX into the only modular system on the market that can also be used as an extendable semi low loader. The beam can be fitted between two CombiMAX components, either directly behind a gooseneck or between two bogies.

- Single or double extendable

- Separation points designed as a coupling head

- Maximum compactness when retracted for cost savings on unladen journeys

- Optionally extendable with elongation beams





## LOWBEDS

Lowbeds come in many versions and payload categories. Faymonville's wide portfolio facilitates deployment in diverse sectors. These are ideal solutions for transporting heavy and high loads such as construction machinery, transformers and industrial goods. Within the CombiMAX modular system, there is a choice between outer beams with a fixed or removable floor, the vesseldeck with hydraulic widening, widenable outer beams, excavator deck and flatbed deck.

- Height-optimised on the move
- Quick and easy installation
- Several variants and payload classes
- Also available with elongation beams

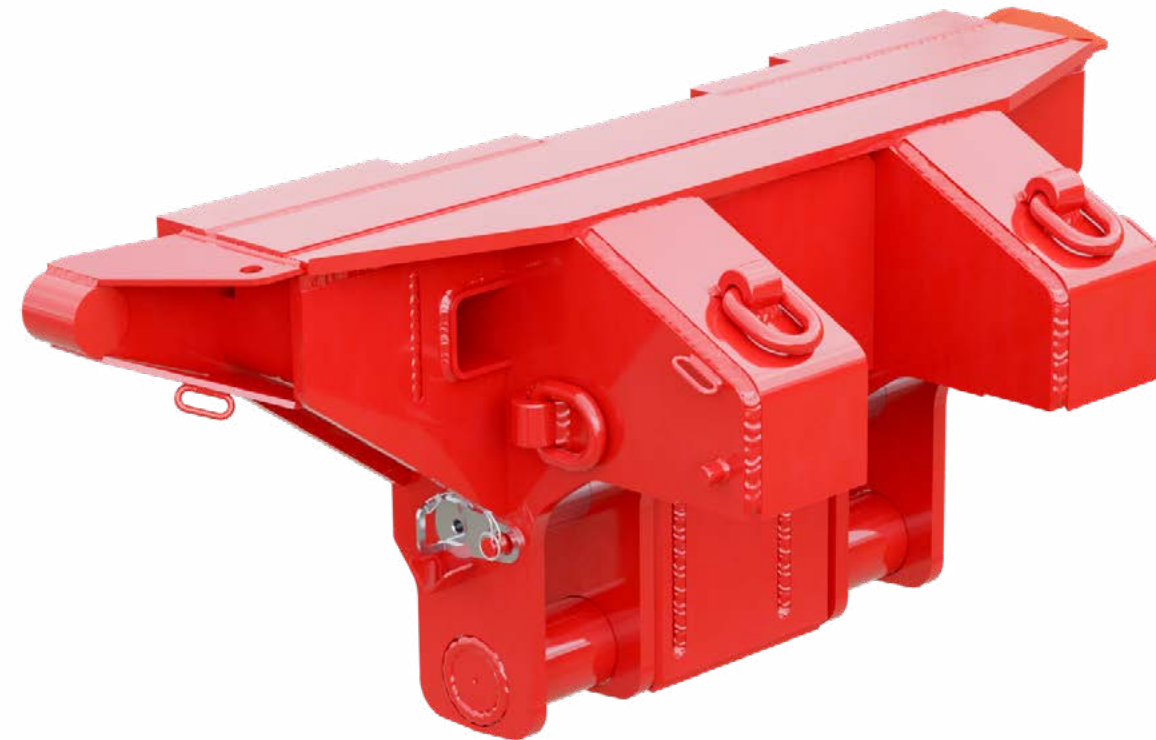




## QUICK COUPLING DEVICE

The quick coupling device is an interface that is fitted between the bogie and the lowbed to permit quick coupling using a hook receptacle. There are different categories, adapted to the respective payload capacity and combination.

- Fast coupling and uncoupling
- Universal for various bogie widths and heights
- 4 different payload classes
- Can be driven over from the front



## EXCAVATOR DECK - BB

Heavy machinery is transported suspended from an excavator bridge with minimum ground clearance. These lowbeds are extendable, which makes them versatile for many applications. The outriggers and mattresses can be easily widened and positioned at two different loading heights. Special mattresses for side loading are available for situations where there is little manoeuvring space available.

- Versatile extension stages
- Different loading heights
- Can also be loaded from the side

**Overall height** | 400 or 450 mm  
**Width** | 1,350 mm





## WIDENABLE OUTER BEAMS - ATV

The Hydro Shift principle permits flexible hydraulic width adjustment of this lowbed variant. Full load capacity is guaranteed even at the maximum widening. A simple extension is also possible with this lowbed. The ATV bed is ideal for transporting wide and heavy construction machines.

- Fast operation
- User-friendly ergonomics
- Safe positioning of the cargo

**Overall height** | 400 or 450 mm

**Width** | 2,850 to 4,250 mm



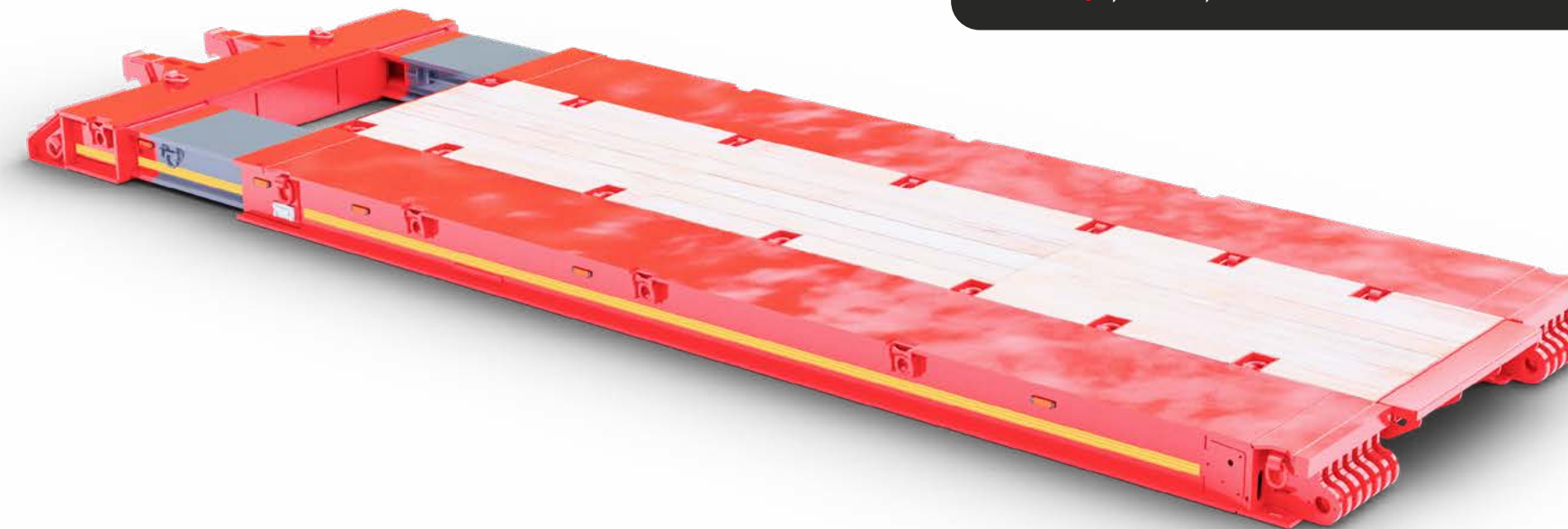
## OUTER BEAMS WITH FIXED FLOOR ATX-A AND AT-A

Lowbeds with outer beams and fixed loading floor offer optimum stability. There will be one continuous track over the entire length of the lowbed when loading construction machinery, even when extended. The beams are available in various overall heights and can be equipped with outriggers.

- Optimum stability
- Safe loading process
- Adjustable length and width

**Overall height** | 300 or 350 mm

**Width** | 2,850 or 3,000 mm





## OUTER BEAMS WITH REMOVABLE LOADING FLOOR- KB(X)

Unlike the lowbeds with outer beams and fixed floor, the loading floor is removable in this version. This move opens up more space, for example to load conical goods. The KB lowbed version allows the transport of high industrial containers and boilers with an optimised loading height.

- More vertical clearance
- Flexible applications
- High load capacity

**Overall height** | 300 or 350 mm

**Width** | 2,850 or 3,000 mm



## VESSELDECK WITH HYDRAULIC WIDENING - KBV

This vesseldeck provides maximum flexibility thanks to its hydraulic widening. Widening systems are available with single or double width adjustment. The longitudinal beams are available in a fixed length or with single telescopic extension. The installation of additional elongation beams is also possible. In this way, lowbed lengths of up to 25 metres can be assembled.

- Maximum width flexibility
- Quickly up and running
- Available with elongation beams

**Overall height** | 400 or 450 mm

**Width** | 3,000 to 6,000 mm





## FLATBED DECK - FBX

The flatbed deck concept stands out for its continuous steel surface across the entire width of the lowbed. The bed is optimally prepared for the transport and side unloading of transformers. The reinforced loading platform enables maximum point loads.

- Continuous loading platform
- Highest point loads
- Robust and durable

**Overall height** | 200 to 300 mm

**Width** | 2,850 or 3,000 mm



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## TOWER ADAPTER

Tower adapters with a lifting capacity of 100 tonnes have been designed for height-optimised transport of tower segments of various lengths and diameters. These special devices are coupled either with a free-turning device or directly between heavy load modules. Loading and unloading can be done without a crane. The tower adapter is hydraulically adjusted to the flange diameter to provide a secure connection during transport. A well-designed work platform on each tower adapter also guarantees absolute safety for the operating personnel.

- Internal flange diameter: 2,850 to 5,000 millimetres
- Lower tare weight than comparable lowbed bridges
- Improved turning circle due to more compact overall vehicle width
- Convenient radio remote control for the hydraulic functions





## TURNTABLE WITH SPACER PLATFORM

A combination of spacer platform and turntable replaces the classic dolly to transport long and heavy concrete or steel beams together with a self-steering trailer.

The spacer is integrated between the gooseneck and the front bogie. This results in a larger loading area, which means that the load is better distributed over the gooseneck and axles.

The turntable makes the combination easy to manoeuvre in tight spaces despite its length. The self-steering trailer is equipped with a maximum of eight axles in such a constellation.

Ideal for long loads

Optimal load distribution

Powerful manoeuvrability





## DRAWBAR AND TRACTION EQUIPMENT

On a vehicle with a drawbar and traction equipment, this component is the connection between the tractor and the axle lines. Especially with a higher number of axles for the transport of heavy and compact loads, such a vehicle combination is a popular option.

- Optimum vehicle manoeuvrability from the front or rear

- Load overhang possible at the front and rear

- Driving underneath a component on both sides for autonomous loading







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# THE **LOW** PENDLE-AXLE PA-X

When it comes to pendle-axes of Faymonville, the PA-X variant has a particularly low design. The optimised design reduces the loading heights of the vehicles by 70 millimetres. This is achieved successfully without compromising on the strong steering characteristics and the considerable lift. As a consequence of this approach, the user has more options when transporting heavy loads.





## PA-X FOR COMBIMAX

A CombiMAX PA-X always consists of a gooseneck and a rear PA-X loading area and can be extended at the front with a PA-X front bogie. These are available as 2- or 3-axle trailers and may be further extended with a PA-X joker axle.

The rear loading platform is available with five to eight axles and can be single or double extendable. If required, it can be equipped with both ramps and an excavator trough.

All loading platforms are equipped with two hydraulic steering systems. The rear section of the vehicle can therefore be optimally manoeuvred depending on the overall combination length. This creates a vehicle with a minimum loading height of 790 millimetres over its entire length and a technical payload of up to 150 tonnes.

Minimum loading height of 790 millimetres\*

Adjustable steering system with hydraulic counter-steering

High stroke of 600 millimetres

High steering angle of 60 degrees

12-tonne axle load permitted in many countries

\* completely lowered





# THE RAIL- VEHICLE

The transportation of trams, underground carriages and locomotives requires special equipment. Loading and unloading them by crane is generally not possible. Apart from the overall height and the load weight, the loading procedure and the track width of the bogies also pose a challenge. The CombiMAX modular system is also suitable for these tasks thanks to the variety of possible combinations.





## THE SOLUTION WITH PA-X AXLES

This variant is particularly popular for locomotives with high axle loads of up to 25 tons.

The loading platform is equipped with bolted and movable rails and a rail ramp developed by Faymonville. So that the vehicle can be adapted to the length of the rail vehicle, the extension section is designed with hook-in rails and sliding tables.

This creates a combination that is perfectly adapted to the cargo.

For variable track gauges of 1000, 1450 or 1670 millimetres

Rail ramp with a minimal gradient angle of 2 degrees

The rail ramp can also be used as a loading platform





## THE SOLUTION WITH CRANKED AXLES

Particularly long trams of up to 50 metres in overall length are transported with this unique combination of PA-X axles at the front and cranked axles at the rear.

By using cranked axles, the loading height in the driving position is reduced to 740 millimetres.

The loading platform is adapted to the required length with robust elongation beams. Its installation and removal is possible without the use of fork lifts or cranes thanks to sophisticated devices.

For variable track gauges of 1000, 1450 or 1670 millimetres

Rail ramp with a minimal gradient angle of 2 degrees

The rail ramp can also be used as a loading platform

Extendible with installable elongation beams





# STANDARDISATION DOWN TO THE SPARE PART

When developing the CombiMAX concept, we focused on the standardisation of components. This principle is the common denominator throughout the individual components. For example, in the pendle-axle sector, both 17.5" and 19.5" bogies share the same components, including cylinders, bearings and wearing parts of the axles. This consistent standardisation ensures a fast supply of spare parts - worldwide thanks to our reliable partners. Swift and efficient maintenance ensures operational safety and a smooth transport process at the end of the day.





# ENDLESS POSSIBILITIES

Flexibility is not only a promise, but the DNA of the Faymonville CombiMAX. This unique principle is the master of modularity. Its sophisticated design facilitates vehicle configurations of up to 250 tons payload as required. The use of standardised components produces a modular system that provides free and endless possibilities. This ease of handling means that you spend less time on preparation and more time on the road.



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EXAMPLES & POSSIBLE ADDITIONS

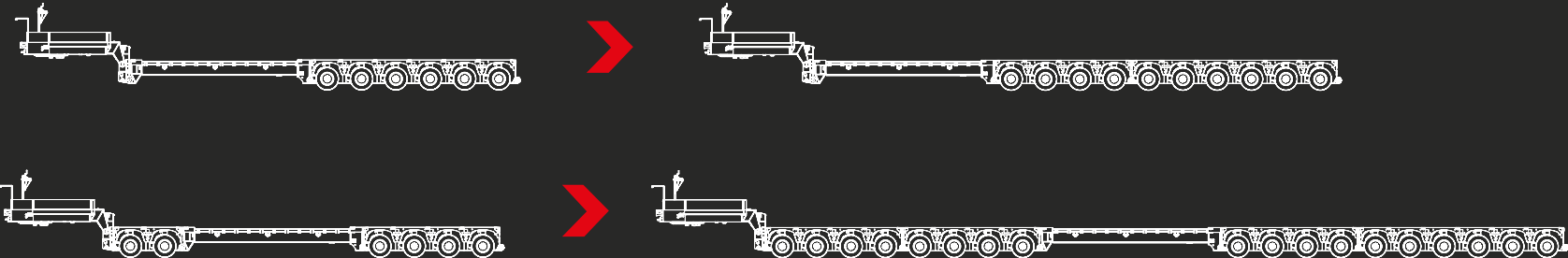
Semi-trailer



Semi-trailer and joker



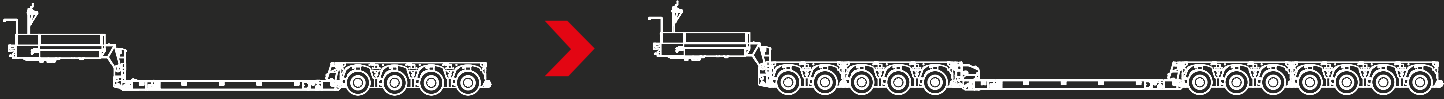
Semi-trailer with Add-On-Beam



Semi-trailer with Add-On-Beam and joker



Lowbeds



Lowbeds with joker





EXAMPLES & POSSIBLE ADDITIONS

Drawbar & towing device



Drawbar & towing device with Add-On-Beam



Drawbar & towing device with lowbed



Turntable with spacer



Tower adapter



PA-X



PA-X & cranked axles





# Ultra-modern infrastructure. Optimally networked locations.

**4** Production facilities in Luxembourg, Poland, Belgium, Italy

**100%** in-house

More than  
**1,400** employees

Production capacity of  
**3,000** vehicle units per year

**175,000** m<sup>2</sup>  
production area

Worldwide distribution throughout  
**125** countries

LUXEMBOURG - LENTZWEILER



BELGIUM - BÜLLINGEN



POLAND - GOLENIÓW



ITALY - BORGO SAN DALMAZZO





# ACTIVE CORROSION PROTECTION

## ALWAYS INCLUDED AT FAYMONVILLE!

Stress in use and the effects of weather put the steel construction of every vehicle to the test. Faymonville counters these challenges with its MAXProtect+ surface protection. This principle is applied as standard with every vehicle. Every stage – from shot-blasting and the full-surface metallisation with zinc/aluminium to the final coating – is carried out by Faymonville in-house, further developed and tested on the basis of meaningful parameters.



Experience all  
steps here

More protection is impossible!

- + After a salt spray test lasting 2,400 hours, there is no red rust on a one millimetre deep scratch made beforehand
- + 100 percent active protection against red rust
- + High zinc content provides for a self-healing effect
- + High edge protection due to mechanical anchoring
- + Optimal adhesion properties of the coating system in case of chain impacts or stone chips
- + The best protective effect in the automotive industry

The MAXProtect+ process sequence:

- 1 MACHINE BLASTING
  - 2 MANUAL BLASTING
  - 3 ZINC SPRAYING BY ELECTRIC ARC
  - 4 JOINT SEALING
  - 5 2-COMPONENT TOP COAT
  - 6 CAVITY SEALING
- OPTIONAL:** SEAWATER-RESISTANT COMPLETE PRESERVATION



[www.faymonville.com](http://www.faymonville.com)



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