



Fire fighting vehicles



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Body technology



The innovative alu-sandwich construction

EMPL vehicles are made of special alu-sandwich panels. They are a combination of PP-honeycomb with aluminium top layers. The top layer is natural aluminium with protection film and the core is made of PP-honeycomb.

Properties

- highest bending stiffness but light weight
- excellent compression strength
- high-grade top surface quality
- shape and measurement stability
- fire class B1 according to DIN 4102
- easy to process and handle



From now on in new design! – EMPL PRIMUS:
pumpers / rescue pumpers for municipal and industrial applications

Body is mounted on galvanized subframe by rubber/steel elements

- maximum torsion capability
- optimized corrosion protection

Turn out shelves mounted on adjustable stainless steel brackets

- approved design
- heavy duty execution for long life span
- easy adjustable/ tailor made brackets
- locking handle color coded
- bar-lock system
- wide opening angle
- ergonomically accessible



Powder coated aluminium roller shutters

- continuous glove support
- shutters can be closed by selftensioned pulling straps

Maintenance and oil free fire pump



MOD-Tech II - Crew Cabin

Well thought-out concept, perfect design

Vehicle with body consists of 3 independent modules:

- 1) Original commercial vehicle cab
- 2) EMPL "ALU" cab module
- 3) EMPL "ALU-Tech" fire fighting body



When tilting the OEM-cabin the crew cabin remains fix on the chassis frame, whereas perfect accessibility for service and maintenance is given.

Crew cabin and body are mounted separated from each other to prevent torsion when driving on difficult terrain

The advantages of the EMPL "Fire Fighter MOD-Tech"

- Minor intervention in the original cab of the truck manufacturer (corrosion protection)
- Accessibility for maintenance and service is retained as on the short cab
- Crew compartment and equipment body separated (no restriction of torsion)
- Optimum space utilisation in width, length and height
- Optimum entry and exit comfort with applied breathing apparatus due to increased height of crew cab and door as well as pneumatic step
- 100% corrosion resistance and long service life
- Quick and simple repair when damaged
- Self-supporting construction without additional braces
- Reusable cab module (easy transfer onto other chassis possible)

Likewise, fire fighting body and crew cab are not interconnected so that no additional stresses are transmitted when operating in difficult terrain. This also simplifies accessibility for service operations on the truck.



Highlights

- walkable roof window or A/C
- Panorama windows made of approved safety glass with carbonfibre-style frame
- Empl EAGLE SCBA-seats
- 3-point safety belts on each place
- Electrical window openers
- Grab-handles in signal colour
- Bright, easy-to-clean cabin roof with continuous power-coated grab-handles
- Batteries on stainless-steel drawer
- Walkable cabin roof
- Seating benches are executed as tool boxes with barlock-locking mechanism
- LED spot lights above the cabin doors
- Sturdy, easy to clean pimpled rubber floor

H.I.T. CAN-Bus

Human Interaction Technology

General

A CAN bus system enables to control all important devices, to access status functions, to observe conditions of the installation and to monitor the executions of instructions. It is a universal interface, serving to make the information of the control appliance available for all the other ones. Thus sensors can be conserved, the expenditure of cabling reduced, weight and costs minimized.

H.I.T. control unit from Empl

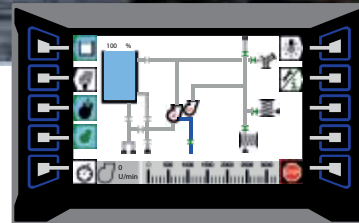
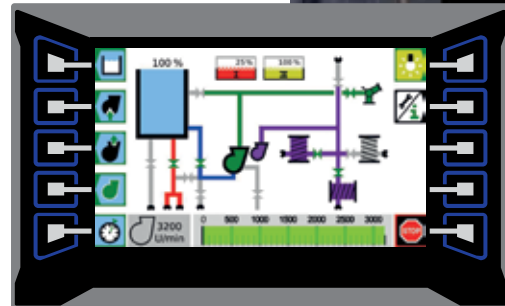
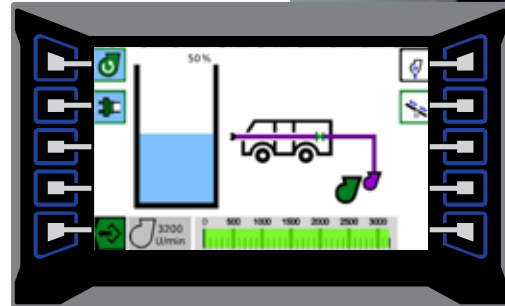
The completely revised CAN Bus System from Empl „Human Interaction Technology“ (H.I.T.) is the most simple and most secure way of operating a fire engine.

The control is effected by means of two fully-automated, self-monitoring system via a 7" LCD colour displays with LED-backlight, located in the driver´s cabin and on the pump operation panel.

Input device features

- 7" anti-glare widescreen LCD colour display
- Powerful LED-backlight with a long life span
- Broad angle of vision
- Functional membrane keys with long-life LED illumination
- Camera inlet for optional rear-driving camera system in the driver´s cabin
- Integrated warning buzzer
- Indication of short-instruction in PDF
- Wide-range voltage input
- possibility of remote maintainability

Design of other pumpcontrol boards are available as well



Monitor H.I.T. CAN-Bus



Monitor foaming agent admixing system



Lightpole control



High pressure rapid attack

Normal pressure rapid attack

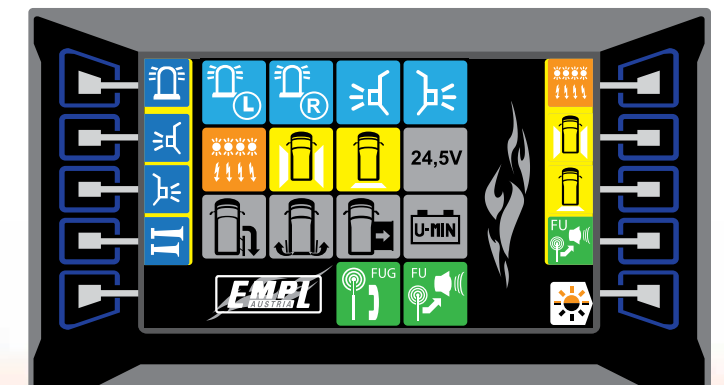
Revolution speed control

Vacuum gauge

Hose reel rewinding & break

CAN-Bus SMART - New modern driver´s cab control unit for body functions.

EMPL has developed a new and comfortable colour-display control unit. Installed in the driver´s cab all body functions can be centrally and rapidly controlled via this new feature.



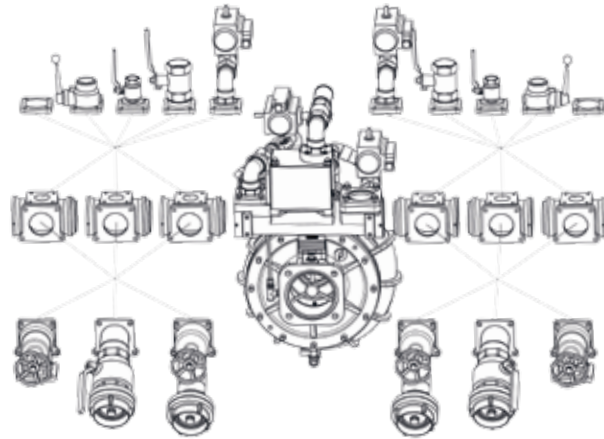
Empl Centrifugal Fire-fighting Pump

This fire-fighting pump made of non-corrosive light metal or sea water resistant gunmetal is driven by the vehicle's P.T.O.. It is equipped with an aluminium impeller designed for normal pressure. The impeller is installed on a stainless steel pump shaft and runs on high-performance bearings with permanent lubrication. This means that the rear-mounted pump is completely **oil-free** and requires **no maintenance whatsoever**.

The pump is primed by the VACUMAT dry piston suction pump, which is automatically switched on when the fire-fighting pump is started up and automatically switched off once the priming process has been completed. When the VACUMAT is switched off, a magnetic valve automatically seals the connection to the suction inlet (thus making it impossible for the tank to be drained via the VACUMAT). An electrical switch allows the VACUMAT to be switched off for inspection and for feeding at a backpressure of 0.8 bar as well as for operation of a fire hydrant or the vehicle's water tank (without automatic connection of the VACUMAT). This priming method requires absolutely **no maintenance, cannot run dry and is not sensitive to dirty water**.

The simplicity and high performance level of this type of pump priming is ideal for fire-fighting purposes and may be essential to ensure that fire-fighting operations can start promptly.

The pump is also available with a high-pressure component (TO pump).



10, 15 bar

NP 3.000
 FPN 1.000
 FPN 2.000
 FPN 3.000

NP 4.000
NP 6.000
 FPN 5.000
 FPN 6.000

NP 8.000
NP 10.000

10, 40 bar

TO 3.000
 TO 4.000
 TO 6.000
 TO 8.000

Foam admixing systems



Picture: BASF

For each scenario the perfect solution

Bladder tank system

- Large variety of foaming agent pumps (hydraulically operated)
- Admixing rates from 1, 3 or 6 % - individually selectable on each outlet
- External suction and filling of the foaming agent tank
- Flushing of the system not necessary (can be realized if requested)
- Operation via glove-optimized buttons

CAFS

- Large variety of foaming agent pumps (hydraulically or electrically operated)
- Compressor performance as per request
- Compressed air foam is generated in the patented mixing chamber - without any disturbance of the stream. The system works without any losses in pressure or flow-rate
- Compressed air foam dry / wet
- Operation via glove-optimized buttons

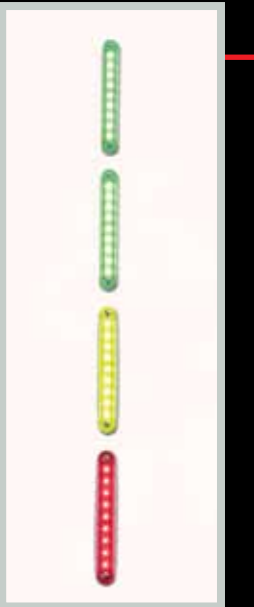


Cameleon system

- 30 l foaming agent pump (electrically operated)
- Admixing from 0,1 to 9,9 %
- External suction and filling of the foaming agent tanks via system-integrated pump
- Automatic flushing and pressurized air drainage at end of work
- Operation via glove-optimized buttons

Additional admixing systems are available

Illumination systems



Empl Fire Fighting



KLF, First Operation vehicle



Command control vehicle



Rescue vehicles



Heavy duty rescue vehicles



Transport vehicle



Transport vehicle



HAZMAT, Hazardous material vehicle



TDF, Diving service vehicle



HLF1, Rescue fire fighting vehicle



HLF 2, Pumper



Pumper 3.000/400



Pumper 8.000/1.000



HLF 3, Pumper



Rescue vehicles



WLF-K, Load handling system with crane



Pumper for industrial application 2.000/1.000/1.000/500

Fire fighting vehicles of EMPL - Focus on innovation



Headoffice Austria, Kaltenbach

EMPL has evolved from a 3-man black smith into a leading manufacturer of truck superstructures and special trailers in the areas of "Fire fighting vehicles", "Commercial vehicles" and "Logistic products".

Benefits to the customer were the central consideration at all times. All vehicles are tailored precisely to the wishes and requirements of the market and user.

High-tech plants for the Manufacture of Customised Special Vehicles

Continuous investment in the four EMPL production centers with most up to date high-tech machines, painting and sandblasting systems and highly efficient welding robots guarantee precise production state of the art.

Quality controls in all stages during and after the production characterise the EMPL organisation according to ISO 9001 and ISO 14001. The quality responsibility of each individual employee guarantees the highest customer satisfaction!



Headoffice Germany, Zahna Elster



EMPL Service Park, Kaltenbach



Fire Fighting Shop, Kaltenbach



Service plant, Hall in Tirol



EMPL Technologie Schmiede, Uderns

State of the art computer controlled production systems together with highly trained staff guarantee top quality EMPL products.

The most up to date computer-controlled production systems, combined with the best trained employees, guarantee the high quality of EMPL products. The high-tech machines can be used for individual products just as economically as for series productions.

Continous performance and safety assessments

Highest customer satisfaction is extremely important. Therefore, processes are continuously being observed and optimized. The consistent fulfillment of customer expectations and the willingness to implement innovative solutions together with the customer play a significant role.

EMPL is one of the few body builders, tests the bodies prior to delivery on its own test track. This ensures that users can rely on the vehicle performing perfectly even under extreme working conditions.

Training and After Sales

Even after the purchase, the company pays particular attention to their customers. In a modern presentation room, the vehicles are handed over to the users. In addition, training courses are held worldwide on-site to guarantee optimum operating efficiency of the products. The permanent reachability of the after-sales employees and the worldwide supply of spare parts make EMPL to a reliable partner.

Continuous investment in modernising the plants are one of the recipes for success.



The Very Latest Production Systems



High-Tech test facilities



Test track



Taking over of a new fire fighting vehicle



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