

# **BREMACH ROAD-RAIL VEHICLE**











# TARGET

- A vehicle suitable for rescue, fire fighting, civil protection, first aid directly from railway in those situation in which helicopters cannot do the job (i.e. in tunnel)
- A vehicle able to replace expensive rail machinery for standard electricity or telecommunication network maintenance
- A multipurpose vehicle able to go both on rail both on roads with no limitations
- A vehicle that can be transformed in short times to real off road vehicle and doesn't need modifications at the axles to get on rails





## TECHNICAL PRESENTATION BREMACH VEHICLE ROAD-RAIL EQUIPMENT

Thanks to its compact dimensions, BREMACH T-REX is one of the most suitable for ROAD-RAIL application and any kind of track, both railway network and subway or tram network.

This specific equipment has been developed to allow vehicle to reach on rail the site of intervention or work in short time, and to return on the road by its self and in real time. At the same time, the vehicle is able to carry out any maintenance rail service. Moreover, the vehicle can be rotated at 180° with a turntable plate that is operated by hydraulic system, to do a U-turn.

It is particularly indicated to take the first aid to subway and tunnels, as well as to guarantee optimum logistic and maintenance railway network and tram support.

# **TECHNICAL SPECIFICATIONS**

#### CHASSIS VEHICLE

BREMACH T-REX 4x4

GVW

6 t

#### ENGINE

- IVECO F1A 2300cc. Turbo diesel 116hp, 270Nm
- IVECO F1C 3000cc. Turbo diesel 146hp, 350Nm
- IVECO F1C 3000cc. Turbo diesel 176hp, 400Nm

#### **GEAR BOX**

- Manual ZF S-300 6 SPEEDS (engine F1A)
- Manual ZF S-380 6 SPEEDS (engine F1C)





• Automatic ALLISON 1000SP (only on engine F1C)

#### TRANSFER BOX

Designed and produced by BREMACH. 2-speed with central differential (lockable) included

#### TRANSMISSION

Permanent 4WD, rear differential lock, central differential lock, ,2-ratio reducer/transfer box (12 speeds + 2 reverse)

#### **BRAKING SYSTEM**

Hydraulic braking circuit with independent double disk brakes and depression power brake on four wheels; ABS (by BOSCH) system ensures a correct and well-balanced vehicle catch in every load condition within maximum GVW limit and during every slope the vehicle undergo, keeping up its efficiency also for extended use and in difficult conditions

#### STEERING

hydraulic power steering

#### FRAME

Bearing-type frame, with two longitudinal frame rails, made of a closed tube lengthwise welded to a C-type profile.

#### **SUSPENSIONS**

longitudinal leaf spring parabolic-type on both axles

#### WHEELBASE

- 3100 mm
- 3450 mm

#### TYRES

Off road - MICHELIN XZL 255/100 R16

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## **ROAD-RAIL EQUIPMENT**

To guarantee rail circulation, the vehicle is provided with two railway axles, set close to the front and rear road axles. Each railway axle is operated by two hydraulic cylinder at double effect by an appropriate hydraulic circuit. In the control panel, which is installed in the cab, as safety there is a red light. This light, in case of drive system breakdown represented by railway trolley, warns the operator in order to avoid vehicle circulation in unsafe conditions, and indicate low pressure of the rail guidance or turntable plate.

Moreover, to guarantee rail circulation stability, for each oil-pressure cylinder of the two rail axles, is installed an accumulator which assures the perfect grip of the rail wheel to track in any conditions.





Load distribution on the two axles is equal to 25% of the total vehicle weight; such value is the result of the compromise between two needs:

- to guarantee an appropriate friction between tyres and track to allow not only engine power transmission relative to the vehicle traction, but also appropriate performances regarding braking distance
- to guarantee a sufficient weight distribution onto railroad axles in order to allow an appropriate drive action on the tracks from the railroad wheels fixed on the axles

to see how it works please click here:

Road rail Ambulance 4x4

Or

Platform for Telecomunication company

Further images, please click <u>HERE</u>





## SOME APPLICATIONS



















