

### Rescue Vehicles

### Fire Fighting, Rescue and Recovery Vehicle



Rescue vehicle ZW 82 S with rerailling equipment and front hydraulics.



Rescue vehicle operating at STIB Bruxelles Transport.



LOCTRAC ZW 202 S.

#### Two rail operation systems are possible:

1. Operation with tires on rail; track guiding device
2. Operation with rail wheels; hydrostatic or friction drive system

#### Advantages:

- Can be used at Railway Authorities, connection trains, trams, metros
- Favourable for operation in tunnels; special vehicle for fire fighting in tunnels
- Staff costs are reduced compared to road units as the site can easily and directly be approached on rail
- Various transporter and truck chassis with rear axle drive or all wheel drive
- Admissible total weight from 3.5 tons to more than 32 tons
- Payload approx. 2,000 – 17,000 kgs depending on basic vehicle
- Driver's cabin for up to nine persons, including gas mask and breathing equipment
- Operating on track gauges from 1,000 to 1,676 mm
- Can be supplied as interchangeable construction for different track gauges
- Standard or special box body exactly designed for the material and equipment you need
- Interchangeable body that can be dismantled if necessary
- Almost no restrictions for road operation

#### Special advantages with track guiding device (tire on rail):

- High traction
- Very short braking distance
- Towing away of defective rail units even with heavy trailing loads on large slopes (e.g. trams, metros)

#### Special advantages with track driving device (rail wheels):

- All rail axles can be supplied in driven and braked design, rear axle driven trucks as well as all wheel drive vehicles.
- Hydraulic implements (rope winch, lifting device, water pumps for fire fighting, generator) can be driven by the hydraulic supply of the track driving system.

„ Q1 supplier of German Railways (DB AG) “

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Rescue vehicle ZW 100 S with double cabin for 7 persons: Auxiliary unit for derailed wagons. Operating at Federal German Railways DBAG.



Loctrac ZW 202 S with hydrostatic drive.



#### Vehicle Data:

Basic vehicle:	2- to 4-axle transporter and truck chassis of renowned manufacturers such as DaimlerChrysler, MAN, Iveco, Volvo, Scania, Renault, Volkswagen etc.
Total weight:	3.5 to 32 tons (higher weights are possible, please contact us)
Payload:	approx. 2,000 – 17,000 kgs depending on basic vehicle
Maximum speed:	on road: 80 – 130 km/h depending on basic vehicle on rail: 30 – 80 km/h on request
Minimum wheel base:	driving tire on rail: approx. 2,500 mm driving with rail wheels: approx. 4,200 mm
Tire gauge:	driving tire on rail: depending on track gauge driving with rail wheels: any

#### ZWEIWEG Equipment:

##### Concept 1:

Operating with tires on rail (track guiding system)

Track guiding device:	3 variations (depending on track curve and according to customer's requirement): <ul style="list-style-type: none"><li>• Track guiding device with articulated guide rollers</li><li>• Track guiding device with 400 mm Ø guide wheel</li><li>• Patented guidance bogie</li></ul>
Track gauge:	1,000 – 1,676 mm
Smallest negotiable curve:	radius of 16 metres (depending on wheel base of basic vehicle)
Max. tractive power:	up to 80 kN depending on basic vehicle
Maximum speed:	on rail: officially allowed 50 km/h, technically possible are 80 km/h
Admissible towing load:	up to 210 tons (unbraked)/800 tons (braked) depending on basic vehicle

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Rescue vehicle ZW 100 S: rear view with retractable floors for loading rerailling equipment.



ZW 102 S fire fighting truck with track guiding system.



Vehicle with box body for Austrian Railways.

#### Concept 2:

Operating with rail wheels (track driving system)

Track driving device:

Hydrostatically driven and braked rail axles.

3 variants:

- 2 axles (2 single axles)
- 3 axles (1 single axle, 1 bogie with 2 rail axles)
- 4 axles (2 bogies consisting of 2 rail axles)

Friction drive system acting on rail wheels through tires of basic vehicle, realized with 2 or 3 axles

Track gauge:

1,000 – 1,676 mm

Smallest negotiable curve:

radius of 23 metres (depending on wheel base)

Maximum tractive power:

approx. 20 kN

Maximum speed:

30 – 80 km/h on rail

Admissible towing load:

approx. 40 tons depending on slope

#### Optional equipment

- Coupling device for rail bound units (wagons, trams)
- Railway wagon brake system
- Devices for increased traction (sanding device, rail dryer)
- "Dead man's handle" safety device
- Inductive safety device (INDUSI)

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