VTG CONNECT

MAKE RAIL EASY – MAKE RAIL DIGITAL

We are convinced that rail haulage is a key to solving the ever growing freight transport volume in a global economy. We therefore want to make rail the backbone of smart and sustainable logistical solutions. Digital freight cars are essential to this vision, since they enable logistical and maintenance processes to be optimized. We are therefore equipping our entire European fleet with a telematics system, the VTG Connector.

How you benefit

OPTIMIZE TRANSPORT

Digitizing our wagons enables us to give you innovative services that will make your logistical processes and your collaboration with rail carriers more efficient in the future.

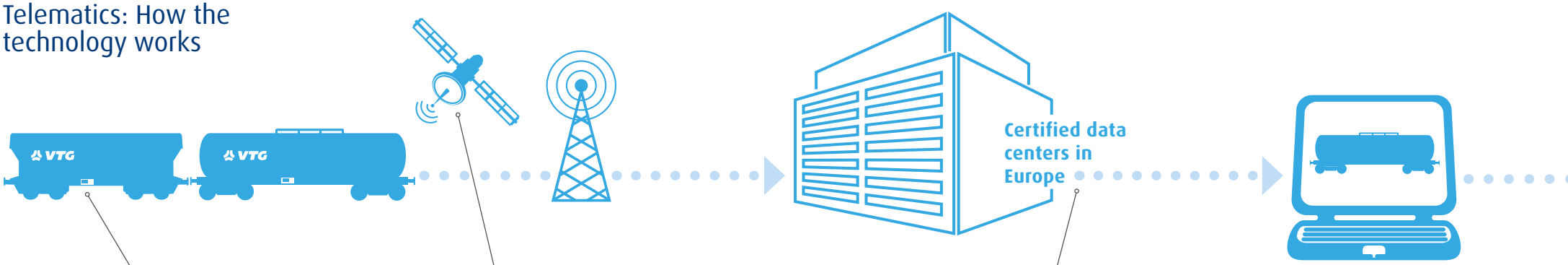
IMPROVE AVAILABILITY

Accurate positioning lets you precisely track itineraries and arrival times. That simplifies and speeds up your wagon scheduling, raises your productivity and slashes both idle time and the duration of round trips.

KNOW MORE

Regular monitoring provides information about the progress of the transport.

Telematics: How the technology works



INSTALLATION

The VTG Connector should preferably be affixed to the I-beam of the wagon. Solar cells combined with a built-in battery guarantee a stable power supply.

DATA TRANSMISSION

The wagon's current position is shown regularly via a receiver (GPS/QZSS, GLONASS, Galileo or BeiDou). Data is transmitted via the mobile network. During normal operation, the data is updated every ten minutes.

DATA PROCESSING

Secure (ISO 27001-certified) German data centers receive data packets from the wagons, analyze them and transform the data into useful business information. This is then made available on a protected online portal or via ITSS data interfaces.

VTG Rail Europe GmbH
Nagelsweg 34
20097 Hamburg
Germany

Phone +49 40 2354-0
info@vtg.com
www.vtg.com

The VTG Connector

DEVICE SPECIFICATIONS

- Operating temperature range: -40 to +85 °C
- Protection class: IP66/IP67
- Size: 363 x 104 x 47 mm
- Weight: 1,400 g
- Ambient temperature sensor
- Impact/shock detection alarm, acceleration +/- 16 g along 3 axes

DATA PROCESSING

- GPS/QZSS, GLONASS, Galileo, BeiDou and GSM triangulation for positioning
- Over-the-air updates
- Wireless links to external devices and sensors via WPAN IEEE 802.15.4 with 2.4 GHz frequency bands

POWER SUPPLY

- Energy harvesting for autonomous operation
- Rechargeable lithium-ion battery
- Smart algorithms to minimize power consumption and adapt to environmental conditions

CERTIFICATIONS

- Licensed for operation in areas that are endangered by the risk of gas/dust explosions pursuant to Directive 2014/34/EU, II 2G Ex ib mb IIC T4 Gb, II 2D Ex ib IIIC T135 °C Db
- Licensed for operation for the haulage of goods subject to explosion hazards: ATEX zone 1
- Further certifications: CE, IEC 62368-1, DIN EN 61373 Category 1 (Class A), DIN EN 60529 (IP67), DIN EN 50121-3-2, DIN EN 50155

Features at a glance

ROUNDTRIP MONITORING

Know exactly where your wagons are at any time; monitor arrival times and delays.

GEOFENCING

Define geographic zones and receive reports when these are entered and left.

MILEAGE TRACKING

Exact details of wagon mileage are at your disposal.

ALARMS AND ALERTS

You are notified immediately of any events – such as shocks, damage and idle time – that occur in transit.

DASHBOARDS

Analyze KPIs such as round-trip times, the intensity of use and mileage and use them to optimize your logistics.

SENSORS

Monitor the status of cargoes in transit for your specific applications. In the future the VTG-Connector serves as hub gathering the information provided by different sensors.

VTG Rail Europe GmbH
Nagelsweg 34
20097 Hamburg
Germany

Phone +49 40 2354-0
info@vtg.com
www.vtg.com