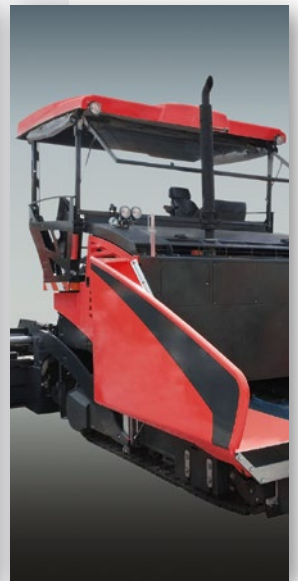




*Generator.Technology.Systems.*

**INTELLIGENT SYSTEMS FOR MOBILE** ///////////////  
**POWER GENERATION** ////////////////



*... we make  
electricity mobile*

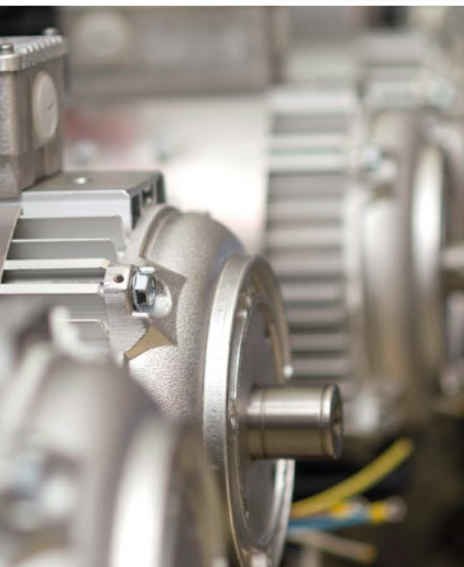
*//RELIABLE MOBILE POWER GENERATION*

# GTS-GENERATORS: ELECTRICITY – ANY TIME, ANY PLACE

We admit that we haven't yet invented a perpetual motion machine – but we are close, as mobile electricity needs increase due to the energy-efficient technical possibilities and practical advantages.

For over 100 years, we have been producing generators for mobile power generation – with German quality. Along the way, we have learned a lot. That is why we are able to build generators from 3.5 to 40 kVA: so to speak, from domestic use, such as for air conditioning in buses, to small power plants with 40,000 Watts. Electricity – wherever you need, at whatever power level you need.

**PERFORMANCE FEATURES OF OUR GENERATORS:** //



maintenance-free	brushless synchronous generators
conserving resources	optimal utilization of input energy
durable	uses only corrosion-resistant alloys
weight-optimized	designed using aluminum technology
compatible	modular mounting components
robust	machines with reinforced bearings, capable of supporting radial loads
precise	harmonic factor < 5% (<=grid) transient time < 100 msec constant voltage +/-1%
regardless of the weather conditions	protected against dust and spray water in accordance with IP54 or IP69k (closed housing)
reliable	short circuit current is four times nominal current
safe	self-protecting with active temperature limit controls
powerful	speed tolerance 1,500 – 3,680 rpm (4-pole), 3,000 – 7,000 rpm (2-pole), Voltage differential -10 /+6 % at max. 200 % unbalanced load capacity
userfriendly	modular concept allows all individual components to be replaced easily

Whether service vehicles, sewage tunnel construction, rescue services (firefighting, civil defense, etc.), promotional vehicles, construction vehicles, street sweepers and cutters, agricultural and military applications, or vehicles that require cooling for passenger or freight transport – all of these can perform their tasks better and more efficiently with mobile power generation. Highly efficient generators provide the basis for this performance. Our electronic control units are the solution for this problem!

//FLEXIBLE MOBILE POWER GENERATION

# GTS-INVERTER TECHNOLOGY: ONLY AS MUCH ELECTRICITY AS YOU NEED – BUT ALWAYS ENOUGH

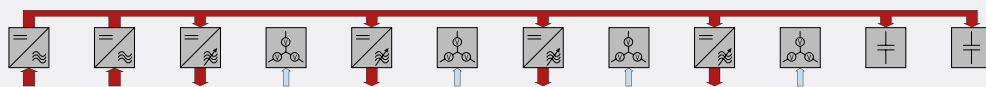
Mobile power generation must solve a basic problem: the input energy from the original drive or engine varies with the speed of the vehicle or the engine rpm, but the electrical frequency remains constant.

The magic word that solves this problem is:  
**VSCF - Variable Speed Constant Frequency**

The electronic GTS-Inverter Technology ensures a constant output frequency.

Our high-tech solution, especially for mobile applications, is called: **MPP – Modular Power Pack**

- Automotive frequency inverter
- Modular design
- Extended temperature range
- Protection class IP54 or higher
- Up to 120 kVA total power
- Short circuit protection
- Self-protecting system
- Durable and maintenance-free
- Individually adaptable to customer requirements



**ITS POWER SPECTRUM CAN BE SELECTED FOR EACH APPLICATION:** //

**For controlling power generation**

1. while driving
2. while idling
3. for applications that need both

**The advantages are obvious:**

- reduces fuel consumption
- reduces noise level
- perfect efficiency level
- maintenance-free

Whether you need a refrigerator in the desert, a hedge trimmer in the jungle, light at night in a cornfield, or a heater in the arctic, we have the perfect solution for you!

The following pages show examples of intelligent solutions for mobile power generation.

//COST-SAVING MOBILE POWER GENERATION

# GTS-COOLING TECHNOLOGY: ELECTRICITY FOR COOL HEADS AND PRODUCTS

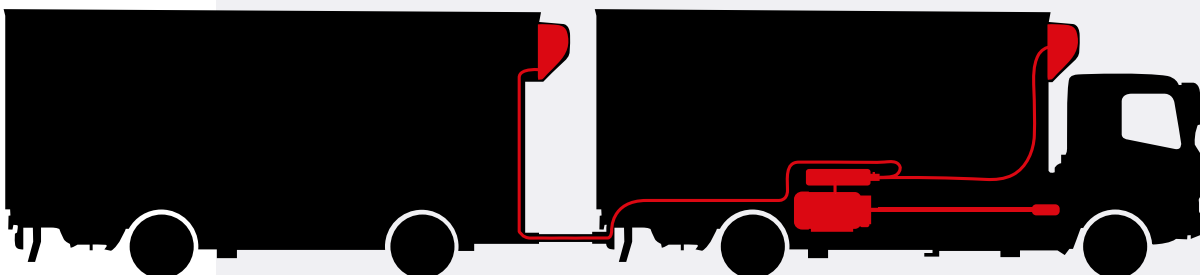
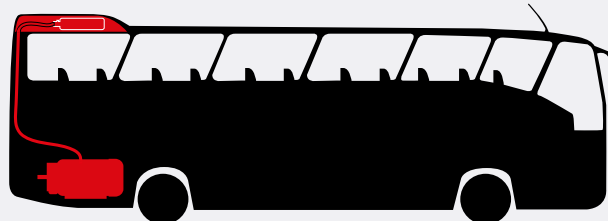
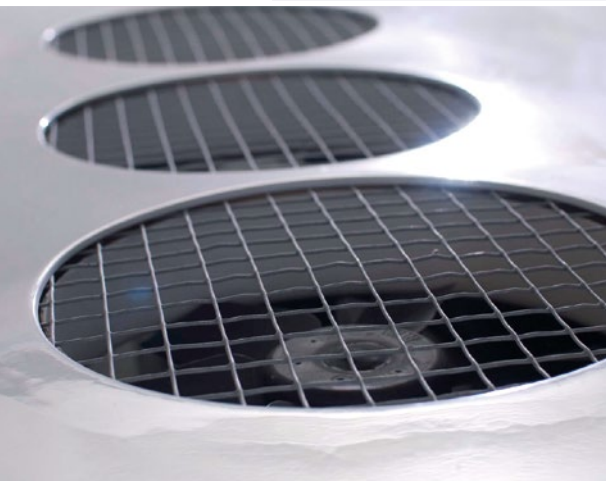
We have developed a perfect solution providing energy for air conditioning and refrigeration systems in buses and commercial trucks. Therefore a generator is connected to the engine. The GTS-Inverter Technology ensures a constant supply of electricity. Together with the entire electrical air conditioning or refrigeration system, it is fitted into a roof unit that is easy to install. For example, an extremely powerful and low-cost solution for retrofitting air conditioning in buses has been brought to market with great success.

**PERFORMANCE FEATURES:**////////////////////

- automotive design
- modular expandable
- either liquid or air cooled
- overload capable
- soft start for refrigeration compressors
- independent speed controls for compressor and fan with GTS-Inverters
- CAN-Bus connection
- application-specific solutions

**ADVANTAGES:**////////////////////

- external mains supply possible
- cooling capacity independent of speed
- energy savings
- completely closed system
- maintenance-free
- adaptable to application



## //SPACE-SAVING MOBILE POWER GENERATION

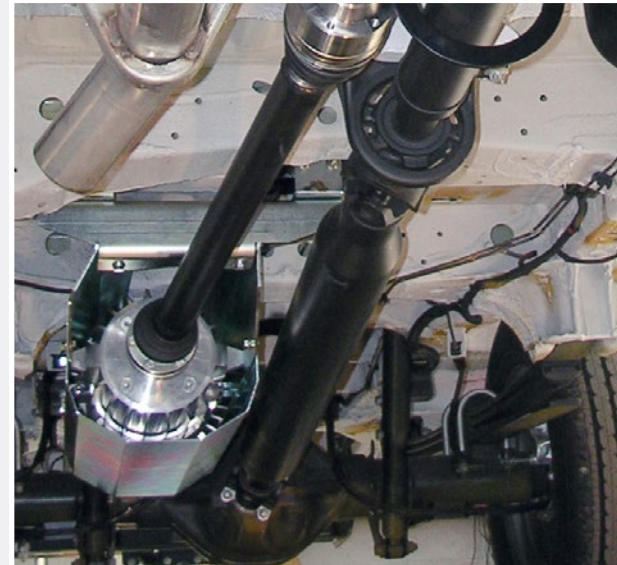
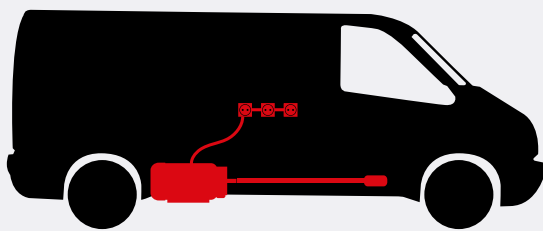
## GTS-UNDERFLOOR SYSTEMS:

### FOR EVERY CONCEIVABLE TYPE OF ELECTRICAL DEMAND – AT EVERY CONCEIVABLE LOCATION

The GTS-Underfloor System is the perfect solution for any type of delivery truck that requires mobile electricity in order to perform its mission autonomously. Whether heavy-duty electrical tools will be used, as in sewage tunnel construction. Or if traveling dealers require cooling, heating, or both in their sales vehicles: the GTS-Underfloor System enables powerful mobile power generation without compromising the loading surface and only a slight increase in load capacity.

**PERFORMANCE FEATURES:**

- high performance range, depending on the size of the vehicle, from 5 - 20 kVA
- vehicle and generator are optimally matched
- generator is connected to the engine via a planetary gearbox and constant velocity joints
- underfloor generators with double bearing, integrated controller and power connection box

**ADVANTAGES:**

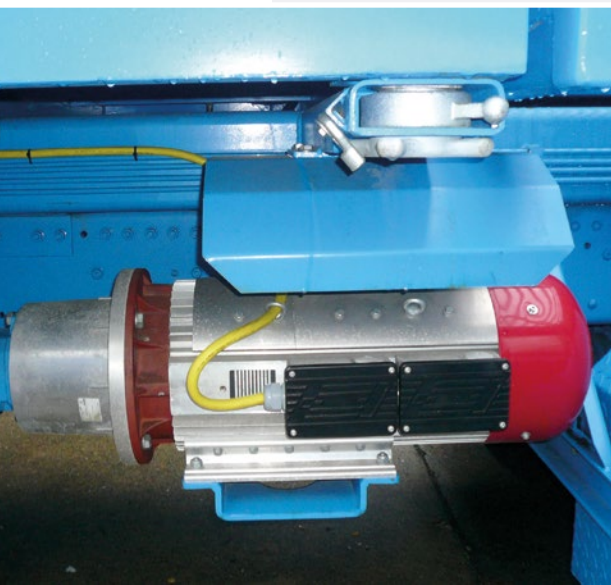
- less space required in the vehicle
- lightweight (13 kVA at 85 kg)
- maintenance-free
- low noise
- reduced exhaust emissions
- available at any time
- powerful, up to 20 kVA for a Crafter/Sprinter and 40 kVA for larger vehicles
- no handling of separate fuels and lubricants
- low operating costs



//POWERFUL MOBILE POWER GENERATION

# GTS-TRUCK UNDERFLOOR SYSTEMS: LOW LOAD - POWERFUL ELECTRICITY!

GTS produces small power plants for commercial trucks. There are various applications: whether for cooling systems, or fully autonomous power generation for promotional vehicles with stage tech, lighting and amplifiers. Depending on the needs of the application, we create the perfect solution for mobile power generation in commercial trucks. Anyone who used to transport a bulky mobile power supply unit, will find a low-cost, high-performance alternative in the GTS-Truck Underfloor System.

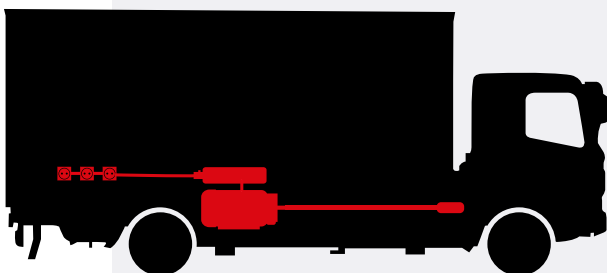


## PERFORMANCE FEATURES: //

- high performance range of up to 40 kVA
- vehicle and generator are optimally matched
- generator is connected to the engine via a planetary gearbox and constant velocity joints, driven by the 2. PTO
- ready to use at any time
- generators with double bearing, integrated controller and power connection box
- depending on the application, the GTS-Inverter Technology optimizes mobile power generation while driving

## ADVANTAGES: //

- reduced exhaust emissions
- less space required in the vehicle
- lightweight (40 kVA at 250 kg)
- maintenance-free
- low noise
- available at any time, ready for use immediately
- no handling of separate fuels and lubricants
- low operating costs
- saves space and weight compared to conventional solutions



## //VERSATILE MOBILE POWER GENERATION

## GTS-APPLICATIONS:

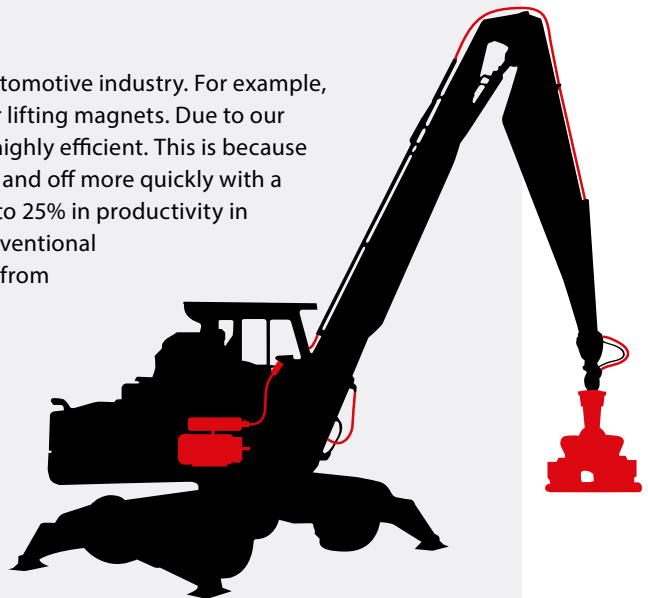
### OUR INNOVATE SOLUTIONS FOR LIFTING MAGNET SYSTEMS AND PAVER SYSTEMS

**GTS-iMAPLA:** //

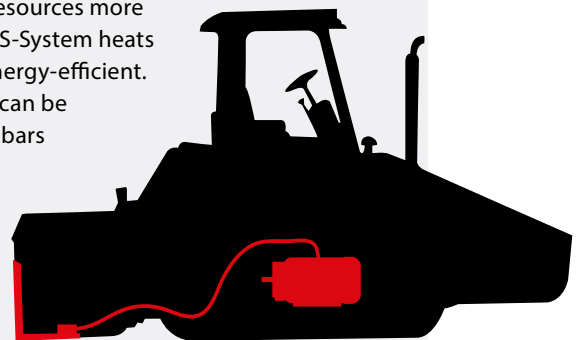
GTS-Technology is in demand not only in the automotive industry. For example, we produce a powerful magnet plate system for lifting magnets. Due to our intelligent control systems the entire system is highly efficient. This is because our systems can switch the magnetic energy on and off more quickly with a special controller. This means an increase of up to 25% in productivity in material handling and sorting, compared to conventional systems. We provide a fully integrated system – from the generator to the electronic controls to the magnet plate.



for external use

**GTS-CONSTRUCTION TECHNOLOGY:** //

Another example of a solution for mobile power needs is GTS-Construction Technology. With double bearing generators from 7-40 kVA capacity and electronic voltage controls, we provide the prerequisites for making road pavers faster and use resources more conservatively. Utilizing the vehicle's drive energy the GTS-System heats the screeds for asphalt smoothing, making them more energy-efficient. With the optional CAN-bus connection the idle behavior can be programmed, due to this the temperature of the heating bars remains constant. This greatly increases productivity.

**GTS-SYSTEM SOLUTIONS:** //

Beyond these, we are proud to present our solutions for railroad, marine and military applications.

*//INVENTIVE MOBILE POWER GENERATION*

# GTS-SOLUTIONS AND SERVICE: INDIVIDUAL SOLUTIONS FOR MOBILE POWER GENERATION

“We will not accept No as an answer!”: with our philosophy, we see problems as challenges. Whatever fulfils your needs in mobile power generation better, easier, faster or more efficient, we will develop the best solution for you. With over 100 years of experience and high-quality generators “Made in Germany”, we have the expertise, imagination and creativity needed to find the optimal solution for your applications. To achieve this, we are in close cooperation with universities and institutions to develop solutions for large and medium-sized industrial use. If our examples have inspired your imagination, please contact us.

**SERVICE FROM DEVELOPMENT TO INSTALLATION AND MAINTENANCE:** //

Many claim to offer full service – we do! Our service starts with engineering, developing solutions for problems – reliably and in partnership. It continues with professional installation of our systems and extensive training programs with customers on site. We provide fast spare parts service, perform repairs and service as fast as possible. This is the guarantee that we remain what we are: the world leader in innovation for mobile power generation.

## GTS – GENERATOR.TECHNOLOGY.SYSTEMS. WE MAKE ELECTRICITY MOBILE



**GTS - The German Innovation Company**

