

An aerial photograph of a mountain valley with a winding road. The terrain is rugged and brownish, with a river or stream flowing through the center. The sky is overcast and grey.

**DW** DESIGN  
WERK

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ALSC Europe 2022 -  
Munich, 2-4 May

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# Who we are

## History

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- 2007: Designwerk founded in Winterthur as a Think Tank for electromobility
- 2010: development of mobile charging solutions starts for Nissan, BMW and Porsche and other OEMs
- 2015: development of the first full electric refuse Truck (with Volvo Trucks)
- 2017: handover of four refuse E-trucks as a Lighttower project in Switzerland
- 2018: Start of the the serial Production of Futuricum Trucks in Switzerland
- 2020: Partnership with Faun and Zöller (Kirchhoff Group) for the European distribution of refuse collection vehicles in Europe
- 2021: Handover for the first Full Electric Concret Mixer to Lafarge/Holcim and the first Long Haul Trucks with 900kw/h
- 2021: World record for the longest driven distance without recharging (1099km)
- 2021: Our development partner Volvo has decided to take over the majority shares (60 %) in Designwerk Technologies AG.





# OPTIMAL APPLICATION TRUCK

## MUNICIPAL LOGISTICS



## SPECIAL VEHICLES



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## CONSTRUCTION



## DISTRIBUTION



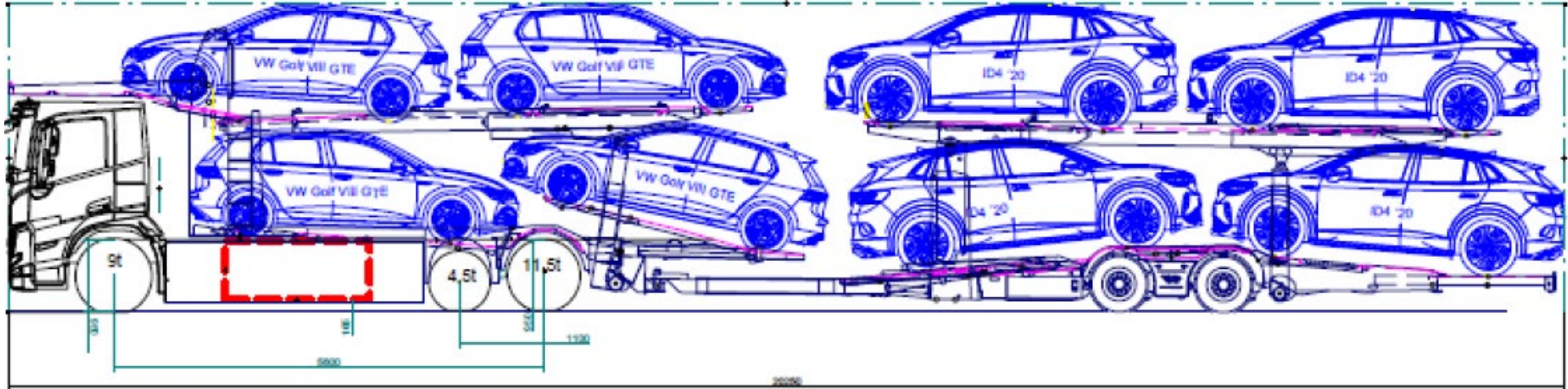
## PLANT LOGISTICS

## Advantages Designwerk E-TRUCK

- Ideal for operation with a lot of stop-and-go (high settlement density)
- Optimal for short to medium distance profiles
- High efficiency
- Energy recovery thanks to recuperation
- Reduction of noise for employees and population
- Increase occupational safety
- Also ideal for topographically demanding terrain
- Elimination of local nitrogen oxides, CO2 emissions, particulates
- No loss of power when using auxiliary units

## What is possible today

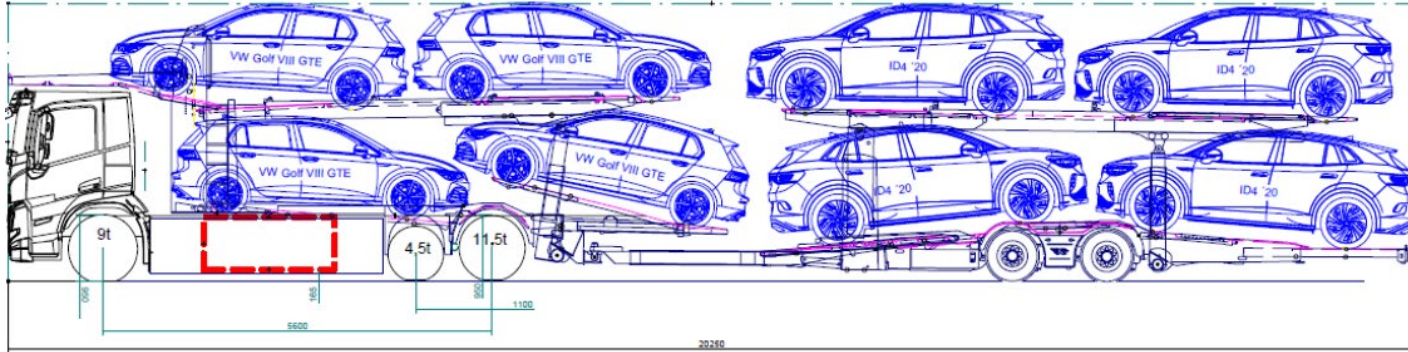
**Kässbohrer**  
Driven by professionals®



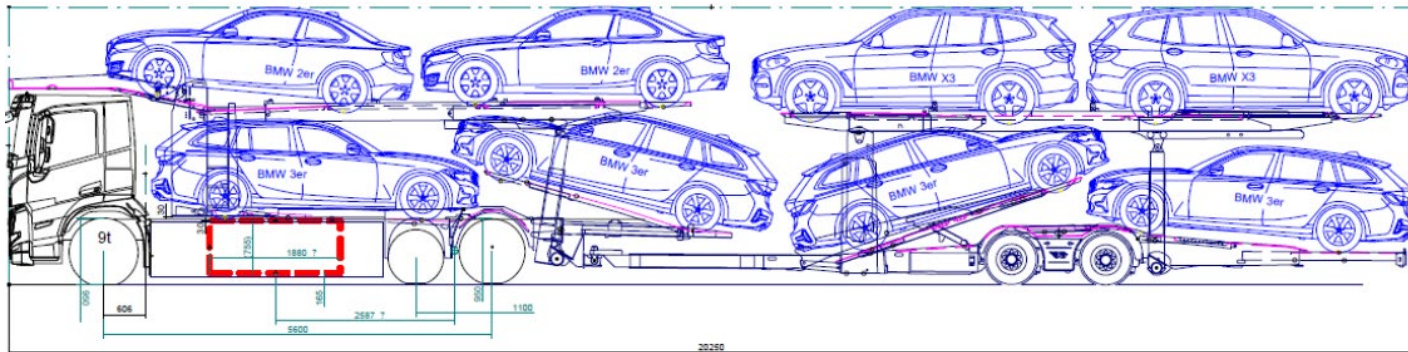
- Battery capacity 340kw/h or 450kw/h
- Range 170km or 225km (fully loaded)
- Fast charging up to 350kw possible

# Loading examples LF8

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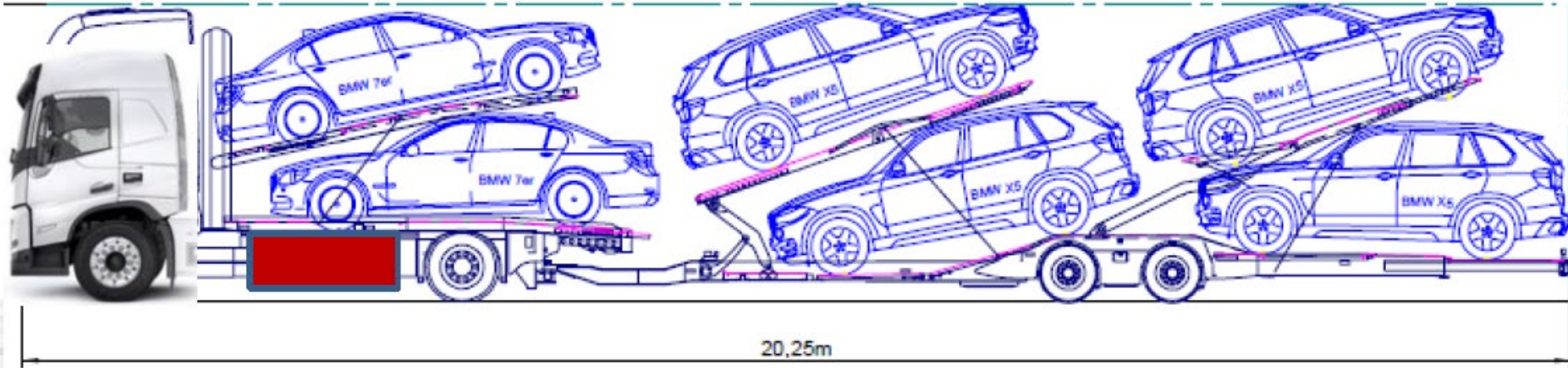
Beispiel LF 8 – BMW Ladung





## Loading examples LF 6

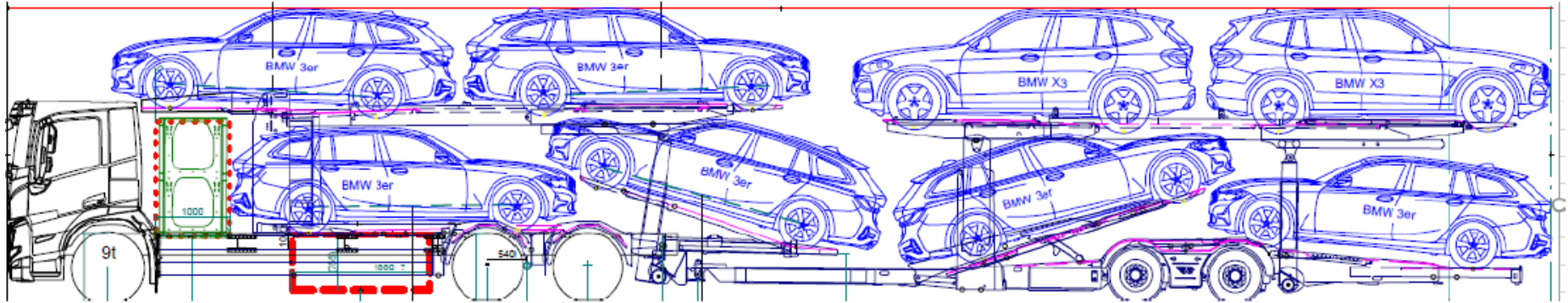
**Kässbohrer**  
*Driven by professionals®*



Alternative concept with Kässbohrer Modolan for larger vehicles.  
Battery capacity 450kw/h and approx. 250km range with full load

## Long Haul Transport LF8

**Kässbohrer**  
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Battery capacity of 900kw/h

Appox. Range 500km

Currently only possible outside the EU or countries with other regulations on total vehicle length

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**Vehicle in real operation**  
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**Kässbohrer**  
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# The Future is now and a Challenge

1. The Clean Vehicle Directive of the European Union stipulates that by 2030, 285,000 heavy trucks with alternative drives must be registered in Germany alone.
2. After Germany, more and more EU countries are starting to introduce specific subsidies, e.g. Germany -> up to 80% of the difference in purchase costs between a diesel and a BEV is subsidised. The development of a local charging infrastructure is also subsidised by up to 80%
3. The public charging infrastructure is currently designed almost exclusively for cars, and this requires individual initiative. A nationwide network will probably not be in place until 2025.



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Whats next to come

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# The Future for mobile charging

## Designwerk MEGAWATT Charger

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- From Q3 2022, we will go into test operation with an MegaWatt Charger
- Charging power from 350kw up to 2.4 MW
- New charging plug generation optional (MCS)
- Battery storage up to 1.8MW
- Mobile use as it works from 88kw input power onwards
- Mobile usage possible (20ft container)
- Available from Q1 2023 for customers





Thank you

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