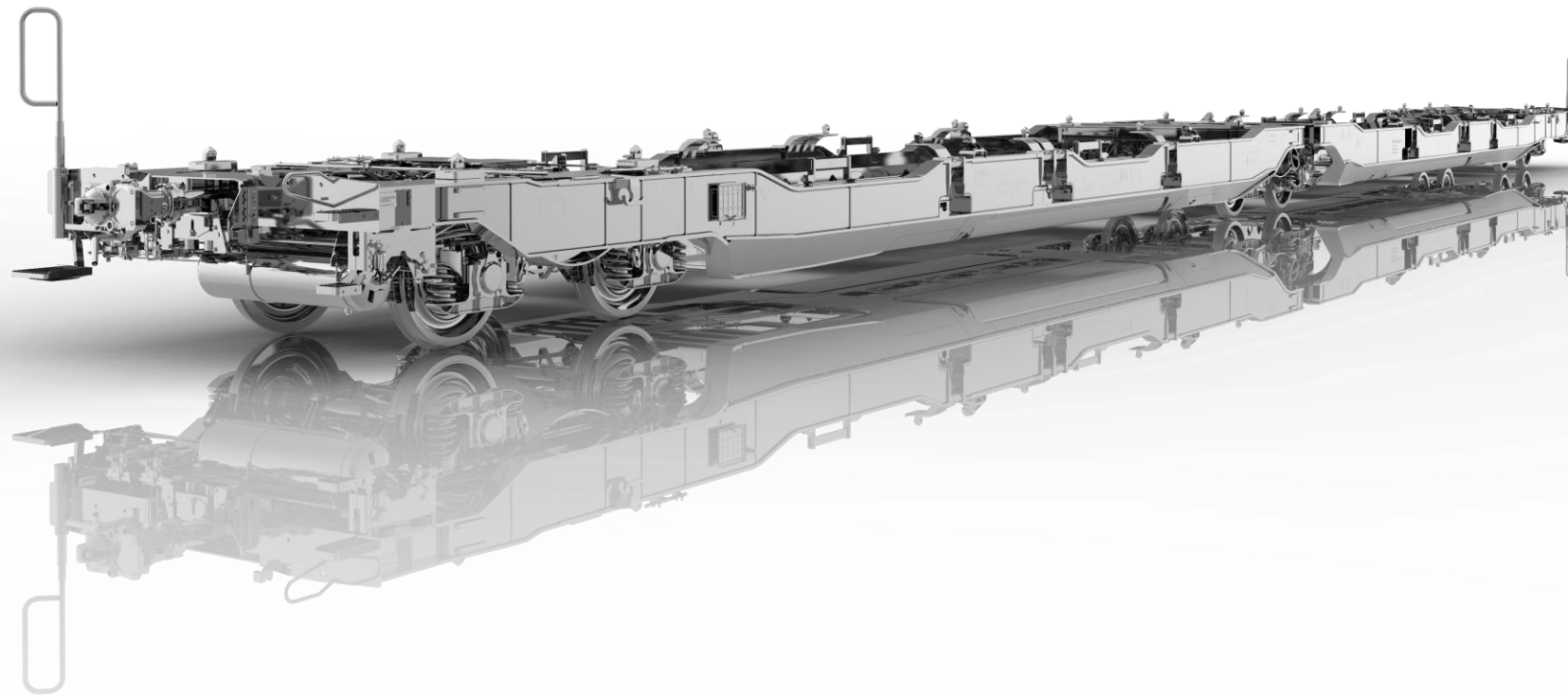


Innovation in the intermodal transport

Competitiveness



COMPANY PRESENTATION

BASIC INDICATORS OF THE COMPANY



TATRAVAGÓNKA a.s. is a **leader** in the field of production and development of wagons and bogies in Europe.



A dominant manufacturer of wagons and bogies of all types of European track gauges with a market share of **30%**.



90% of production is a result of own development. The company deals also with redesign of existing design types.



The annual capacity of TATRAVAGÓNKA a.s. is **4,500** wagons. Simultaneous production of **9** different types.



The annual capacity is **12,000** bogies. Production of **25** different variants simultaneously. TATRAVAGÓNKA a.s. is the only manufacturer of 3-axle bogies in Europe.



Expected incomes of TATRAVAGÓNKA a.s. for 2025 are **€ 608 mil.**



TATRAVAGÓNKA a.s. belongs to a stable background for:

5 manufacturers of wagons and bogies

2 plant for repairs, revisions and reconstructions of rolling stock

7 manufacturers of components for railway industry

in **4** world countries

90% of TATRAVAGÓNKA a.s. products are manufactured within this “family”

COMPANY PRESENTATION

STRENGTH OF THE FAMILY



2006 – entry of a new shareholder



2018 – entry of a new shareholder

MANUFACTURE OF RAILWAY FREIGHT WAGONS



2008



2021



2010



2015



2025

REPAIRS, REVISIONS AND RECONSTRUCTIONS OF RAILWAY FREIGHT WAGONS



2010



2025

MANUFACTURE OF COMPONENTS FOR RAILWAY TRANSPORT



2008



2010



2012



2012



2014



2010

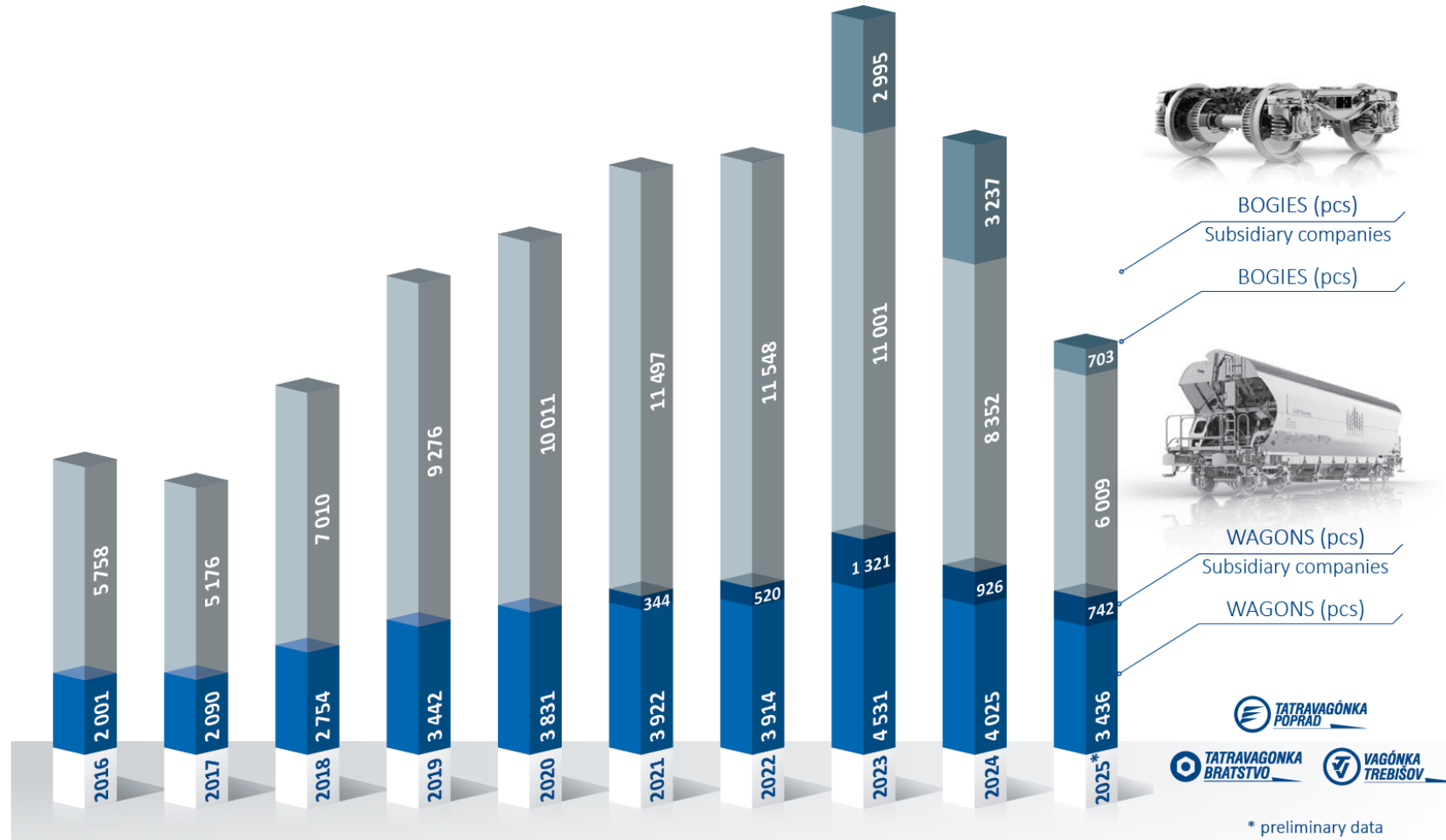


2020



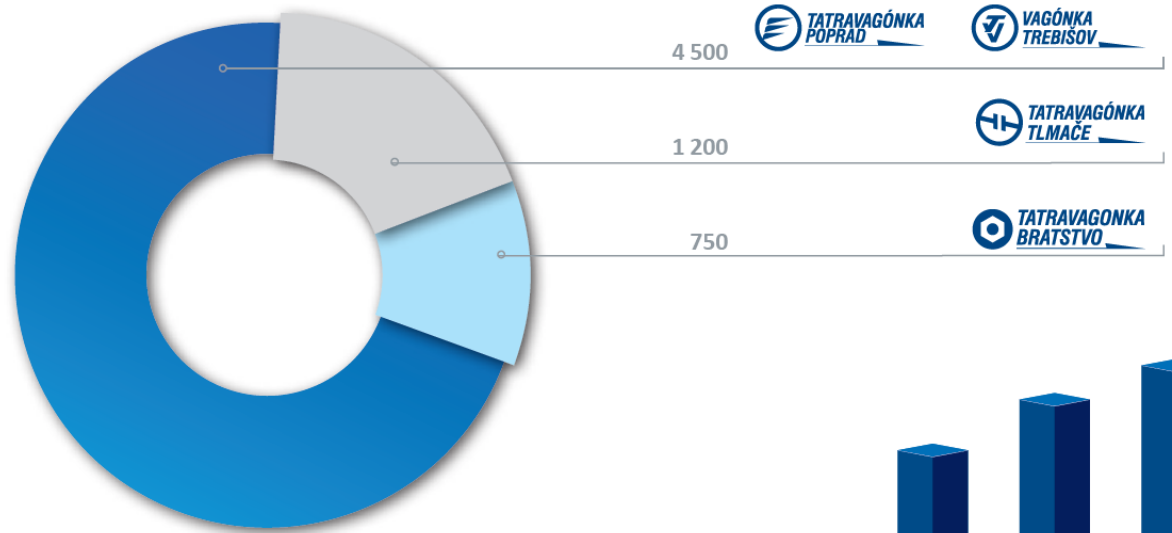
COMPANY PRESENTATION

PRODUCTION OF THE WAGONS AND BOGIES

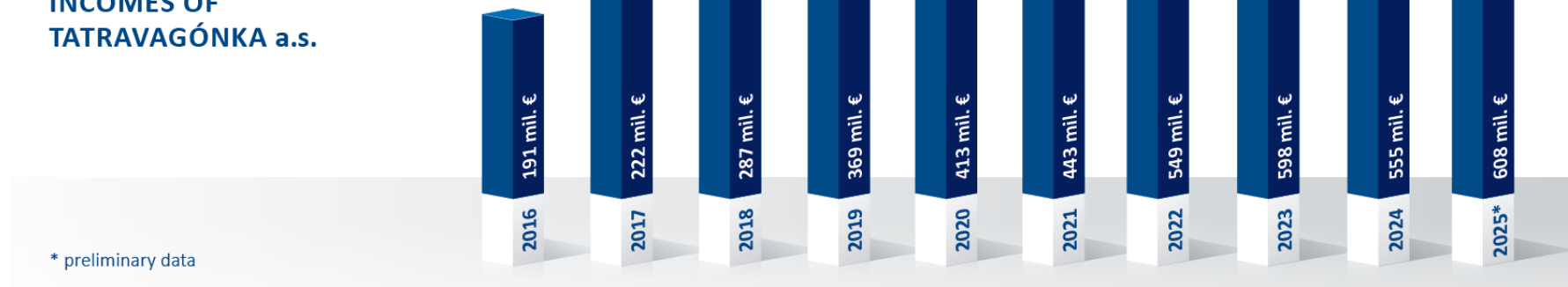


COMPANY PRESENTATION

PRODUCTION CAPACITIES OF THE WAGONS IN THE GROUP



INCOMES OF TATRAVAGÓNKA a.s.



* preliminary data

COMPANY PRESENTATION

R&D BASIS

We have a stable and experienced development team, which specialises upon complex design and development of new production with a clear focus on innovative solutions while respecting requirements for functionality, safety and reliability of a product.

BASIC FACTS



The **R&D** Department was established in the company in **1952**.



90% of production is a result of our own development.



During this period, we have developed almost **200** different types of wagons and bogies.



We participate at creation of the European railway strategy in the field of freight railway transport.



We own more than **40** patents and utility designs.

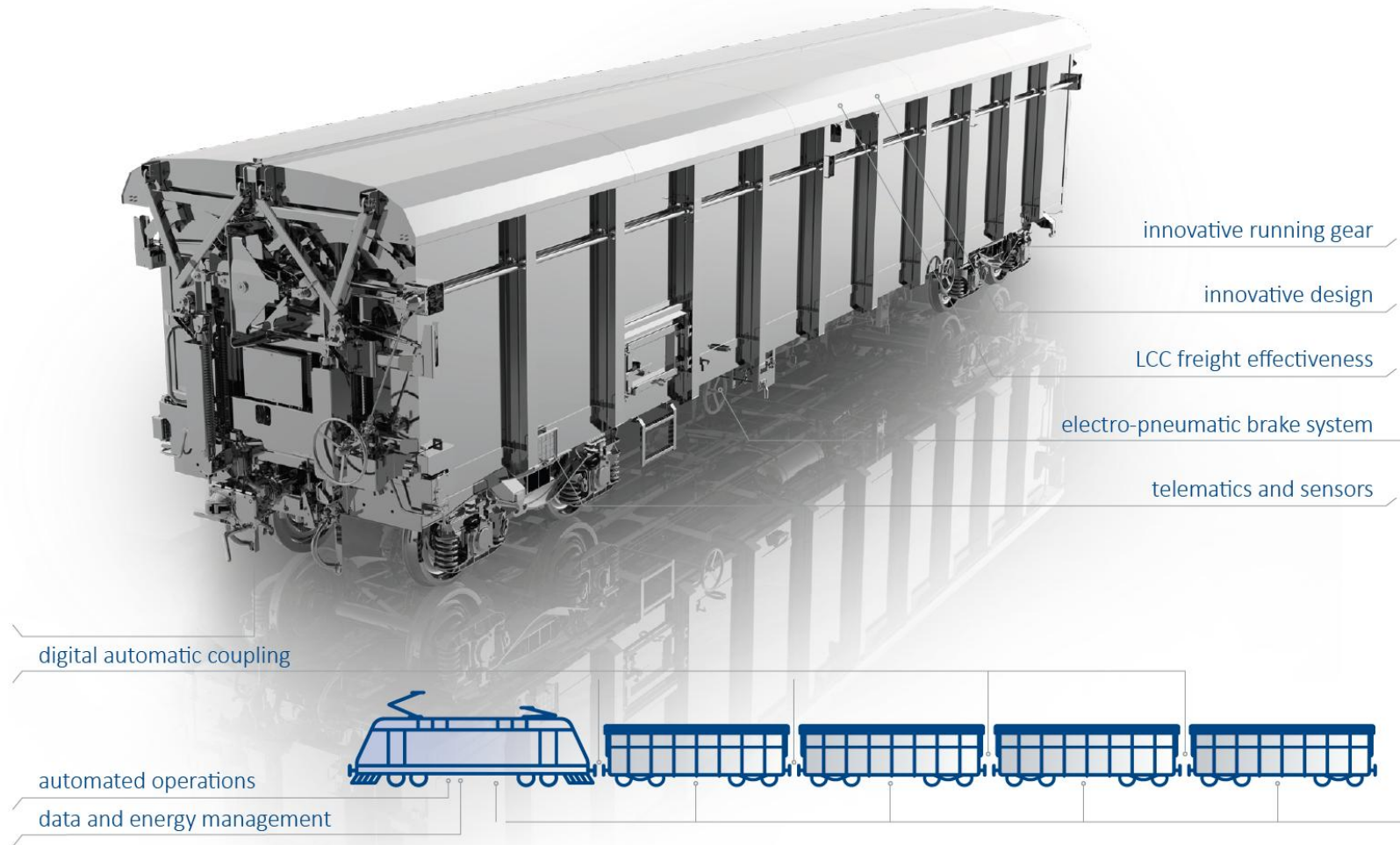


We cooperate at creating and modifications of the European standards and regulations.

We develop products for our customers while respecting a strategy of development in the freight railway transport, which lies in development of innovative freight wagons that are ready to be integrated into the intelligent freight train set.

COMPANY PRESENTATION

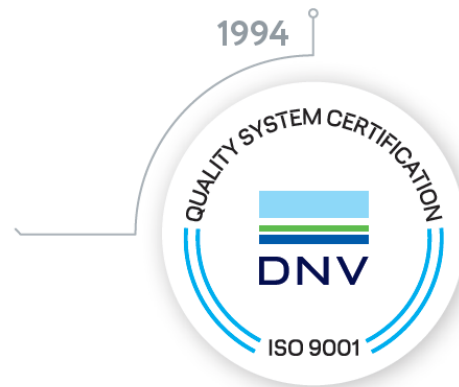
FROM INNOVATIVE TO INTELLIGENT – Standardization aspects



COMPANY PRESENTATION

THROUGH QUALITY TO SATISFACTION

Our highest target is customer's satisfaction, and one of the main priorities is achieving the highest possible level of certification and management system. In the company, the quality management system is regularly verified by the audits resulting from the TSI regulations, customer's requirements, legislative and the market.



ISO 9001

A standard established on the principles of the quality management and containing a strong pro-customer orientation, motivation and top management involvement, process approach and constant improvement.



ISO 22163 SILVER LEVEL

A standard that specifies requirements for a quality management system of a company doing business in the field of railway industry. High level of all processes and ability to meet the stringent requirements of the standard has been confirmed at SILVER LEVEL.



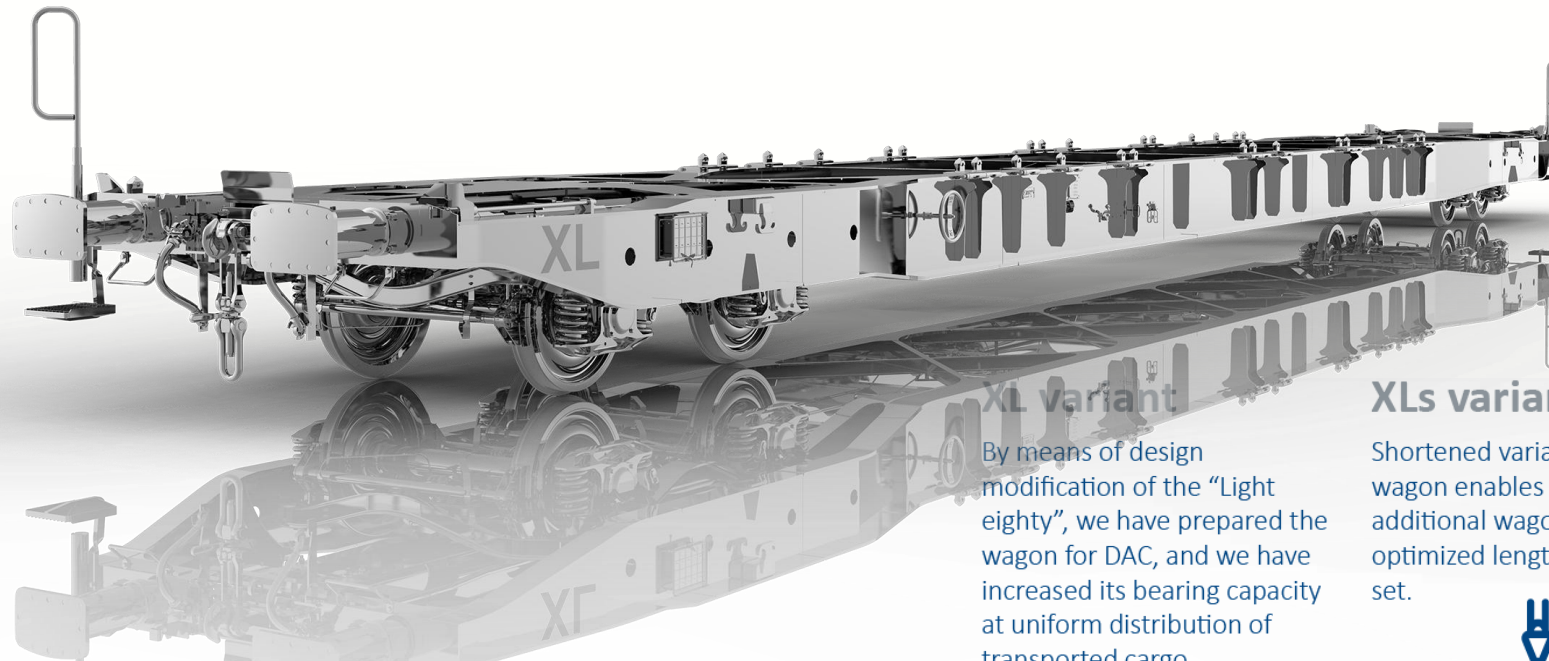
ISO 14001 a ISO 45001

Certificates covering environmental and safety related aspects of the management system.



MAIN PRODUCTION – REPRESENTATIVES OF INTERMODAL TRANSPORT

INTERMODAL CONTAINER TRANSPORT



Light eighty – Sggnss 80' DAC ready

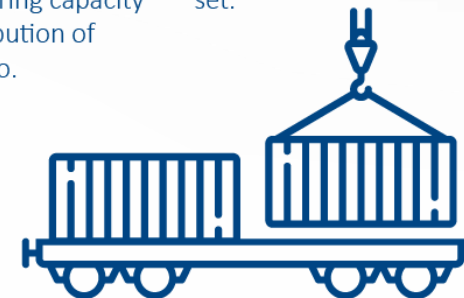
The long-term bestseller at the market of wagons for transportation of containers not only due to its low-weight of 21.5 t, but also due to a possibility to load 5 types of containers and swap bodies in 30 different container combinations. A non-traditional construction of this TSI wagon does not only reduce its noise to measured 78 dB(A), but mainly it enables to increase transportation effectiveness at 20% reduction of energy consumption (in comparison to the standard articulated 80'). By reduced number of bogies, it reduces demand for maintenance of the brake systems.

XL variant

By means of design modification of the "Light eighty", we have prepared the wagon for DAC, and we have increased its bearing capacity at uniform distribution of transported cargo.

XLs variant

Shortened variant of the XL wagon enables inserting one additional wagon in case of optimized length of a train set.



container transportation

MAIN PRODUCTION – REPRESENTATIVES FOR INTERMODAL TRANSPORT

WAGON FOR TRANSPORT OF TRUCK TRACTORS



Laados DAC ready



The wagon of type Laados is the 6-axle, 3-segment, single-deck running-gear wagon for transportation of truck tractors and light utility vehicles. Through optimized weight and increased axle-load enabling transportation of heavy truck tractors up to 9.5 t, the wagon adapts to the development of electromobility. Minimisation of loading height from top of a rail mitigates loading of truck tractors, and the interior profile of the wagon enables smooth passing of truck tractors on the wagon.



transportation of truck tractors

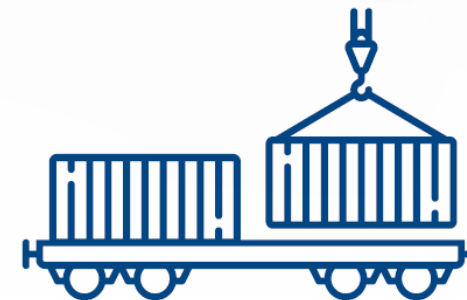
MAIN PRODUCTION – REPRESENTATIVES FOR INTERMODAL TRANSPORT

TVP BOX CARRIER



Box carrier - Sggrs(s) 80' DAC ready

The all-new 8-axle, short coupled, modular concept for transportation of special swap bodies and standard ISO containers. This carrier wagon is available in different versions 60', 80' and 90' for different track gauges 1435, 1524 and 1668mm. The big advantage of this concept is a large opening in the middle of the underframe, which allows the transport of special superstructures with unloading or discharging between the rails, or to increase the loading volume and thus increase the efficiency of transport.



container & swap bodies transportation

MAIN PRODUCTION – REPRESENTATIVES FOR INTERMODAL TRANSPORT

NON-WAGON PRODUCTION



Production of special containers

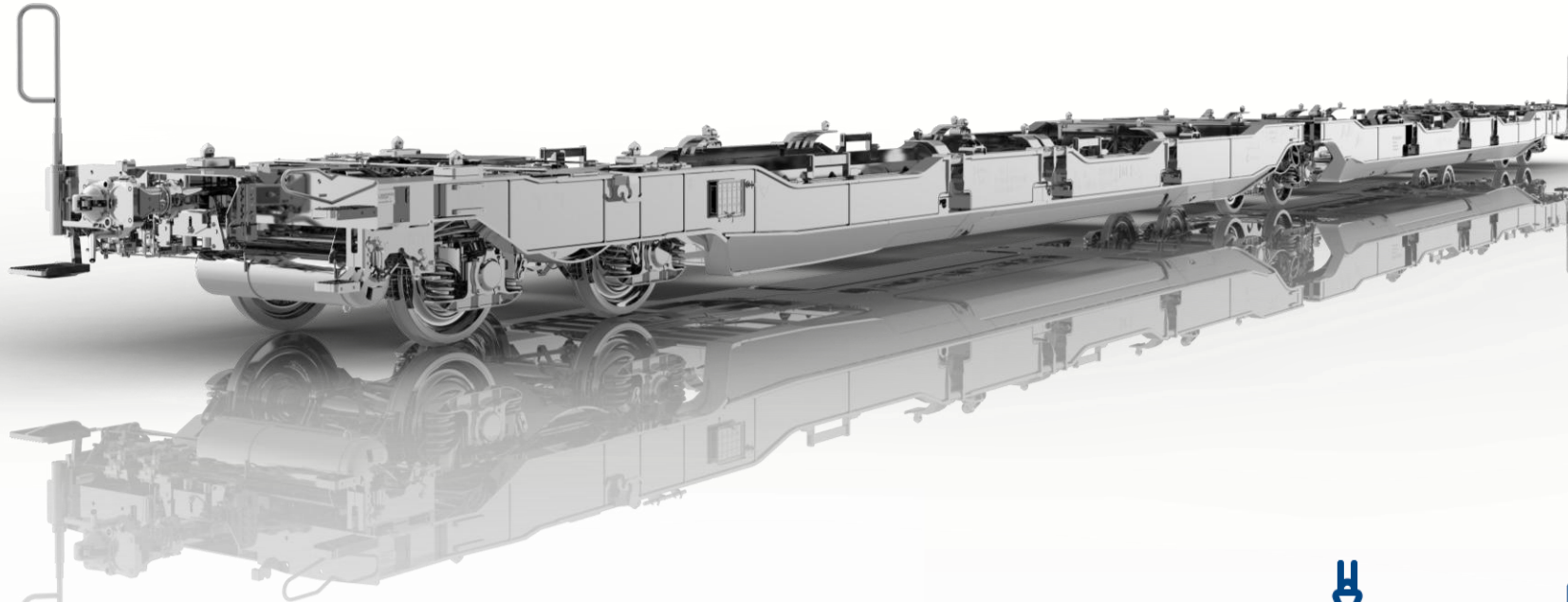
The company disposes of its own line of containers for wide range of application.



special containers

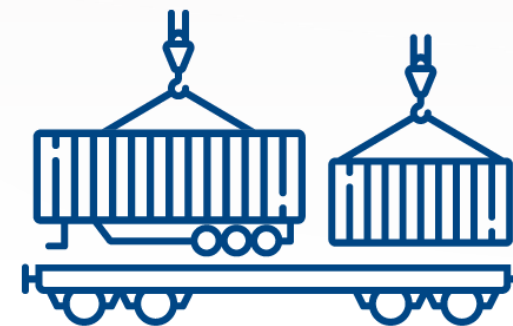
MAIN PRODUCTION – REPRESENTATIVES FOR INTERMODAL TRANSPORT

INTERMODAL BASKET WAGONS



Sdggmrss DAC ready

One of the greatest news of the company TATRAVAGÓNKA, a.s. is the 6-axle intermodal wagon Sdggmrss with two integrated pockets designed mainly for transportation and handling of non-cranable semi-trailers up to the maximal weight of 40 t. This wagon can be marked as the first of its kind among the TSI wagons. The wagon also has the largest loading gauge of “e” type. This wagon provides our customers with a clean concept of transport of non-cranable semi-trailers, but it is also useful for transportation of cranes semi-trailers, containers and swap bodies.



semi-trailer and container transportation

CURRENT SITUATION IN RAIL FREIGHT TRANSPORT

VIEW FROM THE SIDE OF A MANUFACTURER OF FREIGHT RAILWAY WAGONS

- Years 2025, 2026 and 2027 seems to be the most complicated and challenging
- Intermodal struggles – the most important transportation in Europe
- Grain transport has reached its maximum
- The chemical industry is careful about EU regulations on reducing emissions
- Wood transportation – significant drop in demand for lumber
- Currently the car transportation is still dominating
 - Lot of old car carriers – not dedicated for transport of heavy electric cars
 - Demand for approx. 10.000 new car carriers by 2035 – it is still relevant??
- But we still believe that the most dominating segment – **INTERMODAL** – will start to gradually wake up
- Our aim is to **SUPPORT** increasing the **COMPETITIVENESS** in comparison with unimodal road transportation
- Support for **DUAL-USE** and **MILITARY MOBILITY** – reflecting the actual situation.
- Therefore, we draw our attention in development of three types of freight wagons
 - Laados: 6 – axle, a three segment wagon for transportation of the trucks, agr. vehicles, yellow machines, buses, military and defense
 - Sggrrs(s): 8 – axle TVP BOX CARRIER wagon designed for transportation of containers and special swap bodies + production of special containers
 - Sdggmrs(s): 6 – axle **BASKET** wagon, primarily dedicated for the transportation of **NON-CRANABLE** semi-trailers

6 – AXLE BASKET WAGON

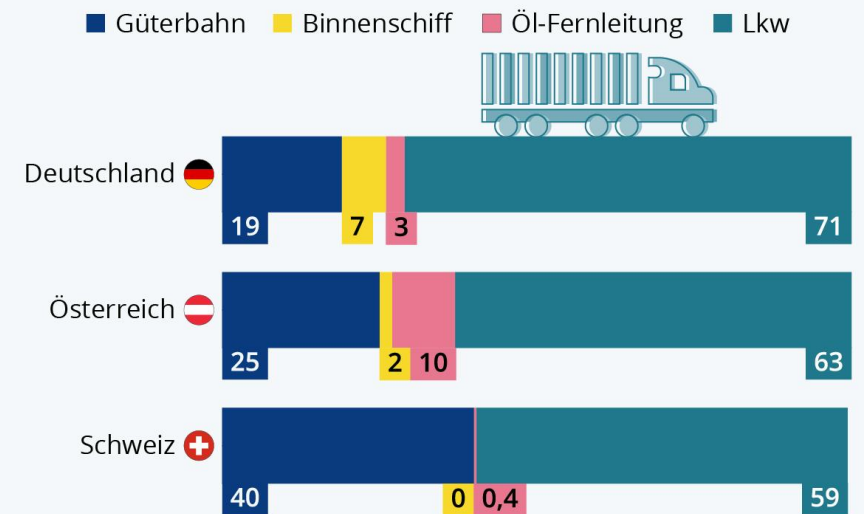
WHY A BASKET WAGON ?

- Approx. 15% of all intermodal transports in Europe are composed of semi-trailers
- The total share of semi-trailers transports on the road is significantly bigger
- 95% of all European semi/trailers are NON-CRANABLE
- 85% of all European terminals dispose with the vertical lifting technique
- To increase the competitiveness in comparison with road transport a logistically simplified solution is needed.
- A solution which saves time and money.
- Because of that BASKET WAGON !!

THIS VERY CONCEPT PROVIDES A SIMPLE AND LOGISTICALLY EFFECTIVE SOLUTION FOR THE INCREASING NUMBER OF TRANSPORTATIONS OF NON-CRANABLE SEMI-TRAILERS BY RAILWAY

Lkw dominieren Güterverkehr im DACH-Raum

Anteile der Verkehrsträger am Güterverkehr 2019 (in %)



Quelle: Allianz pro Schiene

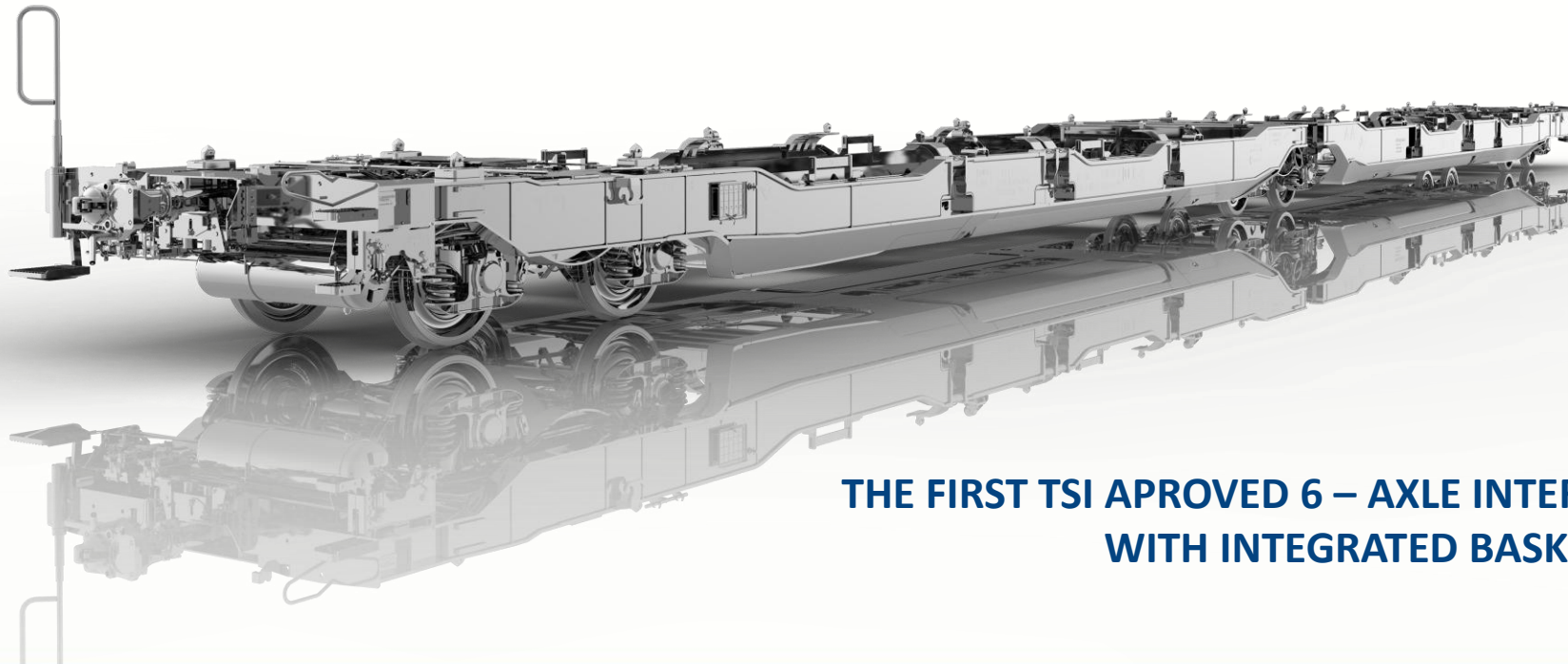


statista

6 – AXLE BASKET WAGON

MAIN TECHNICAL PARAMETERS - WAGON

- ESP-version 1,668/1,435 mm Weight – 45 tones
- EU-version 1,435mm Weight – 43 tones
- Gauge G1/G11.
- Codified for the envelope „e“ according to IRS 50596-5.
- Codified for P400, the height of the loading plane above top of rail is 270 mm.
- Version with preparation for installation of the AC - (DAC Ready)
- Suitable especially for NON-CRANABLE semi-trailers, but also for CRANABLE semi-trailers up to 40 tons.
- And also for the transport of containers and swap bodies

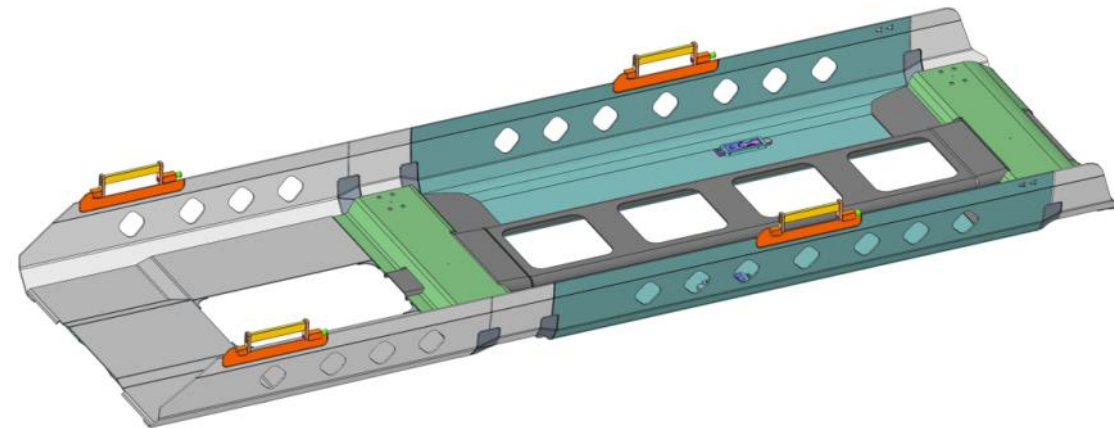
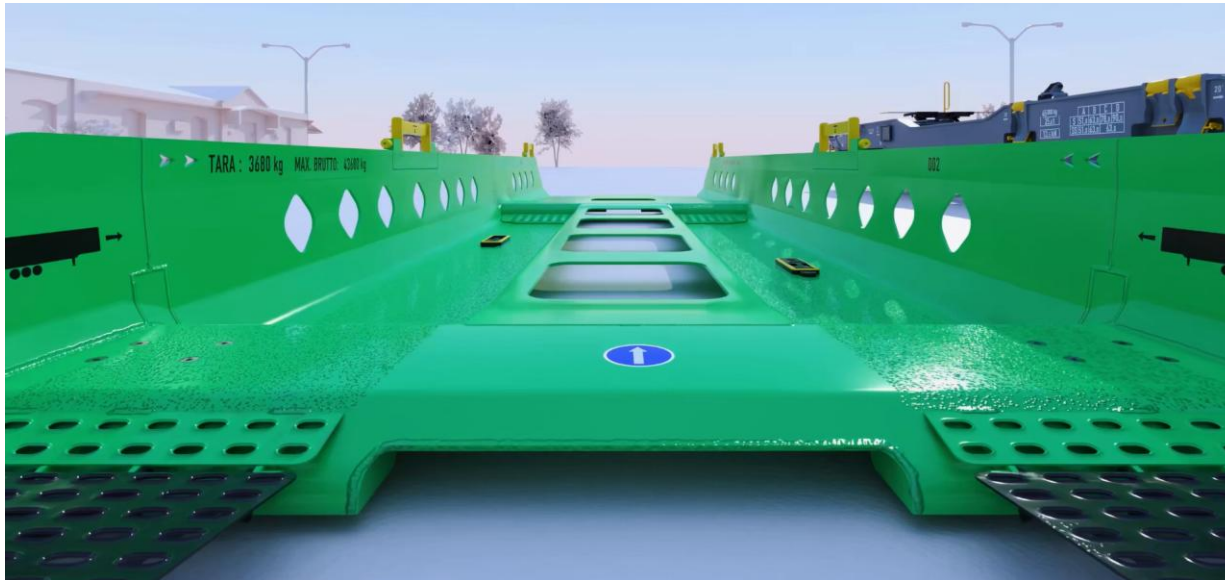


**THE FIRST TSI APPROVED 6 – AXLE INTERMODAL WAGON
WITH INTEGRATED BASKETS**

6 – AXLE BASKET WAGON

MAIN TECHNICAL PARAMETERS - BASKET

- Weight approximately 3.6 tones
- The biggest loading space „e“ according to IRS 50596-5
- Equipped with integrated and adjustable tire securing device and with
- Hinged handles for loading of of NON-CRANABLE semi-trailers
- No other lifting device is necessary – the basket is a part of the wagon, and it remains on the wagon also in unloaded condition.
- Suitable especially for NON-CRANABLE semi-trailers, but also for CRANABLE semi-trailers.



MAIN PRODUCTION – REPRESENTATNS FOR INTERMODAL TRANSPORT

LINKS TO PRODUCT MOVIES

- Laados: 6 – axle, a three segment wagon for transportation of the trucks, agr. vehicles, yellow machines, buses, military and defense
 - [Laados](#)
- Sggrs(s): 8 – axle TVP BOX CARRIER wagon designed for transportation of containers and special swap bodies + production of special containers
 - [TVP BoxCarrier](#)
- Sdggmrs(s): 6 – axle BASKET wagon, primarily dedicated for the transportation of NON-CRANABLE semi-trailers
 - [Sdggmrss](#)



ĎAKUJEME ZA POZORNOSŤ!
THANK YOU FOR YOUR ATTENTION!
DANKE FÜR IHRE AUFMERKSAMKEIT!

