TRANSANT

LESS WEIGHT. MORE FREIGHT.





Rolling stock market characterized by a lack of innovation in the past decades





Market dominated by a few manufacturers



Low efficiency with current freight wagons



Low flexibility with current solutions



Empty runs and downtimes



Necessity to roll out green logistics approach

Who are we?

TransANT makes rail freight traffic more attractive and sustainable.



TransAnt GmbH...

... engineers and produces

... innovative, modular and standardized freight wagons with a lightweight construction design,

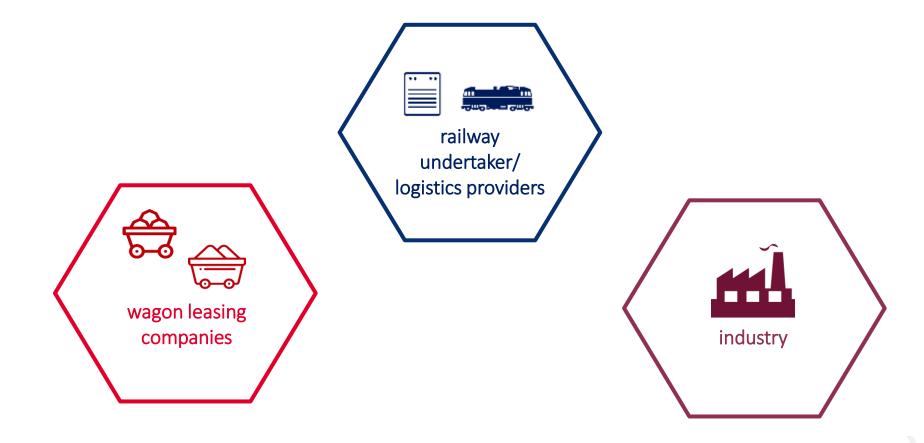
... which consists of a platform wagon as well an innovative superstructure

...and additionally provides in-depth knowledge in optimized cargo handling.

TransAnt GmbH is an innovative, high-quality engineer and producer of rail freight wagons.

A Joint Venture by voestalpine Group, TAS Group and Rail Cargo Group.

Our customers



Inspired by nature.



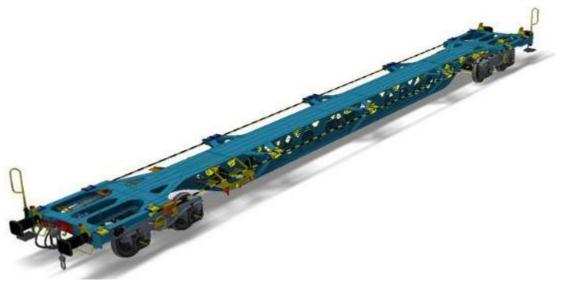
The ant.

An ant is as light as a feather. It only weights 6-10mg but carries up to 100x its own body weight.

An adult (80kg) would have to carry 8000kg.

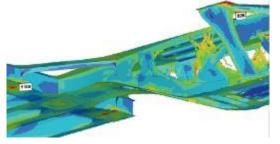
Our DESIGN principles

Product development based on topology optimization.





Weight optimization, standardization and modularization as well as the use of high strength steel as the key factors for development.



Execution via topology optimization

Our TransANT platform concept

A modular concept promises increased efficiency and productivity.

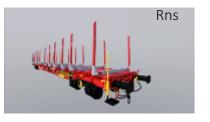


Standardized platfom (33 to 70 feet length)









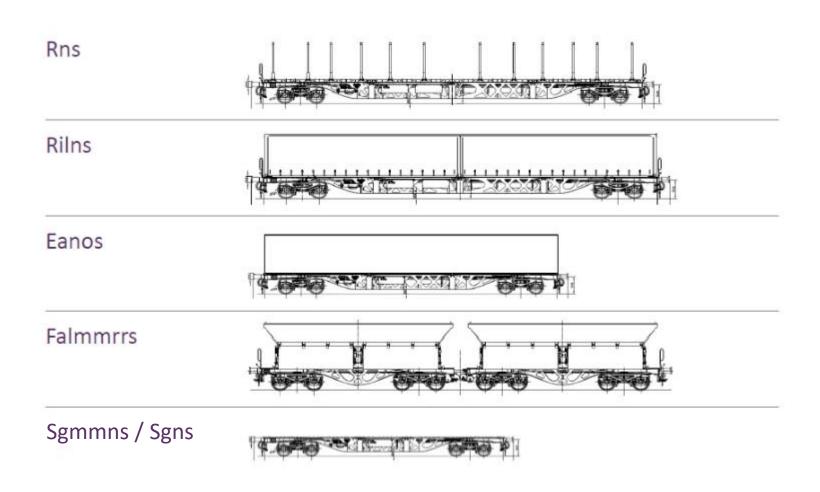


Modular superstructures

- Easily exchangeable
- Available in different industry specific versions
- Useable in intermodal transports without superstructure

Already realized wagon types

Realized from 33ft double wagon to 70ft wagon with different superstructures.



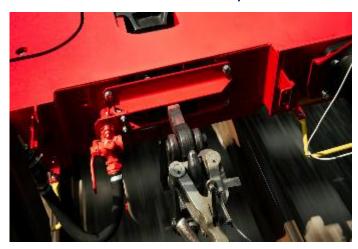
+ additional lengths and versions available!

Convincing PRODUCT ADVANTAGES

Lightweight Construction



Flexibility



Future-Fit



TransANT marks the innovation we need today to revolutionize the freight wagon market of tomorrow.

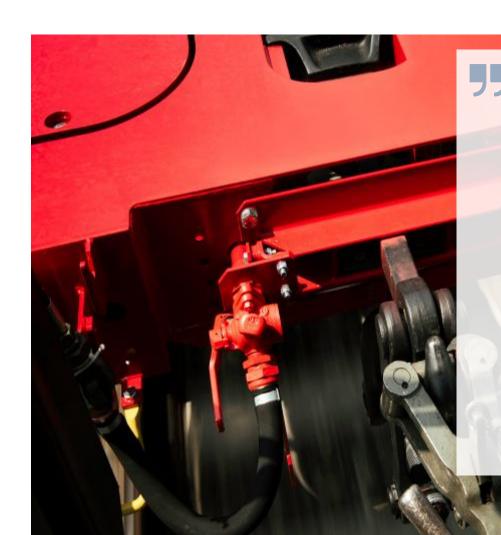
Promising Product Advantages - LIGHTWEIGHT



Lightweight construction for higher payload.

- Payload advantage made possible by a 20% lighter underframe, among other things
- Topology optimization used for the first time in freight wagons
- **Higher payload** reduces the number of needed wagons.

Promising Product Advantages - FLEXIBILITY



Flexibility in construction

- Industry specific superstructures enable optimized logistics solutions
- Change of superstructure enables prompt adjustments to changed logistics requirements
- Improved loading and unloading possibilities as well as integrated load securing optimize handling and securing of the transported goods

Flexibility in use

- With superstructures for unrestricted use in conventional single wagon traffic
- Intelligent interface between superstructure and underframe enables marshalling hump capability
- Underframe without superstructure can be used as container wagon for intermodal transports

Promising Product Advantages - FUTURE FIT



Short investment cycles & innovative technology, for example fit for central buffer coupling

BulkBox 33ft Double - Falmmrrs

Bulk container with side flaps, optimized for ore transports

- Additional payload: lower tare weight (19,5t x 2) enables payload of 140t compared to 96t (Faalns)
- Two seperate loading chambers; controllable from both wagon sides either seperately or collectively



				/
Wagon type		Falmmrrs		
Type number		6586		
Number of axes		8		
Distance between bogie pivots		2 x 6,5		
Bogie frame		Y25 with compact b	rake	
Length over buffers (m)		22,5		
Tare weight (t)		39		
Loading length (m)		2 x 9,8		
Loading width (m)		2,8		
Loading height (m)				
Loading volume (m³)		2 x 40		
Other labels		"K"– Jurid 822, flap	label	
Load	Grain size		Density	
Ore	Ca. 10-12mm		2,2to/m² - 2,4to/m²	
Slag	0-200mm		1,7to/m²	
Track class	Α	В	С	D
Load limits (s-traffic)	73,5	105	125	141

ADDED VALUE for voestalpine Stahl GmbH by using BulkBox

100 less train runs annually by using 33ft double wagons with Bulk Box superstructure (Falmmrrs).



Lower tare weight results in more freight

Since fall 2019, 30 x 33ft double wagons with Bulk Box superstructures make for an efficient transport between Erzberg and Linz.



100 less train runs p.a.

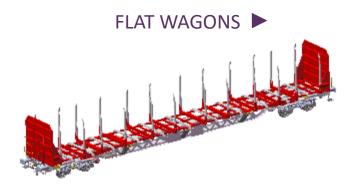
Cost savings of **1 Mio€** p.a.

CO2-reductions along supply chain

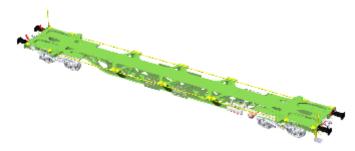
Wagon Portfolio for demands 2023 / 2024

Focus on intermodal rail cars, bulk wagons, open box wagons and flat rail cars for timber









BULK WAGONS



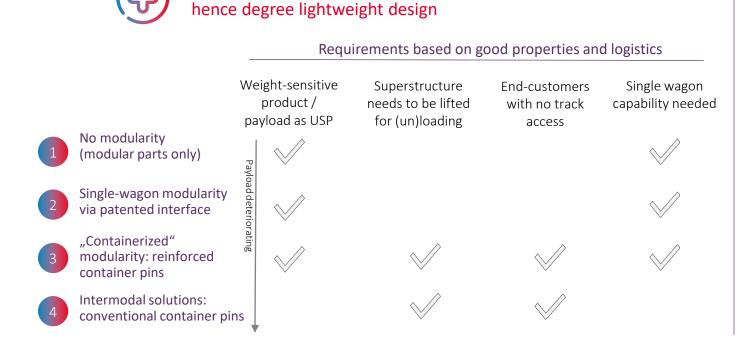
COVER BOX

+ customized container solutions via our partner company DVM

Long-term extension of product portfolio with "TransANT 2.0" + superstructures

Customer-specific flexibility and light-weight design as the main sources of competitive advantage

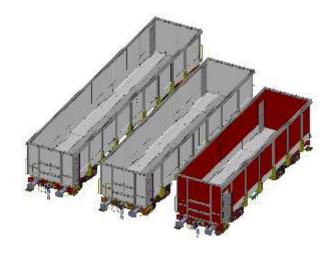
Choice of flexibility between platform and superstructure and

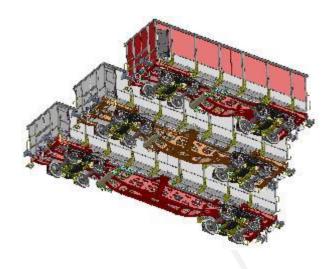


Technical key requirements

- Fulfilment of standard requirements
 - standard loading height above rails <1200mm
 - Full DAC compatibility
 - Enabling central unloading
- Considering new innovations (disc brakes)

Ea wagon solutions





TransANT MULTIBox

Available in different lengths and variations



- 33ft
- 2x33ft short coupled
- 40ft
- 2x40ft short coupled
- 48ft
- 60ft

- Different lengths from 33ft to 60ft; 33ft and 40ft MultiBox also available as a short coupled versions
- Profile G1 or G2
- Materials: Side walls, front walls and floor out of Alform 550 → customer-specific adaptation of material thickness

TransANT MULTIBox 33ft – G1

Overview



MULTIBox 33ft – technical key features:

Max. length over buffers (LÜP) (m)	11.57
Net weight (t)	18.5
Loading length (m)	10.15
Loading width (m)	2.75
Loading height (m)	2.1 (G2: 2.49)
Cargo area (m²)	27.7
Loading volume (m³)	57.7 (G2: 68.3)
Bogie type	Y25 with compact break
Thickness side walls	3-4mm
Thickness end walls	3mm
Thickness floor	4mm
Floor height ARL (m)	1.28

TransANT MULTIBox 33ft – G1 "strong"

Overview



MULTIBox 33ft – technical key features:

Max. length over buffers (LÜP) (m)	11.57
Net weight (t)	21.5
Loading length (m)	10.15
Loading width (m)	2.75
Loading height (m)	2.1 (G2: 2.49)
Cargo area (m²)	27.7
Loading volume (m³)	57.7 (G2: 68.3)
Bogie type	Y25 with compact break
Thickness side walls	6mm
Thickness end walls	6mm
Thickness floor	10mm
Floor height ARL (m)	1.28

TransANT MULTIBox 48ft – G1



MULTIBox 48ft - technical key features:

Max. length over buffers (LÜP) (m)	16.14
Net weight (t)	23,1
Loading length (m)	14.7
Loading width (m)	2.75
Loading height (m)	2.1
Cargo area (m²)	40
Loading volume (m³)	83
Bogie type	Y25 with compact break
Thickness side walls	4-6mm
Thickness floor	6mm
Thickness end walls	6mm
Floor height ARL (m)	1.28

TransANT MULTIBox 48ft – G1 "strong"



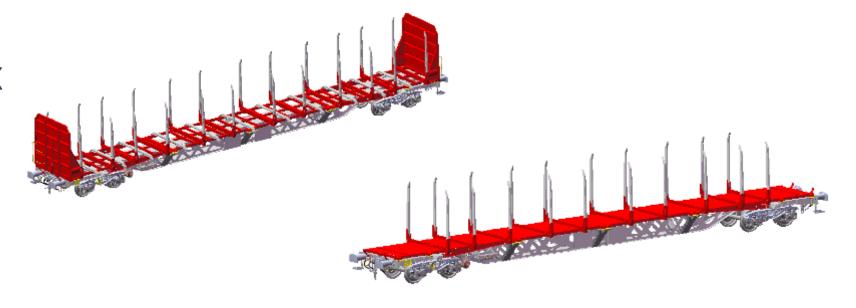
MULTIBox 48ft - technical key features:

Max. length over buffers (LÜP) (m)	16.14
Net weight (t)	25,1
Loading length (m)	14.7
Loading width (m)	2.75
Loading height (m)	2.1
Cargo area (m²)	40
Loading volume (m³)	83
Bogie type	Y25 with compact break
Thickness side walls	6mm
Thickness floor	10mm
Thickness end walls	6mm
Floor height ARL (m)	1.28





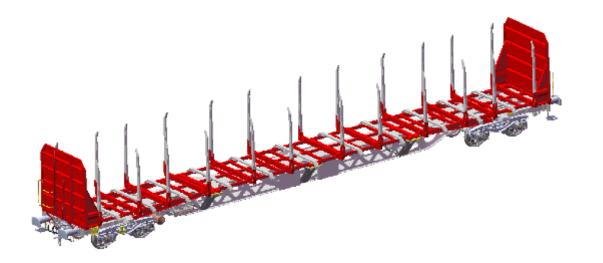
TransANT TimberBox





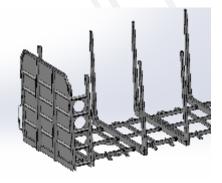
TransANT FLATBox

Available in different lengths and variations

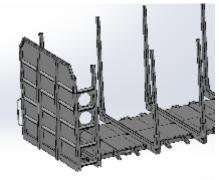


- Lengths from 40ft to 70ft, as well as in short coupled versions
- Profile G1, G2 or customer-specific (e.g. for Scandinavian countries)
- High-strength stanchions
- Superstructure consisting of cassettes for increased maintenance efficiency
- Flexible customer-specific floor construction, position of stanchions and with or without front walls

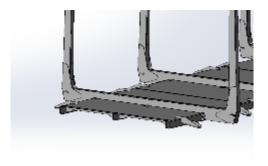
FLATBox floor construction

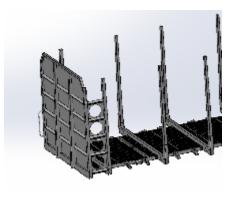


Grid frame consisting of steel profiles



End-to-end floor: fitted sheet e.g. 3mm



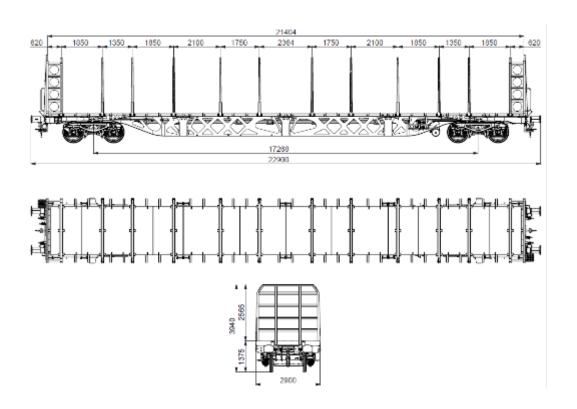


End-to-end floor: fitted open mesh flooring e.g. 25mm (30x30)



FLATBox 70ft – Rns G2

Example: with 3mm sheet floor, front walls and without deflectors

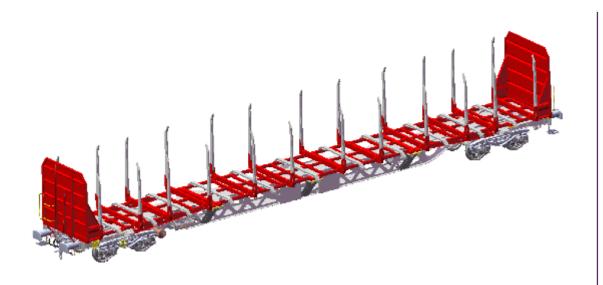


Technical key features:

Model number	Rns
Number of axles	4
Bogie style	Y25 mit Kompaktbremse
Bogie pin spacing (m)	17.3
Max. length over buffers (LÜP) (m)	22.9
Net weight (t)	24.2t (inkl. 3mm sheet floor and front walls, without deflectors)
Loading length (m)	21.4
Loading width (m)	2.45
Loading volume (m³)	140
Floor height ARL (m)	1.37

FLATBox 70ft – Rns G2

Example: without floor but with front walls and incl. deflectors



Technical key features:

Model number	Rns
Number of axles	4
Bogie style	Y25 mit Kompaktbremse
Bogie pin spacing (m)	17.3
Max. length over buffers (LÜP) (m)	22.9
Net weight (t)	24.0t (no floor, with front walls, with deflectors)
Loading length (m)	21.4
Loading width (m)	2.45
Loading volume (m³)	140
Floor height ARL (m)	1.37

FLATBox 70ft – Rns G2

Example: with 3mm floor but without front walls and without deflectors (lashing of wood necessary in this setup)

Technical key features:

Model number Rns

Number of axles 4

Bogie style Y25 mit Kompaktbremse

Bogie pin spacing (m) 17.3

Max. length over buffers (LÜP) (m) 22.9

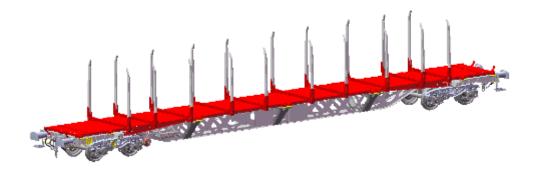
Net weight (t) 23.0t (inkl. 3mm sheet floor no front walls)

Loading length (m) 21.4

Loading width (m) 2.45

Loading volume (m³) 140

Floor height ARL (m) 1.37







TransANT CoverBox





COVERBox 70ft - Rilns

Vierachsiger Drehgestellflachwagen mit Planenaufbau für den Transport von Stückgut und langen Gütern

- Zuladungsvorteil: geringes Eigengewicht (~24t)
 ermöglicht Zuladung von +3,7t im Vergleich zu Habbiins
- Top-Loading: verschiebbare ungeteilte Plane am Dach
- Side Curtain: 4 verschiebbare Planen an der Seite



Gattungszeichen		Rilns		
Typennummer		3552		
Achsenanzahl		4		
Drehgestell Bauart		Y25 mit Ko	mpaktbremse	
Drehzapfenabstand (m)		17,3		
Max. Länge über Puffer (L	ÜP) (m)	22,9		
Eigengewicht (t)		~24		
Ladelänge (m)		21,4		
Ladebreite (m)		2,6		
Ladehöhe (m)		2,1		
Ladefläche (m²)		55,6		
Laderaum (m³)		117		
Fußbodenhöhe über SO (ı	m)	1,35		
Dachöffnung Lichte Länge	(m)	17,2		
Dachöffnung Lichte Breite	e (m)	2,5		
Sonstige Anschriften		"K" im Krei	s – Jurid 822	
İ				
Streckenklasse	Α	В	С	D
Lastgrenze	40,0	48,0	58,0	66,0





TransANT INTERMODAL WAGONS





INTERMODAL WAGON 40ft

Overview



INTERMODAL WAGON 40ft – technical key features:

Wagon type	Sgmmns
Type number	4505
Number of axes	4
Distance between bogie pivots (m)	8,1
Bogie frame	Y25 with compact brake
Length over buffers (m)	13,7
Tare weight (t)	16,5 (incl. ballast weights)
Loading length (m)	12,4
Loading width (m)	2,4
Floor height above rail (mm)	1155

INTERMODAL WAGON 60ft

Overview



INTERMODAL WAGON 60ft – technical key features:

Wagon type	Sgns
Type number	4543
Number of axes	4
Distance between bogie pivots (m)	14,2
Bogie frame	Y25 with compact brake
Length over buffers (m)	19,8
Tare weight (t)	16,5 (incl. ballast weights)
Loading length (m)	18,45
Loading width (m)	2,4
Floor height above rail (mm)	1155
Wagon type	Sgns
Type number	4543

TransANT MULTIBox

Available in different lengths and variations



- 33ft
- 2x33ft short coupled
- 40ft
- 2x40ft short coupled
- 48ft
- 60ft

- Different lengths from 33ft to 60ft; 33ft and 40ft MultiBox also available as a short coupled versions
- Profile G1 or G2
- Materials: Side walls, front walls and floor out of Alform 550 → customer-specific adaptation of material thickness

TransANT MULTIBox 48ft – G1



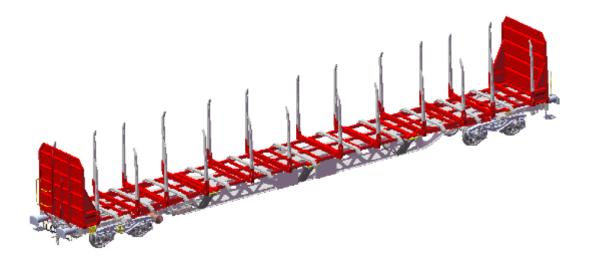


MULTIBox 48ft - technical key features:

Max. length over buffers (LÜP) (m)	16.14
Net weight (t)	23,1
Loading length (m)	14.7
Loading width (m)	2.75
Loading height (m)	2.1
Cargo area (m²)	40
Loading volume (m³)	83
Bogie type	Y25 with compact break
Thickness side walls	4-6mm
Thickness floor	6mm
Thickness end walls	6mm
Floor height ARL (m)	1.28

TransANT FLATBox

Available in different lengths and variations

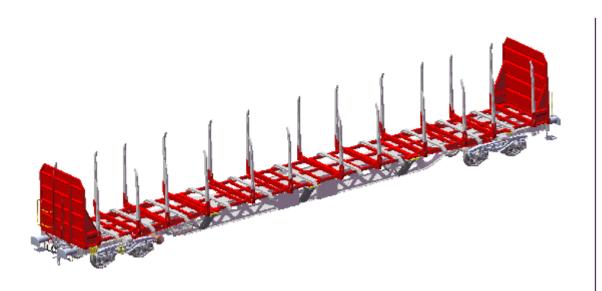


- Lengths from 40ft to 70ft, as well as in short coupled versions
- Profile G1, G2 or customer-specific (e.g. for Scandinavian countries)
- High-strength stanchions
- Superstructure consisting of cassettes for increased maintenance efficiency
- Flexible customer-specific floor construction, position of stanchions and with or without front walls

FLATBox 70ft – Rns G2

Example: without floor but with front walls and incl. deflectors





Technical key features:

Model number	Rns
Number of axles	4
Bogie style	Y25 mit Kompaktbremse
Bogie pin spacing (m)	17.3
Max. length over buffers (LÜP) (m)	22.9
Net weight (t)	24.0t (no floor, with front walls, with deflectors)
Loading length (m)	21.4
Loading width (m)	2.45
Loading volume (m³)	140
Floor height ARL (m)	1.37

COVERBox 70ft - Rilns

4-axes Bogie flat wagon mit tarpaulin cover for sensitive and long freight

- Additional payload: lower tare weight (~24t) enables payload of +3,7t compared to Habbiins
- Top-Loading: shiftable, unseperated top tarpaulin cover
- Side Curtain: 4 shiftable side tarpaulin covers



					\
	Wagon type		Rilns		
	Type number		3552		
	Number of axes		4		
	Distance between bogie pivots		Y25 mit K	ompaktbremse	
	Bogie frame		17,3		
	Length over buffers (m)		22,9		
	Tare weight (t)		~24		
	Loading length (m)		21,4		
	Loading width (m) Loading height (m) Loading area (m²) Loading volume (m³) Floor height above rail (m) Roof opening clearance lenght (m) Roof opening clearance width (m) Other labels		2,6 2,1 55,6 117		
			1,35		
			17,2 2,5		
			"K"– Jurid 822		
	l				
	Track class	Α	В	С	D
	Load limits (s-traffic)	40,0	48,0	58,0	66,0

TransANT platform wagon 40ft

to be used as a conventional container carrying wagon but can also be changed, without ballast weights and with a respective superstructure, into e.g. an 40ft Ea* wagon

INTERMODAL WAGON 40ft – technical key features:



Wagon type	Sgmmns
Type number	4505
Number of axes	4
Distance between bogie pivots (m)	8,1
Bogie frame	Y25 with compact brake
Length over buffers (m)	13,7
Tare weight (t)	16,5 (incl. ballast weights
Loading length (m)	12,4
Loading width (m)	2,4
Floor height above rail (mm)	1155

TransANT platform wagon 60ft

to be used as a conventional container carrying wagon but can also be changed, without ballast weights and with a respective superstructure, into e.g. an 60ft R* wagon



INTERMODAL WAGON 60ft – technical key features:

Wagon type	Sgns
Type number	4543
Number of axes	4
Distance between bogie pivots (m)	14,2
Bogie frame	Y25 with compact brake
Length over buffers (m)	19,8
Tare weight (t)	16,5 (incl. ballast weights)
Loading length (m)	18,45
Loading width (m)	2,4
Floor height above rail (mm)	1155
Wagon type	Sgns
Type number	4543

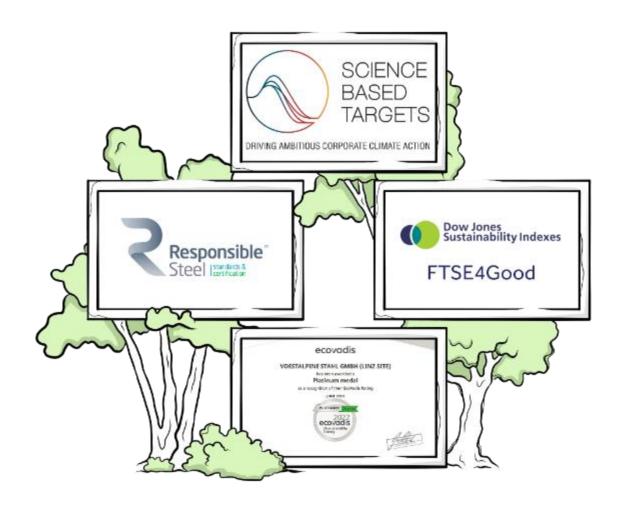


CO2 reduced wagon

greentec steel option



Chart-topping sustainability





- » Climate protection targets within the framework of the Science Based Targets Initiative (SBTi)
- » Only European steel company in the Dow Jones Sustainability Index Europe
- » FTSE4Good (since 2020)

voestalpine Steel Division

- » ResponsibleSteel certification
 of the Linz site
- » EcoVadis ranks voestalpine
 among top 1% → Platinum
 Ranking

Offering CO2 reduced wagons

Let's think sustainability along the entire product lifecycle – from saving weight to reducing the CO2 footprint of the product itself





- Externally certified CO2e savings
- Joint PR campaigns
 - Media attention
 - Employer branding
 - Showcase
- Improved CSR rating for attracting investors and for public tenders
- Attraction of end customers by helping them to reduce their footprint

You deserve it, your big moment.
When your goods travel effortlessly through entire countries and you are applauded for your smart decision.

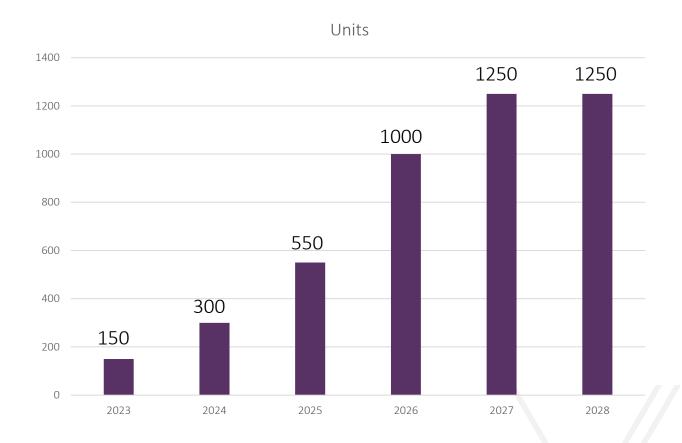
#lessweightmorefreight

TRANSANT

LESS WEIGHT. MORE FREIGHT.

Sales and production ramp-up

- Numbers of units include platform wagons, modular superstructures and complete freight wagons
- Standard capacity planned for 1,250 wagons p.a.



Supply Chain Set-Up



1,250 production units/year are assembled in the factory.



A finished platform truck leaves the factory every **150** min.

