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wascosa **infoletter**

Latest news for the freight wagon industry

Oligopolies formed much quicker than expected

The rail reform implemented in Germany in the mid-90s was supposed to have opened the way for a deregulated railway market. The government's policy of setting targets for shifting freight and passengers from road to rail was meant to encourage a flourishing market. Some 25 years on, however, market concentration has taken hold in many areas far quicker than originally thought, and the environment has become much tougher for industry players.

by Karl Arne Richter, journalist specialising in the rail industry, based near Hamburg

The railway reform was welcomed by all sides and made sense for many reasons. Everyone hoped the measures would radically improve the situation. In Germany, the government – as owner of Deutsche Bundesbahn and the national railway of the former East Germany, Deutsche Reichsbahn – passed the Law on the Reorganisation of Railways in 1994 in an attempt to improve their disastrous financial situation and to reverse (or at least stem) the railway's escalating loss of market share in the wake of the modal split.

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Dear Reader

There has been a massive increase in both the scale and speed of change in the market. In our lead article, the rail specialist Karl Arne Richter provides a clear summary of the impact this has had on players in the rail freight industry over the past 25 years. His conclusion: the scene is now dominated by oligopolies.

The challenge facing entrepreneurs is not simply dealing with the rapid pace of market developments as a determined 'change manager', but at the same time acting as a 'speed manager'. Our wagon fleet has not only doubled in just five years, but telematics has become standard. We are now represented in all the major European markets with our own agents and have established ourselves as Europe's leading provider of freight wagon systems. Following the recent acquisition of some of Nacco's wagon fleet, we have become Europe's fourth largest wagon leasing company.

Nothing is expected to stand still in future, either. That's why Wascosa has decided to simplify its management structure and at the same time strengthen our team with new members. Our DNA is the same. We will continue to make all the necessary changes in future in order to deliver innovative, top-quality services to our customers and respond flexibly to market requirements, as CEO Peter Balzer explains in his interview.

There is one constant among all this flux, however: the hard steel used for constructing tank wagons. But there's more than one sort of steel. Different types are required for different uses, depending on the material being transported. We provide a detailed analysis that is worth keeping as a reference. We hope you enjoy reading our latest Infoletter!

Philipp Müller
Chairman of the Board of Directors

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Rail reform dismantles barriers

Opening up the rail network to third parties was intended to boost competition in the rail industry and remove cross-border obstacles across a united European rail network. The political goal of promoting a shift in passenger and freight traffic from road to rail held the promise of sizeable new markets opening up outside the state monopolies. The same applied to companies leasing freight wagons were the national rail companies to lose their dominant position. As private railway companies were established and market structures radically changed, a new wave of investors came along looking to tap into the lucrative business by building up their own pool of locomotives.

Gold-rush atmosphere …

The new trading conditions and the potential chances created by a liberalised railway market produced a goldrush atmosphere some 25 years ago. Banks pumped huge amounts of money into building up locomotive pools, and entrepreneurs assumed considerable risks in the process of setting up their own railway companies. At the time, there was enormous hope for the creation of a prosperous new railway market. The risks seemed to be manageable, and the breakeven point for investments appeared to be achievable in the mid-term.

The expectations of the new industry players in the first 10 years following German rail reform were not disappointed. Private railway companies quickly succeeded in stealing market share from incumbent state monopolies. Following disappointing experiences with state-run carriers, the freight industry gave an enthusiastic welcome to new market players. Staff were happy to switch sides and growth only seemed to be limited by a shortage of resources in the locomotive and wagon domain, as well as disputes with competitors about international routings.

… transitioned into consolidation sooner than expected

Despite this, the consolidation of market participants occurred far quicker than originally expected, due to a number of reasons:
Investments in the rail industry only tend to generate profits over the longer term. This is certainly obvious to all those directly involved in running a railway, but may be difficult to explain to outside investors who are used to dealing with other industries in competition with the railways. This inevitably put more pressure on undertakings by private individuals, and on companies with external financial backers, to make their operations profitable. At the same time, political pressure grew on companies owned by the government and local authorities to expand in a bid to hopefully secure a lucrative share of the market in the mid- to long-term.

First takeovers, then bankruptcies

This triggered an initial wave of intense market consolidation. Domestic and foreign railway companies acquired efficient start-ups. Conglomerates bought up private railways whose leaner organisation enabled them to respond quickly to volatile markets. In most cases the prevailing argument was: money available, market players willing to sell. But just a few years later, in the grip of a major collapse caused by the financial crisis, there was a sudden change in motivation. It was no longer easy to sell or refinance companies, especially when in the red. This predictably led to the first bankruptcies.

Since the rail reform, the transport volumes that can be carried on the railway network have fluctuated significantly. Whereas in the first few years the competitors assumed that they would enjoy a lucrative business with the forecast growth rates, having poached market shares from the state railway on the intramodal front, the economic crisis ten years ago in particular put an end to these opportunities.

Although the market shares of the non-federal railways ("NE-Bahnen") and competitor railways have steadily risen to around 40% in the meantime, the shifts from road to rail included in these figures remain surprisingly manageable. Shifts are taking place above all in transports that can be switched from trucks to intermodal units. Private initiatives in single wagon and group wagon transport have largely failed.

"Black network" dominates

Today this market continues to be characterised by the "black network" of state railways. Only a few companies are active in this field. This is also partly due to the fact that since the rail reform, the market for rail freight forwarding companies or companies that can offer significant rail transport capacity has not expanded as much as necessary. In the Industry 4.0 era, the freight industry demands comprehensive logistics solutions which smaller and mid-sized rail companies, for example, are unable to shoulder on their own.

Barriers closed at national borders

Since the rail reform, the removal of barriers at national borders has been a stated political objective. Unfortunately, this is still a long way from realisation. Harmonisation of rules, for example on the operation of railways or the approval of railway vehicles, is very slow. The introduction of a common railway language, as in air travel, repeatedly features on the agenda, but no real progress is being made.

ETCS train protection systems disappoints

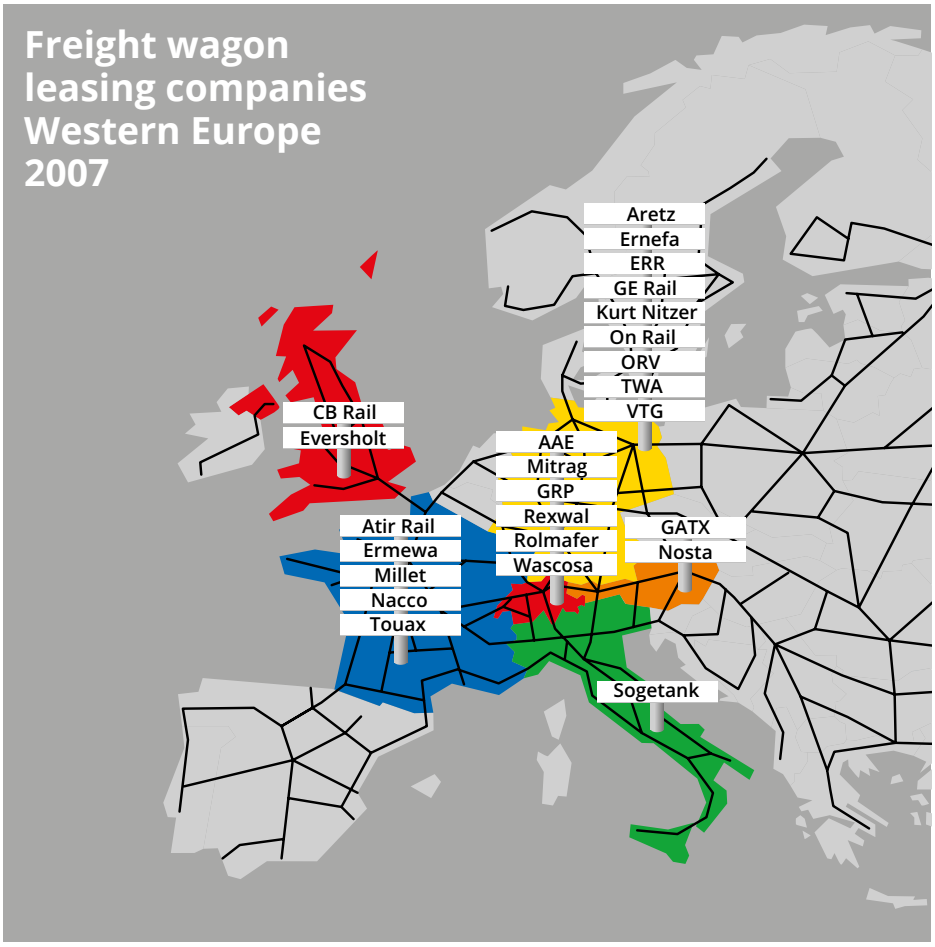
The latest development is a renewed push regarding language requirements in cross-border rail transport. The general consensus of the rail industry is that the European train protection system ETCS has also failed to meet expectations. The necessary equipment, costing millions, has been fitted in locomotives, but countless software versions and country-specific packages have caused costs to mushroom well beyond the initial estimates. Only a general overhaul of the system would really make cross-border deployment possible throughout Europe.

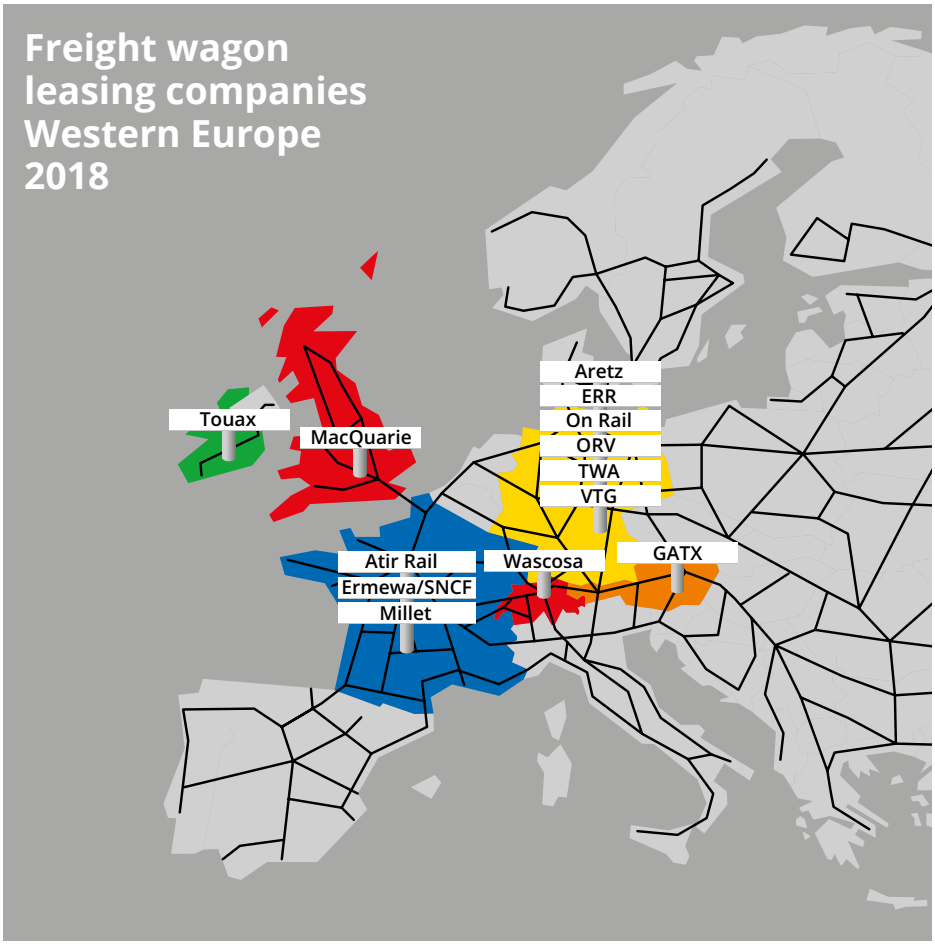
Increasing investments in rolling stock

In the years immediately after the rail reform, it was primarily a shortage of locomotive and wagon resources that held back growth. Substantial investments in rolling stock increasingly allowed the competing railways to operate at European level, which had been impossible beforehand with the old state-owned rail assets. Following a "dip" during the financial crisis, the large locomotive pools, some of which have changed hands several times, are now investing again, mainly in electric locomotives. The market for diesel locomotives is saturated. This may be partly because the market for leasing diesel locomotives is heavily concentrated and now only includes a handful of large leasing companies.

Consolidation among wagon lessors ...

The trend is split in the case of wagon lessors. Low interest rates have flooded the market with funds for investment in new wagons. The companies that own the wagons are therefore busy making new purchases. At the same time, the number of lessors has fallen. The concentration has been most pronounced among the top five companies, after the market leader acquired two competitors. Here too, the impression is that rivals are fighting hard for survival in a fiercely competitive market.





From 2007 to 2018, 12 wagon leasing companies disappeared or were sold. Only 13 remained in 2018. Source: Internet

… especially on the manufacturing side

Consolidation has now become even more pronounced on the manufacturing side. European companies producing electrical locomotives can only buy components from Bombardier or from Siemens' transport division, which is currently in the process of merging with the Alstom Group. This lack of alternatives creates an opportunity for smaller providers, however, including those offering niche products such as Stadler's hybrid technology.

Chinese manufacturers have been unable to gain a real foothold in Europe so far. Their main hope for breaking into the market is through acquiring state rail companies in order to recoup the costs of operating in Europe and for the homologation of the locomotives. From the lessors' viewpoint, the supply of wagons has also fallen sharply.

Production bottlenecks

After production capacities were steadily cut back in Western Europe, Eastern European suppliers did not come up to standard in many areas of quality and consistency. This also led to production bottlenecks, insolvencies and mergers. Today, lessors are focused on securing scarce production capacity to ensure they are able to meet their customers' needs.

Lack of skilled workers as biggest obstacle

The biggest obstacle to growth in the rail freight sector, as in many areas of business, is the lack of skilled labour. Whereas it was fairly easy to poach staff from state-run railways in the immediate aftermath of the rail reform, the labour situation in the rail industry has become very tight in recent years. It is particularly difficult to recruit new train drivers, due to unattractive shift work.

There is a shortage of labour and attracting new staff is made difficult by the unsociable working hours and the mound of regulations that have to be learned. The drop-out rate in training is often around 75%. One consequence of this labour shortage is the cementing of markets. While it used to be easy for transport clients to reposition freight in a competitive market, market players nowadays tend to complain of a lack of response to requests for quotations from freight forwarders and haulage companies.

Longer holding times present an opportunity

Large consignments are therefore likely to remain with a contractor for much longer than previously. There would be a clear advantage for the freight industry: longer contractual partnerships would enable processes and systems to be imbedded in a positive way for rail traffic and thus provide a better chance of achieving reasonable margins.

Efficiency must be improved

It is precisely the shortage of skilled labour that is forcing rail transport to become more efficient. This means that more and more systems – providing clients with better information about the location of wagons and transport containers, or vehicle owners and maintenance staff with information about the condition of the vehicles – are likely to be supplemented by software solutions providing even greater efficiency through favourable or cross-company dispatching of rail vehicles.

Optimise processes in the short term, use autonomous systems over the longer term

Although rail-bound transport offers positive conditions for autonomous systems, it will take a few more years for their approval and operation, as their legitimation is expected to be legally complex. Changes in logistics processes, for example with driverless intermodal units at large industrial plants, should be quicker to implement.

Shortage of skilled workers as greatest obstacle

Safety-critical composite wear parts

Wear parts for freight rail bogies are critical components in preventing derailments. There are three materials commonly used to produce such parts. However, thermoset composite materials are the most technologically advanced solution for rail wear parts applications.

by Jakub Nowacki, Marketing Executive at Tenmat - Railko

Nowadays safety has a priceless value in the majority of industries. Such is the case with the rail industry – authorities, operators, wagon owners, network providers and manufacturers all work together to ensure the rail networks in Europe are as safe as possible. Years of experience have brought design, technology and safety standards to the point where we can minimise the risks and rely on rail transport as a secure means of travel.

The average rail user might not be familiar with the fact that the safety of the whole train often relies on a single component or group of components that are vital to the mechanics of the train and maintain its correct movement on the track. Wear parts are such a product category, as they are responsible for the safe movement of the train on the track while maintaining the friction and motion between the platform and the bogie. They ensure the brake systems work smoothly and that the couplings between the wagons operate safely.

Main types of components and materials

There are two main wear part components vital for the safety of the train: centre pivot liners and side bearer liners. These components hold the weight of the platform and provide smooth movement of the bogie through curves in the track. Correct operation of these components has a direct link to preventing derailments (such as the one on a Megafret intermodal wagon at Washwood Heath, UK in 2015). The key element of a quality part is the material used. The wear materials found nowadays on the market divide into three categories:

1. metal parts supported by the use of lubricant (i.e. grease)
2. thermoplastic materials
3. thermoset composites

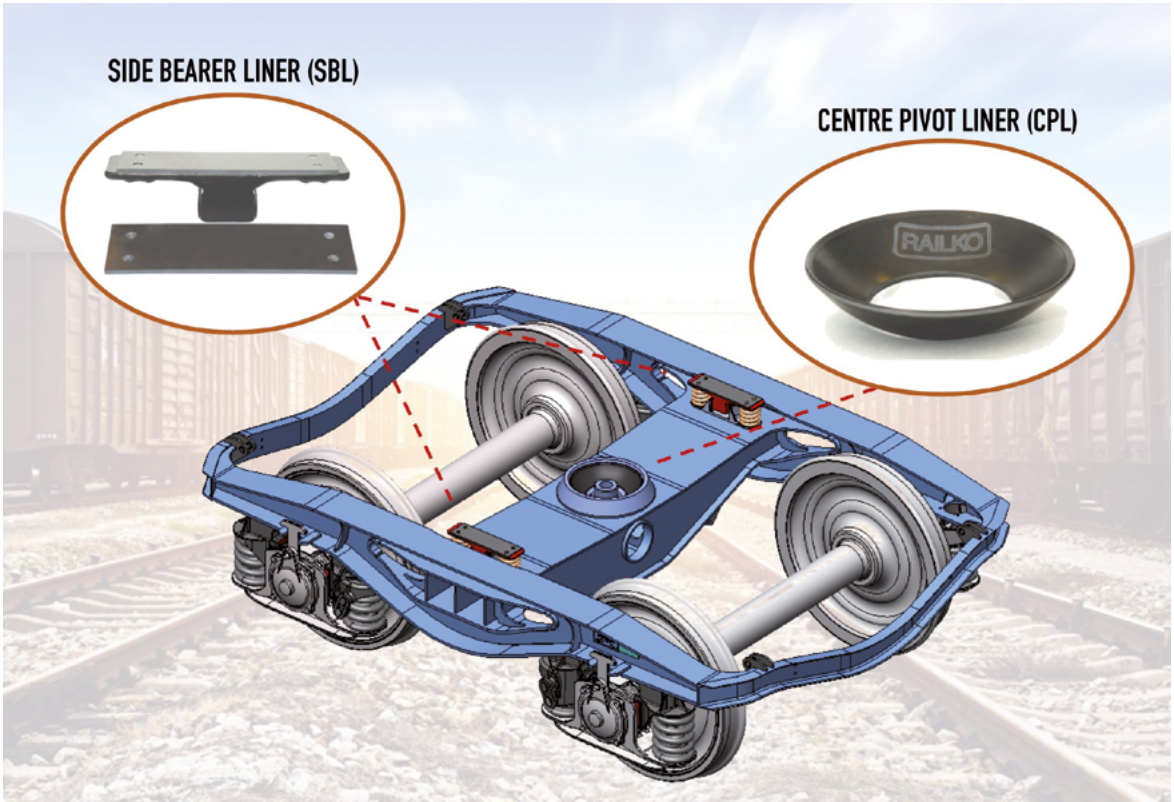
Material	Self-lubrication	Noise emission	Fibre reinforcement
Metal	✗	🔊	✗
Thermoplastic	✓	🔉	✗
Thermoset	✓	🔉	✓

Oldest category: Metal components

Metal parts are the oldest and probably most problematic, as they emit a high degree of noise and need continually re-lubricating, which is not environmentally friendly. Metal wear parts require ongoing maintenance and care in order to provide safety and performance. This increases the costs of servicing and reduces the wagon's operational hours due to downtime.

Light and self-lubricating: Thermoplastic components

Thermoplastic materials are made out of different resins and moulded to shape. These materials are light and self-lubricating, but due to the lack of fibre reinforcement they offer low wear resistance, service life and compressive strength. Their chemical structure allows them to

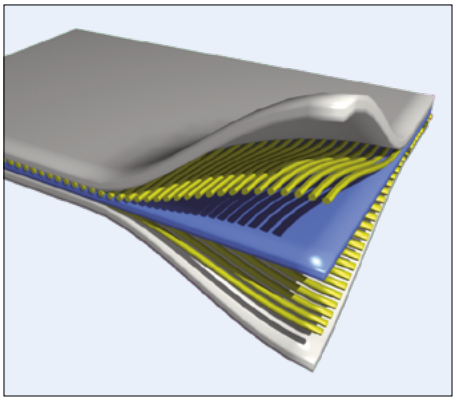


Side bearer liner (SBL) and centre pivot liner (CPL)

be remoulded into a different shape when heated to temperatures typically above ambient. This means they can change their shape and lose dimensional stability when subject to high temperatures during operation, which decreases their service life.

Inherently stable: Thermoset components

The remaining category is the thermoset composites – the most advanced technologically. Thermoset composite materials are based on special types of resins and are additionally reinforced with fibres, thus providing exceptional wear resistance, low weight, silent operation and self-lubricating properties. Resins used to produce the material offer excellent physical and chemical properties, while fibres used to reinforce the material ensure high dimensional stability, resistance to high temperatures and structural integrity.



Thermoset composite material structure (matrix + reinforcement) / Source: image courtesy of Wikipedia.org

How thermoset wear parts benefit wagon owners

Thermoset wear parts for bogies have proven to be the most efficient solution in the long run. This is mainly due to their excellent durability. They offer the best physical properties of all the available materials and are resistant to corrosion, harsh weather conditions and contaminants.

Using thermoset composite wear parts for rolling stock decreases the amount of required maintenance to a minimum, thereby reducing the costs associated with wagon servicing, like downtime and labour. Some European wagon owners have managed to increase their standard maintenance cycle from 6 to 12 years. Thermoset composites are able to operate for an extended cycle and still provide excellent performance and - most importantly - safety. Thermoset wear parts might be initially more expensive compared with thermoplastics, but in the long term the operating costs are significantly reduced due to the minimal amount of maintenance required. As a result, wagon owners can benefit from the extended maintenance cycles and have peace of mind that the rolling stock on track is secure from derailment at all times.

Materials used in the production of tank wagons

Depending on the nature and chemical properties of the transported goods, the vessels on tank wagons are made of different materials or may have a special interior surface treatment, such as paint or vulcanization.

by Josef Pešula, Project Manager at Legios Loco a.s.

Tank wagons are generally designed and used to transport liquid products for the food industry (edible fats, vegetable oils, fruit juices, molasses, wine, pure alcohol, etc.) or the chemical industry (petroleum, petroleum products, mineral oils, etc.), or compressed and liquefied gases. Some of the wagons in this group are equipped with a steam heating system for warming contents that may have solidified or settled during transport, before the tank is discharged, or the wagons may have insulated tanks.

Basic classification of tank wagons

It's important to be familiar with the basic classification of tank wagons in terms of transported substances, because the material from which the tank is made must always match the characteristics and nature of the substance transported. As a general rule, this material must not react with the substance being transported.

1. **Tank wagons for the transport of mineral oils:**

a) Light petroleum products, commonly tanks with a volume of 95 - 99 m^3

b) White petroleum products, commonly tanks with a volume of 83 - 88 m^3

c) Heavy petroleum products, commonly tanks with a volume of 66 - 79 m^3

2. **Tank wagons for the transport of chemicals:**

Tanks with a volume of 40 - 70 m^3 are mostly used. There are many types of chemical and the tank has to be precisely adapted to the properties of the transported substance. Often hydroxides, acids and other caustic or dangerous substances are transported. The tanks are usually equipped with non-drip fittings.

3. **Tank wagons for the transport of compressed or liquefied gases**

General requirements for steel used in the production of tank wagons

The materials used in the construction of a tank must be suitable for the duration of the expected service life. Materials of the parts subjected to pressure must have suitable properties under all operating conditions and must be sufficiently ductile and resistant to brittle fracture. This requires chemical resistance in the environment of the liquid medium while under pressure. The material must not be affected by the ageing process, it must be suitable for the intended technological processes and must be selected so as to avoid undesirable effects when combining different materials.

Materials must be compatible with the intended manufacturing processes and suitable for the internal liquids and the external environment (also taking into account normal operating and transient conditions – during production, transport, testing and operation).

For steel, there are two basic physical properties that have a major impact on tank strength. The first is the **minimum yield point,** and the second is **tensile strength.**

Minimum yield point is the point that indicates the limit of elastic behaviour and the beginning of plastic behaviour. "Yielding" is when the fibres start to break. Yield strength or yield stress is the material property defined as the stress at which a mate-

rial begins to deform plastically whereas yield point is the point where (elastic and plastic) deformation begins. Prior to the yield point the material will deform elastically and will return to its original shape when the applied stress is removed. Once the yield point is passed, some fraction of the deformation will be permanent and non-reversible.

Tensile strength under the given conditions is the greatest possible tension in the material during stretching that the material can withstand without breaking.

Special requirements for steel used in the production of tanks for the transport of mineral oils

a) Tanks without heating

The maximum temperature of the transported substance is 50° C. The most commonly used structural steel plates are P355N, P355GH and S355J2+N.

A P355N steel plate, under EN standard, is a normalised steel plate and sheet which is mainly used for building pressure vessels and boilers and pipes for hot liquids. Yield point is 355 MPa; tensile strength is 490-630 MPa.

A P355GH steel plate is characterised by a minimum yield strength of 280-355 MPa and by good weldability. So P355GH steel is mainly used to for manufacturing boilers, pressure vessels and pipes transporting hot liquids.Its tensile strength is 490-630 MPa.

A S355J2+N steel plate offers high yield and the best tensile strength, with a minimum yield strength of 355 MPa. It is a structural grade steel which is widely used in the engineering and construction industries. It can be supplied with a variety of treatments and test options to ensure that it is a highly usable steel in very diverse projects. Its tensile strength is 490-630 MPa.

A basic parameter is also the thickness of the tank wall. Most tanks are designed for the pressure of 0.4 MPa, with the thickness of 6.3 to 6.8 mm. For tanks which are designed for the pressure of 1.0 MPa, the thickness is 6.8 to 7.2 mm.

b) Tanks with heating

The maximum temperature of the transported substance is 190° C. For the production of heated tanks, the same materials as for tanks without heating are used. The difference is that the wall thickness of the tank is 7 to 7.5 mm. The reason for

the greater wall thickness of the tank is the change in the physical properties of steel when it is heated to a higher temperature. Steel loses strength and the yield strength decreases, while tensile strength also decreases.

Special requirements for steel used in the production of tanks for the transport of chemicals

Stainless steel types are mostly used, because as alloys they are resistant to caustic substances. Stainless steel does not react with the transported substance, which ensures the purity of the transported substance and also the safety of operation. The most commonly used stainless steel types are 1.4301, 1.4307 and 1.4571.

Stainless steel 1.4301 is corrosion-resistant in a normal environment (water, weak alkalis, weak acids, industrial and urban atmosphere). It is weldable but susceptible to intergranular corrosion in the welded area. Where the penetration depth is more than 5 mm, soft annealing is required. The steel is worked by cutting, bending and drawing. It can also be polished and used for products of general use (catering equipment, external constructions, external architecture, hydraulic structures, waste water treatment plants, etc.) except for welded structures with welding depths over 5 mm. For such structures, annealing is required after welding, followed by blasting and pickling. The chemical composition complies with the standard for use with food and drinking water products. Its yield point is 250 MPa, its tensile strength 520-720 MPa.

Stainless steel 1.4307 is corrosion-resistant in a normal environment (water, weak alkalis, weak acids, industrial and urban atmosphere). It is easily weldable without additional metal and also resistant to intergranular corrosion after welding. Heat treatment after welding is not necessary. This stainless steel is primarily used in the chemical, food and pharmaceutical industries for pressure vessels, containers and other equipment. Its yield point is 240 MPa, its tensile strength 520-700 MPa.

Stainless steel 1.4571 is resistant to corrosion in moderate acids and lyes, except nitric acid and nitrous gases. It is medium resistant to pitting corrosion in the chloride environment and resistant to intergranular corrosion in the area of thermal influence. It is weldable without the need for annealing of deep penetration depths. It is worked by cutting, forming and machining. Its polishing is more laborious, and a mirror polish cannot be achieved. It is used for structures more susceptible to corrosion, in an environment with increased presence of chlorides, chemical pipes, structures in a seaside environment, welded constructions with deeper penetrations. It can be used where there is contact with foodstuffs and beverages, but cannot be used in contact with drinking water. Its yield point is 260 MPa, its tensile strength 540-690 MPa.

The wall thickness of a stainless tank is in the range of 6.3 to 7.5 mm.

Special requirements for steel used in the production of tanks for the transport of compressed and liquefied gases

P460 NL2, so called for having a minimum yield strength of 460 MPa, is high-quality steel grade for use in boiler and pressure vessel fabrication. It is a normalised fine-grain steel with good weldability characteristics. It is used for especially low temperatures and is very weldable.

For an overview of the various steel types, see page 16.

More than 200 new tank wagons in Hungary

Wascosa is delivering new tank wagons for Pannonia Bio in Hungary. One of Europe's largest producers of bio-ethanol and animal foods relies on a uniform fleet of new, highly efficient Super Jumbos from Wascosa. The project was implemented in close cooperation with Dettmer Rail. 180 out of a total of 220 new wagons have now been delivered.

Together with Dettmer Rail, Wascosa is systematically expanding its business in Hungary with state-of-the-art new wagons, all equipped with telematics systems. The new construction project was initiated a good 24 months ago in close partnership with Dettmer Rail GmbH in Budapest and Hamburg, the logistics service provider of the Hungarian company Pannonia Bio Zrt.

A tailor-made comprehensive offer finally convinced the customer to go for the solution with Wascosa and Dettmer Rail.

Peter Bacsó, Logistics Manager of Pannonia is delighted with the visually attractive new tank wagons and cites the following as the main reasons for the project's success: "There were many reasons to choose Wascosa wagons, but I would highlight the attractive rental price, the reduced tara weight which increases our fleet utilisation, and the telematics system which helps us to track our wagons."

Jan Diercks, authorised signatory and project manager at Dettmer Rail, says: "The decisive factor was the initial phase of the project, in which Wascosa actively sought cooperation with our branch in Budapest and we were able to develop the project together. In addition, Wascosa's timing was perfect for an offer with modern new wagons."

The new Pannonia wagons are travelling in block trains from Dunaföldvár, Hungary to Austrian, German, Romanian, Polish, Dutch, Italian, Bulgarian, Czech and Hungarian refineries and terminals, and transport approximately 400,000 tons of ethanol annually, which is mainly used for fuel blending.

About Pannonia Bio

Pannonia Bio (formerly known as Pannonia Ethanol) is a subsidiary of Ethanol Europe (EERL), an Irish agricultural company based in Dublin, Ireland. The state-of-the-art biorefinery in Dunaföldvár, Hungary, is one of the largest ethanol production plants in Europe and one of the most efficient in the world. Every year, it processes over 1.1 million tonnes of feed corn to produce 500 million litres of bioethanol, 350,000 tons of Pannonia Gold (DDGS) animal feed, and 15,000 tons of Pannonia DCO distiller's corn oil.

About Dettmer Rail

The logistics service provider Dettmer Rail, with headquarter in Hamburg and a branch in Budapest, specialises in the transport of liquid goods on the European rail network.

Acquisition of Nacco's German fleet opens up new growth prospects

With additional wagon types, new customers and the experienced team of our new Hamburg subsidiary, Wascosa is forging ahead with ambitious expansion plans: having acquired around 4,400 freight wagons from Nacco, Wascosa now ranks number four among Europe's top wagon leasing companies.

On 1 October 2018 Wascosa and Aves One AG, a listed German company investing in logistics assets, completed the acquisition of around 4,400 freight wagons from Nacco, a subsidiary of CIT Group. As well as taking on the operations and leasing of freight wagons, Wascosa has also assumed responsibility for Nacco GmbH operations in Hamburg, Germany. The remaining 10,500 or so Nacco freight wagons will be taken over by VTG AG.

Wascosa fleet grows to over 14,000 wagons

Wascosa is not only continuing, but significantly accelerating its pace of growth with this major acquisition. During the period 1995 to 2015, the wagon fleet has expanded by 10-15% every year. The latest acquisition brings the fleet size to over 14,000 wagons. In addition, there are orders for more than 1,000 more wagons to be delivered in 2019.

The acquisition of part of the Nacco fleet is an important milestone in the company's 55-year history. Wascosa's growth opens up attractive prospects in both existing and new market segments which the company will systematically exploit.

The 4,400 new wagons are leased to around 50 companies, most of them German, which Nacco has served for many years – and even decades in some cases. Wascosa is already working with around half of them. The other half represents new customers, which Wascosa now has to win over with a high level of service and innovation to prove itself a reliable and fair new partner. The existing lease contracts continue as they are.

New wagon types in Wascosa's fleet

Shimm(n)s

bogie wagon for transporting coils

Res/Rmms

flat wagon with tiltable stanchions/ panels

Ea(n)os

open box wagon

Laagss

container flat wagon

Falns

self-unloading open wagon

Tad(n)s

covered hopper wagon with side unloading

Ta(n)oos

covered hopper wagon with central unloading

Slps

specialised flat wagon

Standing from left to right: Torsten Wagner, Thomas Wehlen, Andreas Duchatsch, Bettina Jones, Michael von Berlepsch, Karin Baumbach, Roland Baumbach
Sitting from left to right: Peter Balzer, Thomass von Berlepsch, Helle Camara, Thomas Karsten

Wascosa's German subsidiary located at Alter Steinweg 1, Hamburg

New wagon types added to Wascosa's fleet

The fleet of wagons acquired from Nacco, including the ongoing "new build models", comprise 17 different wagon types in total and is the perfect ideal fit for Wascosa's young and modern fleet. Apart from additional tank wagons, intermodal wagons and other existing wagon types, there are also new, strategically important wagon types to complement Wascosa's fleet: flat wagons (Shimms) for the steel industry, open freight wagons (Eanos) and various types of hopper wagons (Tanoos, Falns and Tadns) for transporting all kinds of bulk materials.

With an average age of 13 years, Wascosa now also has the youngest fleet of all European wagon leasing companies following the acquisition. The wagons acquired from Nacco will all be fitted with telematic systems, the same as the rest of Wascosa's current fleet.

Hamburg office is the first international subsidiary

As well as taking on the operations and leasing of freight wagons, Wascosa assumed responsibility at the start of October for Nacco GmbH operations in Hamburg, Germany. The company in Hamburg is the first Wascosa subsidiary outside Switzerland and was renamed Wascosa GmbH after the takeover. The branch manager Thomas von Berlepsch, the sales expert Torsten Wagner and the technical manager Roland Baumbach have successfully built up the German business of the former Nacco, with the help of eight other employees, over the course of more than 20 years. This team will continue to take care of the existing customers in its current composition and to support the further development of Wascosa in the key market Germany.

"Wascosa's top priority now is to integrate the Hamburg team into the Wascosa family and transfer the operational functions of Nacco/CIT Paris as quickly as possible to Lucerne, and to complete data migration. We aim to do this by the end of the year," Peter Balzer, CEO of Wascosa, describes the current challenge.

“Our willingness to change and our culture of professionalism drive us continuously forward …”

Wascosa’s DNA, underpinned by its positioning as Europe’s leading provider of freight wagon systems, creates a strong strategic framework for future growth. After rapid expansion over the past five years and the recent completion of the acquisition of part of Nacco’s fleet (see the articles on pages 10/11), Wascosa is now making the necessary adjustments to its organisational structures. In this interview, CEO Peter Balzer describes how the new management team plans to continue to respond flexibly in future to market requirements and deliver innovative, top-quality services to customers.

CEO Peter Balzer in conversation

Mr Balzer, you have slimmed down your management team and added some new members. How does this fit in with your business strategy and growth plan?

Since 2014 we have been successfully positioning ourselves as Europe’s leading provider of freight wagon systems. Our goal is to improve the efficiency of rail transport, increase the productivity of freight wagons and reduce rail logistics costs. Since then, our positioning has been a key driver of our business development and a dynamic growth engine.

What does that mean in concrete terms? What progress has there been so far on your growth path?

In the past five years alone, we have more than doubled our fleet from 6,000 to over 14,500 freight wagons. A significant boost came recently from the successful acquisition in October 2018 of 4,400 freight wagons from Nacco/CIT. This was the perfect complement to our existing portfolio of wagons. Our fleet is very modern overall, with an average age of just 13 years. Customers find this very appealing, not least in view of the new regulations on noise emissions and safety. We are now extremely well positioned as Europe’s number four wagon-leasing company.

Focusing on Europe for a moment: has your business become more international?

Yes, over the past three years we have gradually expanded our country-specific presence to include agents in all the major markets, especially Eastern Europe and more recently the UK. The acquisition of one third of Nacco’s wagon fleet and the opening of our first subsidiary in Hamburg, Germany, are other important milestones in our international expansion.

Growth and efficiency do not necessarily go hand-in-hand. What are you doing to continuously improve your efficiency?

We are making full use of the opportunities presented by automation and digitalisation in order to meet our customers' growing demands in the areas of business processes and transactions. We have been investing heavily in telematics over the past three years, and half our fleet has already been fitted with the relevant technology. We have rolled out a new state-of-the-art transaction platform CoMap and we will shortly introduce automated electronic data exchange with partner companies based on the communications standard VPI 08.

Going back to the start of the interview: why are you changing the organisational structure now?

Our motto runs along the lines of "Structure follows strategy". Given our successful growth plan, the rising demands created by a bigger wagon fleet, the need to further develop our digital business models towards Wascosa 4.0 and the continuous professionalisation of investor management, we decided to simplify Wascosa's management structure and at the same time strengthen it with new members.

However, we are not digging up a tree simply to check whether it has any roots. All the same, we are not leaving anything in place that is unable to withstand a storm – in the form of tougher competition. Ultimately, we are dedicated to serving our customers and all our stakeholders, as well as striving for a high level of professionalism. This is what makes us embrace change so enthusiastically.

What do these changes mean for your customers?

Adding important wagon types to our existing portfolio makes us more attractive to customers as a one-stop solutions provider. Wascosa's core business is concentrated on four divisions: freight wagon leasing and new construction, ECM fleet management and the provision of freight wagon systems. Our DNA has not changed: we are customer-focused, we build on long-term partnerships, we are reliable, fair and innovative, we are in a continuous process of dynamic development and we strive for a high degree of professionalism in everything we do.

Wascosa: Europe's first provider of freight wagon systems

Wascosa's new management team as of 1 January 2019

Wascosa's management is being trimmed from seven to five divisions. In addition to CEO Peter Balzer, the team is made up as follows from 1 January onwards:

Yann Bonguardo (CSO, Chief Sales Officer; new member)

Stephan Kellmann (CFO, Chief Finance Officer; new member)

Irmhild Saabel CBDO, Chief Business Development Officer; existing member)

Markus Vaerst COO, Chief Operations Officer responsible for Maintenance, Technical Dept., Purchasing; new member)

The management's extended circle will also include **Fabian Stadler** (previously CFO), who after 10 successful years as CFO is taking on the newly created role of Chief Business Excellence Officer (CBEO), and **Kirsten Trost** (CIO, Chief Investment Officer; new member), who will be heading up Investor Relations as of 1 July 2019. In addition, **Thomas von Berlepsch**, head of Wascosa's new Hamburg subsidiary, will report directly to CEO Peter Balzer.

Wascosa expands to the UK

Over the past years, Wascosa has gradually expanded its sales organisation in all the major European markets. Now the company is also represented in the UK for the first time.

Since 1 October 2018, Mick Tinsley is working for Wascosa as a sales agent for United Kingdom. He has 37 years of professional experience in the UK railway industry. He has held various senior roles including locomotive and wagon fleet management, customer services, finance and worked most recently in a commercial role, running DB Cargo's Construction Sector.

Wascosa has just signed a contract with GB Railfreight for the lease of 50 open box wagons. The open JNS wagons are need for transporting materials used in the construction of Britain's new high-speed railway, HS2.

Mick Tinsley:
"I am excited to be representing Wascosa UK and contributing my know-how to the team."

GBRf: Lee Armstrong and Andy Moyle, Wascosa: Mick Tinsley and Philipp Müller (from left to right)

Farewell after 31 years

Our long-time employee, Cécile Arnosti, entered her well-deserved retirement at the end of June 2018 after 31 years of loyal service to the company.

"Coming together is the beginning. Keeping together is progress. Working together is success."
(Henry Ford)

Cécile has made an enormous contribution to our company over the years and we would like to thank her for her exceptional dedication and loyalty. We will all miss her cheerful and positive nature very much. We wish Cécile Arnosti an exciting start to this new chapter in her life.

Paola Müller-Sandmeier, Cécile Arnosti, Philipp Müller (from left to right)

Calendar of events

Date	Event	Location	Website
2018			
05.12.2018	RNE RailNetEurope General Assembly	Vienna, AT	http://www.rne.eu/calender/
06.12.2018	5th EU Rail Freight Day	Vienna, AT	http://www.rne.eu/calender/
06.12.2018	UIC Digital Conference 2018	Paris, FR	https://uic.org/
10. - 14.12.2018	6th Training on Highspeed Systems Level II	Madrid, ES	https://uic.org/
12.12.2108	RFG Xmas Lunch	London, UK	http://www.rfg.org.uk/
17.12.2018	European Commission Conference: Multimodal Sustainable Transport: internalization of externalities	Brussels, BE	https://ec.europa.eu/transport/themes/logistics_multimodal_en
2019			
07.01.2019	VPI New Year reception	Hamburg, DE	https://www.vpihamburg.de
08.01.2019	9th VPI Symposium	Hamburg, DE	https://www.vpihamburg.de
29. - 30.01.2019	12th BME/VDV-Forum Rail Freight Transport	Berlin, DE	https://www.vdv.de/Termine.aspx
05.02.2019	RFG Member's Party	London, UK	http://www.rfg.org.uk/
20.02.2019	European Railway Award 2019	Brussels, BE	http://www.cer.be/events
19.03.2019	12th UIC Workshop on Railway Noise and Vibrations	Paris, FR	https://uic.org/
26. - 28.03.2019	Railtech Conferences	Utrecht, NL	https://events.railtech.com/
26. - 28.03.2019	Sifer, 11th Salon international de l'industrie ferroviaire	Lille, FR	http://www.sifer2019.com/
26. - 28.03.2019	SITL Europe (Semaine Internationale du Transport et de la Logistique)	Paris, FR	http://www.sitl.eu/
28.03.2019	VPI Austria General Assembly	Vienna, AT	http://www.vpirail.at/
04. - 05.04.2019	IBS Spring Convention	Athens, GR	www.ibs-ev.com
17. - 19.04.2019	UIC Asset Management Global Conference	Paris, FR	https://uic.org/
01.05.2019	RFG Spring Group Meeting	London, UK	http://www.rfg.org.uk/
08.05.2019	VAP Forum	Zurich CH	https://cargorail.ch
09. - 10.05.2019	F&L Meeting	Hamburg, DE	https://www.europeanfreightleaders.eu/
04. - 07.06.2019	transport logistic	Munich, DE	https://www.transportlogistic.de/
13.06.2019	General Assembly of the AFWP	Paris, FR	http://www.afwp.asso.fr/
16. - 20.06.2019	XIX International Wheelset Congress	Venice, IT	http://www.unife.org/events/unife-events.html
17. - 19.06.2019	VDV Annual Convention	Mannheim, DE	https://www.vdv.de/Termine.aspx
18.06.2019	Multimodal Exhibition	Birmingham, UK	http://www.rfg.org.uk/
26.06.2019	VPI General Assembly and Get Together	Berlin, DE	https://www.vpihamburg.de
26.06.2019	UIP General Assembly	Berlin, DE	https://www.vpihamburg.de
26.06.2019	Politisches VPI/UIP-Symposium «Keeper's summit»	Hamburg, DE	https://www.vpihamburg.de

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Steel types / designations of materials used for tank wagons

	EN Norm			European national Designations		American Designations			Used for tank wagons for *
Material Group	**Material number**	**EN**	**EN-Norm**	**French**	**German**	**UNS**	**ASTM**	**AISI**	
C-Steel	1.0473	P355GH	10028-2	A52 CP	19Mn6	–	A414 Gr. G	–	Mineral oil
C-Steel	1.0562	P355N	10028-3	A510 AP	StE355	–	A537 CL 1	–	Mineral oil
C-Steel	1.0565	P355NH	10028-3	A510 AP	WStE355	–	A662 Gr. C	–	Mineral oil
C-Steel	1.0570	S355J2+N	10025-2	–	St52-3 N	K03011	A350LF2	1024	Mineral oil
C-Steel	1.8915	P460NL1	10028-3	A590 AP	TStE460	–	A633 Gr.E	–	Gas
C-Steel	1.8918	P460NL2	10028-3	–	EStE460	–	–	–	Gas
V2A-Steel	1.4301	X5CrNi18-10	10028-7	Z7CN18-09	X5CrNi18-10	S30400	304	304	Chemicals
V2A-Steel	1.4307	X2CrNi18-9	10028-7	Z3CN19-09	X2CrNi18-9	S30403	304L	304L	Chemicals
V4A-Steel	1.4404	X2CrNiMo17-12-2	10028-7	–	X2CrNiMo17-12-2	–	–	316L	Chemicals
V4A-Steel	1.4462	X2CrNiMoN22-5-3	10028-7	–	X2CrNiMoN22-5-3	–	–	318LN	Chemicals
V4A-Steel	1.4541	X6CrNiTi18-10	10028-7	–	X6CrNiTi18-10	–	–	321	Chemicals
V4A-Steel	1.4571	X6CrNiMoTi17-12-2	10028-7	Z6CNDT17-12	X6CrNiMoTi17-12-2	S31635	316Ti	316Ti	Chemicals

* = Based on the transport requirement, the most suitable steel can be selected.

EN-Norm

The **European Standards (EN)** are rules ratified by one of the three European Committees for Standardisation (European Committee for Standardisation CEN, European Committee for Electrotechnical Standardisation CENELEC and European Telecommunications Standards Institute ETSI).

French Designation

The **Association française de normalisation (AFNOR)** is the official French standardisation body. It is a member of both ISO and the European Committee for Standardization. It was founded in 1926 as a registered association (Association Loi 1901) of French companies.

German Designation

The **German Institute for Standardization e. V. (DIN)** is the most important national standards organization in the Federal Republic of Germany. It was founded on 22 December 1917 under the name «Standards Committee of German Industry».

UNS

The **UNS number** (Unified Numbering System for Metals and Alloys) is a system in which each metal is identified by a letter and five subsequent numbers. It is an industrial system that cannot be used to derive special properties or exact compositions with defined limit values.

ASTM

ASTM International (originally the American Society for Testing and Materials) is an international standardization organization based in West Conshohocken, Pennsylvania, USA. It publishes technical standards for goods and services.

AISI

The **American Iron and Steel Institute (AISI)** is the North American steel industry association.

Chart: Josef Pešula, Project Manager at Legios Loco a.s