

Innofreight technologies as the new European standard for our customers

## **PREFACE**

A successful year is coming to an end. This year we celebrated the 15th anniversary of our company's founding. In this edition we would like to present you with the highlights from 15 years of Innofreight, and take a look into the future together, full of anticipation.

You can look forward to great snapshots of our impressive anniversary celebration in September, find out more about successfully implemented projects, and look back with us at completed collaborations, such as this year with VTG.

In the following pages you will also learn more about what has particularly influenced us this year, the current state of our successful project ITECCO, which we are participating in through the EU funding program Horizon 2020, how the collaboration is going both with our end customers and with the European railway companies, along with many other highlights, trade fair information, and news from 2017.

We hope you enjoy browsing through our anniversary edition, and would like to thank you for being part of our 15 years of existence!



# **Anniversary**





## 15 YEARS OF INNOFREIGHT — THANK YOU!

We would like to express our special thanks to all guests, partners, suppliers and service providers who came to our lively anniversary celebration on 12th September. You all have made this day unique for us, and have contributed in making Innofreight one of Europe's leading rail logistics companies.

We would also like to mention the extremely successful collaboration with EP Cargo. Together, we were able to implement the new brown coal logistics in the Opatovice power plant (CZE) this year – many thanks to all those involved for their excellent cooperation and outstanding achievements in connection with this project.

In addition, the international trade fair "transport logistic" in Munich (GER) was a special highlight for us. The event gave us the opportunity to proudly announce the deepening cooperation between Innofreight and VTG, Europe's leading rail wagon lessor and rail logistics company. We were also able to celebrate hand-over of the first production model of the newly developed wagon for roundwood transport in Sweden to the Swedish rail transport company Hector Rail, which in the future will be undertaking roundwood transport for SCA Skog. Thank you for the trust you have placed in us!

For us, the next year will be again about "Let's move the limits!", with the goal of being even more international and even closer to our customers. Last but not least, this also promises to involve this year's organisational restructuring.

We wish you and your families a Merry Christmas and a successful 2018!

DI Peter Wanek-Pusset & Bernhard Grentner and the entire Innofreight team

Vist us: www.innofreight.com







# **OUR SUCCESS STORY**

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# 360°- MAINTENANCE/REPAIR/SERVICE





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ITS 15TH ANNIVERSARY



## A Success Story on Rails - 15 Years of Innofreight

On the 12th September 2017 Innofreight invited to a very special event. Together with around 400 selected people, including important partners, long-time companions, customers and employees, we toasted to 15 highly successful years at Innofreight.

The location, the terminal in St. Michael, offered the guests the ideal setting for the festive event. At a lively get-together in a great environment, the managing directors DI Peter Wanek-Pusset and Bernhard Grentner, as well as the approximately 65 Innofreight employees were able to properly look back on the last 15 years.

The impressive backdrop of the terminal in St. Michael did the rest to make this day very special for all guests present at the celebration. Not even the rainy weather could dampen the enthusiasm of this day.





## A BOISTEROUS CELEBRATION IN AN ENVIRONMENT WITH PROPER STYLE

The entire celebration was themed "Internationalisation", because this emphasized our plans to become even more established on the international market.

Among other things, our guests were offered international delicacies. In addition to the exuberant celebration with culinary specialties, atmospheric music and exciting programme items, the personal conversations were in focus. Numerous local partners along with partners from abroad took advantage of this unique opportunity for a having chat in good company. The celebratory atmosphere showed the

strong solidarity and honest relationships with our customers and partners, and provided an opportunity to strengthen existing relationships and to jointly establish new plans for the future.

15 years of company history adds up to a lot, and especially the employees used the festive setting to share many enthralling and funny anecdotes from everyday business in personal conversations.







Many exciting programme items contributed to the relaxed mood at the celebration and to the beaming faces of the people present.

After two years under the following theme "Man versus Machine", the question arose again: Who is faster? Human "Rambo" or machine "Ore Train"? On the 7th October 2015, the Brucker extreme runner Andreas "Rambo" Ropin took on the challenge of racing against our Innofreight ore train for the first time. After Rambo's unbelievable victory, Innofreight demanded a rematch, which he accepted on the occasion of our 15th anniversary highly motivated. The train started at Erzberg, the runner at Präbichl, and the destination for both was the terminal in St. Michael. Ropin came to the finish line on time, but the planned train couldn't compete with its rival, because the railway line was interrupted.

A highlight was the presentation of our strong, long-term business partnership with the company Kalmar. Our rotary unloading forklift trucks, which we purchased from Kalmar, have been in use for our customers since 2004. The very first rotary unloading took place at the company Sappi in Gratkorn. The success of this collaboration was marked by the unloading of colourful air guitars from an Innofreight container, with none other than our very first rotary unloading forklift — our oldest machine. This was enthusiastically celebrated with an air guitar show by the two managing directors, some employees, and family members







## **INNOVATION TRAIN**

135 metres of company history: A special highlight for all guests present was a rolling innovation train, consisting of the modular Innofreight logistics system. On 135 meters of train, consisting of 5 InnoWaggons with 6 containers each, the success story of Innofreight was impressively presented along with highlight pictures. The managing directors pre-

sented the guests with a pleasant journey through 15 years of company development, relating exciting details of the respective years. They thanked all the guests and presented the shared achievements of past years, and took a look at future innovations.









# INNOVATIVE, EUROPEAN, PROFESSIONAL, ECOLOGICAL AND MODULAR- THE INNOFREIGHT SUCCESS CONCEPT

The 15-year company anniversary is by no means a reason for us to rest on our achievements – for all those involved, it means looking back and moving fully motivated into the future together. Some things have already happened, and much more will follow.

When we founded our company in 2002, we faced a major challenge. The railways are an important component in the supply of resource-intensive industrial operations. In the past, transports were carried out with outdated freight cars, resulting in not optimized payload, low availability and ultimately also operational problems and security gaps. As a result, the need for a reduction in rail freight traffic and the relocation of transports to the road arose.

Based on this problem, Innofreight created a solution by developing an innovative platform concept – separation of the structure from the wagon.

Although the initial focus was still on the wood industry, the limits of what is possible have since significantly extended. From agriculture and building materials, through to transport of steel, energy products, and liquids, today there is hardly any material that is not transported by our InnoWaggons and the associated container systems.

A track record of success: Currently, more than 10,000 Innofreight containers are in use throughout Europe every day.

## WHAT HAS HAPPENED SO FAR



2002-2012 2013 2014 2015 2016







## THE BIRTH OF INNOFREIGHT

On 12th September 2002, the official starting signal was given for the ongoing Innofreight success story. After an intensive development phase, purchase of the first truck and other important steps in the company's history followed in 2003.

In 2004, the first container systems for the wood industry, the WoodTainer XXL in combination with forklift rotary unloading, were successfully launched on the market. This technology has since become the European standard in rail transport of wood chips and biomass.

Of great importance for future development was the use of the first block train with ČD Cargo for Mondi Štětí (CZE) as well as start of transport to Hallein in Tyrol with Binder Holz in 2005.







Continuous development made it possible to have in 2016 1,000 WoodTainer systems in use— a major milestone in our initial development. The events line up in quick succession in the following years: the first tests with Green Cargo (SWE), the nomination for the State Prize for Logistics, and commissioning of the tipping plant at Zellstoff Pöls had the year 2007 flying by.

2008 saw the beginning of iron oxide transport with VR Cargo (FIN), the first block train transporting with SCA (SWE), and the still ongoing partnerships with our customers, including SCA Mannheim (GER), Perlen Papier (CH), and Papierfabrik Palm (GER). In 2009, we were able to celebrate many new commissions, such as with Borregaard in Sarpsborg (NOR), Green Cargo for Korsnäs in Gävle (SWE) and for Fantoni (IT).





Another important milestone followed in 2010, when we were able to celebrate our 1 millionth unloading with Sappi in Gratkorn. This was followed by further important expansions in the transport of raw materials such as logs, iron ore, and gypsum. The initial years provided us with new insights that were of great value for further development work.

The new partnerships focused stronger on logistics solutions for transport of agricultural products and building materials. Many years of testing of our WoodTainer systems delivered key results to us, leading to the use of our WoodTainer systems with the intermodal AgroTainer system.

Testing of the RockTainer systems followed in 2012. The special needs of our partners led us to decide that the future of rail logistics will primarily be in ultra-light and multifunctional container wagons. The idea of the InnoWaggon was born! This project was presented and celebrated in Mürzzuschlag during the 10th Anniversary in 2012.



2013 the first InnoWaggon prototypes were designed. At the same time launch of the InnoWaggons was the starting signal for revolutionising the existing Europe-wide rail logistics. Hurdles that so far had been virtually impossible to overcome were surpassed, and in particular we were able to completely transform raw material logistics for the steel industry and thermal power plants. Our innovative solution for tomorrow's rail logistics is significantly higher payload weights due to the reduced dead weight of InnoWaggons. The success of this innovation was honored and confirmed by the Styrian innovation award, the Fast Forward Award. Another highlight in 2013 was the use of the four-thousandth container in Saviola, Italy.



The use of the first block train with InnoWaggons was of great importance in 2014. It was in use for Knauf, and this successful cooperation was duly celebrated. Furthermore, the diversity of our elements was increased this year. The first RockTainer ORE, a self-unloading container, was developed. The first block train of these containers was in use for voestalpine. With the continuous development of new products – the InnoWaggons, the matching container systems, but also hand optimised, process-reliable unloading technology in compliance with the highest safety precautions – in recent years Innofreight has positioned itself as a full-service provider within this market.



The following year our equipment portfolio was enriched by another self-unloading container. The newcomer was our successful RockTainer INFRA, which is used for track ballast adhesive. Another highlight was the lignite mining project with the Pilsen power plant. The first InnoWaggons for coal transport were handed over.

In 2015, Innofreight was particularly proud of the completion and commissioning of the stationary coke unloading station at voestalpine in Donawitz. It was the first complete unloading facility owned by Innofreight and also the largest equipment delivery ever.



Further important partnerships were concluded in 2016. For example, there was delivery of the first InnoWaggons set for SŽ Cargo (SVN), and launch of collaboration with VR Transpoint (FIN) on the development of the FinnoWagons, which are adapted to the broad-gauge tracks in Finland. The constant development of our products makes it possible to overcome almost all technical and logistical hurdles – then, now, and in the future. Maximum customer benefit is our foremost objective.

Without neglecting container standards, we offer our customers solutions tailored to their specific needs. This provides our partners with an incredibly high degree of flexibility.





2017



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# INNOFREIGHT NOW — THE COURAGE TO CHANGE

Today, Innofreight is a medium-sized company with around 65 employees and a Europe-wide presence, which operates in a wide variety of industries – steel, energy, building materials, timber, agriculture and liquids. In 2017, we can assign our success to no less than 30 different container types that we have developed and brought to market. Meanwhile, Innofreight has filed around 25 patents with partial worldwide effect. Innofreight currently leases 10,000 different containers to well-known rail companies in Europe, which use them to transport environmentally friendly freight by rail for their customers. Presently we have 800 wagons in the fleet; 10 percent of all newly built wagons in Europe are currently our wagons. 50 Innofreight-owned forklift trucks and 6 stationary unloading systems are used for loading and unloading activities, completing our overall logistics concept.

So far, around 10 million transports have been carried out with Innofreight equipment – equivalent to 150 million tonnes of transported goods on the environmentally friendly railway. This has resulted in avoiding one million tonnes of  $\mathrm{CO}_2$  emissions.

With the year 2017, we are not just marking the 15th anniversary of the company's founding in our history book; we also want to take advantage of the steady growth of our company to open a new chapter and to head into the future full steam ahead.

# JOINT INITIATIVE — COLLABORATION WITH VTG

Innofreight is now working even more closely with VTG – Europe's leading wagon lessor and rail logistics company. Successful projects since 2015 have led both partners to cooperate even more intensively this year. The international transport trade fair "transport logistic" in Munich (GER) was chosen for announcing this great news.

At the first step, VTG will be incorporating in total 200 InnoWagons into its wagon fleet. A portion of them will be used in the next 10 years for a shared customer – the Swedish railway company Hector Rail.

This collaboration also involves a number of other services, including consulting and development for a transport, equipment and unloading concept, undertaking rail transports, managing wagon and container equipment, managing damaged wagons, providing stationary or mobile unloading technology, along with implementing and organising physical unloading.

Hence, the customer receives all services from a single source – from the concept phase to operational implementation.





# INNOFREIGHT — THE NEW INDUSTRY STANDARD IN THE 21ST CENTURY

## PROJECT ITECCO AS PART OF HORIZON 2020

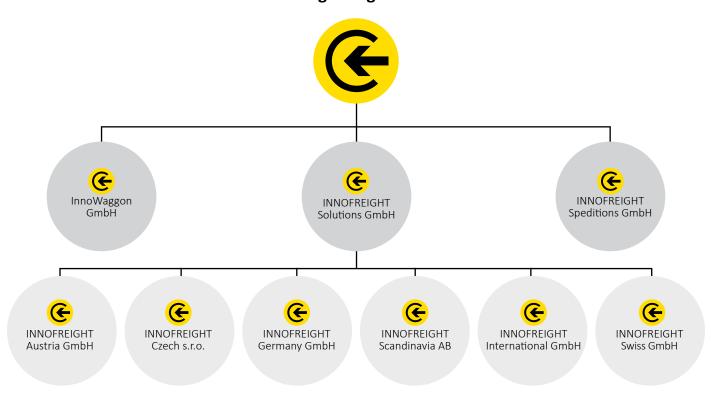
News comes also from our highly-promising project ITEC-CO, part of the EU Research and Innovation programme "Horizon 2020 SME Instrument".

This program particularly aims at supporting innovative businesses, small and medium-sized, in their growth and at helping them market their innovative products and services internationally in a more effective manner. Innovative offers, growth and the support of companies from SMEs to internationally successful large companies are of utmost importance. The programme is divided into two sections. A feasibility study is conducted in the first phase: the second phase deals with the realization of the project aims and contents.

Launched in October 2016, Innofreight's ITECCO is participating in the programme as one of just eight Austrian companies. Following the successful completion of the first phase, the focus is now on gaining experience within a trial phase and establishing a broad market presence. The pilot project in cooperation with the core partners voestalpine and ÖBB, but also other companies operating throughout Europe within the iron and steel industry is being successfully carried out. The aim is to primarily supply innovative rail logistics solutions for the European steel industry and establish Europe-wide uniform standards. This is, in detail, a platform concept combined with containers optimised for the specific load, which can be used universally. On the one hand, the competitiveness of the railway is enhanced and, on the other, logistics costs get significantly reduced.



# INNOFREIGHT Consulting & Logistics GmbH



### INTERNATIONALITY IS PARAMOUNT

Increased and pursued internationality is an important keyword in connection with Horizon 2020 and ITTECO. With the support programme, which is part of the economic programme Europe 2020, amounting to around 80 billion Euros, Horizon 2020 primarily supports the increasing internationalisation of Innofreight.

One of the project aims is to bring a modern organisational structure on track. This year we have been able to fulfil this goal. INNOFREIGHT Consulting and Logistics GmbH acts as a holding company. It holds two subsidiaries that have been converted into asset companies - InnoWaggon GmbH and INNOFREIGHT Speditions GmbH - as well as INNOFREIGHT Solutions GmbH. "To provide solutions is our mission in order to prepare rail freight in Europe for the challenges of the 21st century. In the organisational structure, the Innofreight Solutions GmbH is above the newly established local sales organisations, combining the Innofreight equipment into a comprehensive, custom-made logistics solution.

From now on, Innofreight impresses with our newly founded subsidiaries in Austria, the Czech Republic, Germany, Scandinavia and Switzerland, and beyond national borders. Therefore, we can be even closer to our customers in the future- also internationally.

The subsidiaries primarily operate in the field of selling and renting tailored customer solutions. The local sales offices offer important advantages: a better local presence and greater proximity to our customers and a direct increase in service quality, in other words a sound path towards even better performance.

With the growing international scope, the restructuring of the corporate organisation, as well as the direct customer proximity, Innofreight expects a multiplier effect in achieving the goal of becoming European market leader in technologies for rail-bound mass cargo transport.





# HAND IN HAND TOWARDS THE FUTURE — WE BRING RAILWAY COMPANIES AND END CUSTOMERS TOGETHER

Even in Innofreight's early development, it became evident that we are not a classical railway logistics company limited to just providing equipment. We rather see ourselves as a systems provider and an important link between the European railway companies and end customers.

On the one hand, there are railway companies, which are limited to transporting raw materials and finished products, and on the other hand, there are industrial enterprises which require powerful logistics systems in order to remain internationally competitive.

Innofreight operates right in the middle so all partners can fully focus on their core competencies.

With our flexible and efficient technologies distinguished by their special modular design and innovation, as well as our strong international sales team, which is even closer to you from this year on through our newly established subsidiary companies, we bring together what belongs together.

Thus, we ensure smoothly running processes in the entire logistics chain, from loading through transporting and up to handling and unloading the product.

Our unique approach guarantees full exploitation potential for the competencies of the railway companies and the end customers, as well as many other advantages that all partners can significantly benefit from.



## **EVERYTHING FROM ONE SOURCE**

International competitiveness requires powerful logistics systems. Compared to other providers, Innofreight is fully focused on maximising logistics efficiency, tailored to our customers' particular needs.

Innofreight is a strong partner for end customers. Everything comes from a single source – with our own highly qualified and experienced team, we have the development skills our

products require. As a full-service provider, we address your wishes and needs and take care of the entire design and production process of the wagons, the matching containers as well as the appropriate unloading and conveyor systems.

Our motto is "Moving Limits"! To move the boundaries of what is possible and to become even bigger, faster and more efficient together with our customers is our way.





There are many advantages for our customers that result from specifically developing new logistics solutions and skillfully implementing them:

- Side by side Innovation requires close cooperation. A process of ongoing optimisation is important to us, and we require our customers' direct feedback. Only with this experience and the underlying expertise, it is possible to deliver innovation at the highest level.
- Custom-made products all of our clients have specific requirements. In order to guarantee trouble-free processes, we clearly focus on the needs of our customers and devise new and tailored state-of-the-art logistics solutions.
- Pushing the boundaries without moving beyond them due to our standardised and therefore interchangeable wagons, our customers benefit from flexible handling and highly modern products. We know what's important and what's not. This is why all of our partners can be sure that all requirements and standards are complied with. All of our transport containers go hand in hand with specialised unloading concepts which are also adapted to all customer needs.
- All-round coverage as is well known, standing still is moving backwards. That's why we are dedicated to take care of all our customers' needs, even after successfully completing a project. Our comprehensive package includes continuous service, ongoing maintenance and necessary repairs. Thanks to our newly established subsidiaries, our highly-qualified staff is always nearby.





## **EFFECTIVE CONNECTION WITH ECONOMIC BENEFITS**

The European Railways have always been important partners and customers of Innofreight. One of our most important working relationships in this field started early in 2004: the cooperation with the Rail Cargo Austria Group. We were able to further develop that connection throughout the years and to establish the WoodTrainer system combined with the rotary unloading forklift trucks used for the Austrian cellulose, paper and sawing industries as a new standard for the transport of wood chips.

They were followed by many other important partners such as ČD, DB, SBB, PKP, SNCF, SŽ, ZSSK and Green Cargo. Up to this day, a highly fruitful collaboration connects us.

A significant portion of our success is also owed to our collaboration with the European railways companies which increasingly rely on Innofreight technologies.





Whether it's the transport of coal, wood or steel products in the Czech Republic and Slovakia, recycling materials and wood chips in Germany, biomass in Poland and Sweden, ores in Slovenia or construction materials in France — railway companies increasingly use technologies developed by Innofreight.

Innofreight also develops new railway concepts for shippers, with the private railway companies of Europe. We created innovative solutions for the forestry and energy sectors, jointly with Hector Rail in Sweden and Takargo in Portugal. In the Czech Republic, the lignite supply of power plants is realized in collaboration with EP Cargo. In Germany and Austria, companies such as LTE, SETG, SLB, Stuttgarter Bahnservice, WLB and Gysev carry trains with Innofreight containers.

Not only do we as a company benefit from this effective alliance – the railway companies also draw direct economic profits:

Optimised processes - the modular equipment concept typical for Innofreight, makes it posibble to improve routine processes in daily business. The diverse applications of the containers allow the transporting of almost any kind of material. The state-of-the-art material engineering used for our InnoWaggon systems, including matching containers, allow for up to 25% more load per wagon as well as a general reduction in shunting effort with shorter trains. The wagon turnarounds times are significantly reduced, particularly because the loading and unloading processes become quicker and simpler. The optimised maintenance concept does the rest.

Maximum Flexibility - another advantage of our systems is their flexibility. Due to the standardised and thus interchangeable wagons, our railway customers benefit from adaptive handling. Our concept of modular separation is unique.







360°- MAINTENANCE/ REPAIR/SERVICE



## SERVICE QUALITY AT THE HIGHEST LEVEL

In contrast to many other providers, our customer care does not end after the purchase of a product or the completion of a project. It is the all-round service in the daily business in particular that plays an important role for us as experts in railway logistics.

The continuous development of our products is representative for our company – it is the only way for us to guarantee steady progress, deliver state-of-the-art innovations and further strengthen our position as the leading provider of railway logistics products in Europe.

We are available at any time to provide our customers with help and advice. Maintaining the supply chain is one of our top premises. Because when it comes to unexpected obstacles, every second counts and can otherwise result in production losses or even downtime. Direct contact, permanent availability and short reaction times are our main priorities.







## INNOFREIGHT FULL SERVICE

In addition to the service activities at the customer's location, regular equipment maintenance and repair are also part of Innofreight's services. Many of those works have for years been performed at the ÖBB INFRA Terminal in St. Michael in Styria, Austria. The growing scope of those services as well as their important role and great potential responsibility made it necessary for us to break ground for a new repair and maintenance hall at the terminal in 2016, measuring over 560 m<sup>2</sup>.

At a spectacular opening celebration in March this year, ÖBB INFRA has together with many guests, long-time partners and Innofreight employees, put the repair and maintenance center into operation.

Now we can perform all kinds of repairs in an optimal way, regardless of the weather conditions. Thus, we put an even stronger emphasis on preventive maintenance and quick repair, today as well as in the future.

And these activities in particular provide us with direct insights which then can be used immediately for the development of new products. This kind of processing of direct feedback is representative for our Innofreight approach as a systems provider.

In addition to our activities at the terminal of St. Michael, we have also strengthened our position regarding direct service at the customer's location by reorganising our corporate structure. With the establishment of our new, local sales organisations, we're even closer now.

Thus, our highly competent service team with specialists for all product groups is well-positioned for international allround service for our clients, day and night.









# INNOFREIGHT PROVIDES 144 INNOWAGGONS FOR ROUND TIMBER TRANSPORT IN SWEDEN

The forest industry is still an important cornerstone of our Innofreight enterprises. Particularly the optimized transport of round wood is becoming increasingly important among customers. In order to always be one step ahead of the competition and especially in the road freight transport in the development of new solutions, we have designed our own stanchion system specifically for those purposes. The modular concept — a combination of stanchions structures and corresponding InnoWaggons — is especially important, particularly for the Scandinavian region.

Approximately 22 percent of all goods transported by rail in Sweden are forestry products. And so, it happened that we, as a technology provider, participated in a bid for a tender by the Swedish forestry and timber processing company SCA in a joint effort with the Swedish railway company Hector Rail in order to win a 10-year-contract over the transport of 3 million tons of round wood timber, which we subsequently won and signed. The scope of this great project is enormous: Hector Rail gave the single biggest order for the delivery of Innowaggons to Innofreight. In total, 144 InnoWaggons equipped with heavy-duty stanchion systems by Innofreight are being rented out to Hector Rail.

Following important steps such as signing the contract, subsequent thorough development activities, obtaining all necessary permits and intense testing operations, we succeeded in delivering the first block train last September. The transfer of all 144 InnoWaggons as per the plan will be carried out continuously until August 2018.

The advantages for our customers are enormous: Through the use of very wide and tall stanchion systems, the block train cargo load can be increased by about 25 percent compared to the wagons used before. The combination with the light InnoWaggon allows for this huge increase in cargo load and an immense reduction of logistics costs. The robust system resists any weather conditions and noticeably reduces maintenance costs

The modular principle makes loading and unloading the wagons faster and, especially, safer. With this innovative system, Innofreight sets the new standard in round timber transport in Scandinavia, garnering international attention.



# DISCOVERY CHANNEL FILMING FOR MIGHTY TRAINS

This successful project in Sweden was also noticed by the Discovery channel. The Mighty Trains crew filmed an episode about Hector Rail and included the newly developed Innofreight wagon and the Vectron locomotive.

Mighty Trains takes viewers into the world of rail travel to witness the inner workings of what it takes to launch

and execute a mighty journey on some of the world's most incredible railway equipment.

In spring 2018, they will dedicate an entire episode to this Innofreight product in the Hector Rail system for the final client in this chain: SCA. We are looking forward to it.





## CENTRAL EUROPEAN CUSTOMERS BENEFIT FROM THE OPTIMIZED SOLUTIONS FOR ROUND TIMBER TRANSPORTATION AS WELL

The concept developed by Innofreight for optimised round timber transportation has also proven very popular with Central European customers. Particularly transports for the paper and cellulose industries, for instance as performed by the Mondi Group and Mercer International, can be significantly optimised by the innovative system we developed. The stanchion structures and container wagons were specifically adapted for the Central European region.

Thus, they can reach their usual maximum cargo load for rail-way traffic while also achieving flexibility in container traffic. The prototype specifically designed for those purposes is already being tested. Already, the excellent testing results point towards a successful development in the future. Hence, nothing is in the way of implementing our system in all of Central Europe during the second half of 2018, as per the plan.







## BROWN COAL TRANSPORTATION IN THE 21ST CENTURY — A TURNKEY SOLUTION FOR EP CARGO

The transportation of coal still remains a lucrative segment in rail freight transport. Therefore, coal producers and processors are constantly looking for optimisation potential within the transport chain.

Large quantities of brown coal — more precisely around 2 million tons per year — are being transported from the coal mine to the power plant in Opatovice in eastern Bohemia by the Czech railway company ČD Cargo. The Czech rail freight company EP Cargo is taking care of the appropriate logistics behind that.

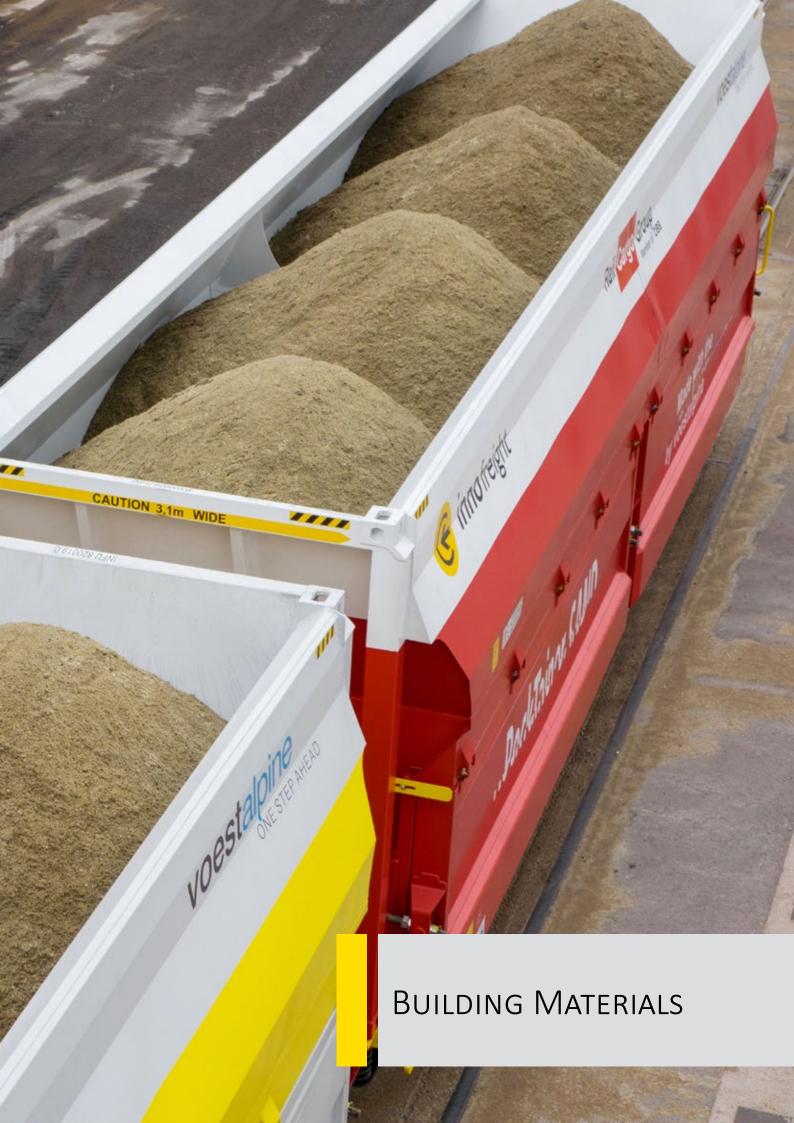
Looking for a suitable partner to provide a new and innovative logistics solution for those transports, they decided to engage Innofreight in 2015. Following a successful planning procedure and implementation — always in alignment with our customers — an important milestone in brown coal transportation in Europe was reached when the coal logistics were officially put into operation on 7th June of this year.

Through our unique concept, we allowed our end customer EP Cargo to provide a turnkey solution that includes Innow-

aggons, MonTainers, a stationary tipping system, as well as the relevant all-round service for that system. Our MonTainer is a rugged, reliable open top container version, which, in combination with the InnoWaggon, offers maximum achievable payload and volume.

The resulting advantages are enormous: 70 new Innowaggons in total allow for a higher cargo load while the container tipping system additionally ensures reliable process operations in winter, even at very low temperatures. The innovative system also significantly improves occupational safety during the unloading process. The sophisticated overall concept considerably reduces the necessary amount of staff and thus speeds up the traffic. The entire process now takes significantly less equipment than before.

This brings us one step closer to our goal of optimising rail freight transport in the energy sector. With this project, brown coal transportation was purposefully modernised and has now arrived in the 21st century.





## Innovative Transport of Granulated Slag — Innofreight Develops New Transport Solution

In Rohrdorf in Bavaria, cement has been produced by our end customers, the Rohrdorfer Group, since the 1930s. This requires sand, more precisely granulated slag, which has been transported for many years by our railway customer, Rail Cargo Group from the voestalpine Materials Centre in Linz to the cement plants in Rohrdorf and Gmunden.

To make this more innovative, simpler and, above all, faster in the future, the Innofreight system was integrated into this process together with our partners. The first talks in the summer of 2016 were followed by the trial of our RockTainer SAND. Quickly after the test phase, the advantages which could arise with the modular system from the Innofreight company in the future became clear.

Due to its high loading capacity, the RockTainer SAND is the ideal container for the building materials industry and thus for the transport of sand and gravel, limestone or granulated slag. Also, the loading advantage through the optimised

load volumes and the pneumatic flaps guarantee a much more cost-effective and reliable rail transport of the building materials. All in all, we can thus guarantee a loading increase of up to 20 percent. The jointly optimised, new, modular wagon, container and handling concept also makes the efficient combination of rail and road transport possible. This means: a flexible handling through the deployment of our modular system, which thus allows for more efficient work. Another plus is presented by the high safety standards, which also support a safer and faster loading and unloading of the wagon.

Innofreight has always been characterised by intensive test operations and their evaluations, including a sophisticated logistics concept and the subsequent series production. Thus, in July 2017, the first block train with the appropriate equipment, that is, both loading and unloading devices, was able to travel on the rails for long-term traffic.





## FIRST COMBINED COKE & COAL UNLOADING STATION AT VOESTALPINE IN DONAWITZ

voestalpine Steel at Donawitz has always been one of the big names in the Upper Styrian steel tradition. We are all the more pleased that Innofreight has made voestalpine AG into one of our end customers. Already in 2015, we were able to successfully commission a container tipping system for coke in Donawitz which was unique in this form across the world.

Only about 1.5 years later, in April 2017, another important step followed in this planned expansion.

Celebrating together with our partners, we were able to officially open the new coal conveying technology unit and thus conclude a highly successful joint project between Innofreight, the Rail Cargo Group and voestalpine AG. The already existing unloading station for coke was thus expanded with another conveyor belt system for coal. Since April, both coke and coal containers can now be unloaded at a unloading station and the raw materials can subsequently be distributed using sophisticated conveyor technology.

The specific challenges that have been posed in this project, and therefore also to us, were, among other things,

the tight schedule, the very tight local space conditions and the difficult and sometimes very inaccessible assembly conditions. Despite all adversities, we were finally able to assemble the additional conveyor technology under fully operational conditions and thus supply our customers with a tailor-made and innovative Innofreight product. Thanks to the especially light InnoWaggon in combination with our MonTainers XXM-L, which is used here, the loading per block train can be increased by about 25 percent. In addition, the container tipping system ensures process-reliable winter operation even at very low temperatures and therefore brings significant improvements in terms of safety at work during the unloading process. In addition, the new system works especially in a dust and noise minimising manner, which also relieves in a far-reaching way the environment and the population.

With the completion of this construction project, all planned construction measures in connection with the transport technology of Innofreight at voestalpine Donawitz have now been completed and we look forward to further future joint projects.





## TEST TRAFFIC WITH RAIL CARGO WAGON COMPLETED WITH GREAT SUCCESS — FULL INTRODUCTION ON THE STARTING BLOCKS

With the transport of liquids, Innofreight has been dedicated to another important segment in the freight transport market for quite a few years already. Together with our partner, the Rail Cargo Wagon/RCW we were able to take an important development step this year, especially in the transport of slurry.

Slurry (milk of lime, consists predominantly of calcium carbonate in the form of marble, limestone or chalk and water) is used in the paper industry as an important filler and as a coating pigment.

The project, which started with preliminary discussions in 2015, was able this year to make major progress towards series production. In September, we were able to complete with great success the European test transports of two pro-

totypes. The resulting experience is already being used in series production, which will be put on the tracks in the Austrian area of activity from April 2018 with twenty tank containers and the ten matching InnoWaggons (close coupled, eight-axle wagon).

Through our innovative Innofreight system, that is, the deliberate separation of sub-structure and body, there are important advantages for our customer compared to conventional tank wagons. The Innofreight tank container specifically developed for this in combination with the InnoWaggon has a significantly higher loading. In addition, the planned, unified fleet for our customer and its end customers will significantly optimise the installation work in terms of occupational safety and maintenance.



#### TRANSPORT LOGISTIC



From 9th to 12th May, the international trade fair for logistics, mobility, IT and supply chain management once again took place: transport logistic in Munich (Ger). Around 2,262 exhibitors from 62 different countries-including Innofreight-participated to present their latest developments.

The visitors were not only able to experience the details of our new technologies at first hand, there was also something offered in terms of event technology. So, we used the pleasant atmosphere of the trade fair to celebrate important milestones.

Among other things, we were also able to celebrate the hand-over of the first production model of the newly developed wagon for round timber transport in Sweden to the Swedish rail transport company,

Hector Rail, which in the future will be undertaking round timber transport for SCA Skog.

We sincerely thank the numerous international customers, partners and interested parties who visited us at the trade fair!

#### CZECH RAIL DAYS





A further trade fair highlight this year followed in early summer, when Czech Rail Days 2017 took place in Ostrava (Czech Republic) between 13 and 15 June. Every year the Czech Republic's most important event in the field of railways provides an excellent platform for establishing contacts with the most important decision-makers and companies.

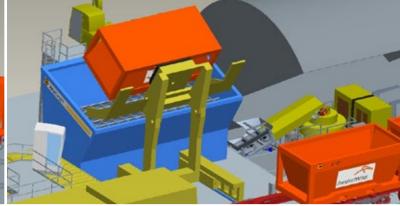
Innofreight participated together with around 200 other exhibitors to present the latest technologies and products of the industry to the approximately 7,000 visitors

A special attraction was certainly the InnoWaggon, exhibited by our partner ČD Cargo, with WoodTainer systems on the open space at the exhibition centre, which attracted a lot of attention from both the international and the audience in general.

ČD Cargo thus shows that Innofreight is a strong, trustworthy partner to whom they will be committed in the future. Thank you for the confidence that you have placed in us!







#### CONTINUED MOVEMENT IN THE DIRECTION RUSSIA & UKRAINE

Another important goal for the coming years is above all the expansion of business and direct networking with Russia and Ukraine.

Due to the many raw materials available, Russia is an interesting market with great potential. An expansion of our business there is therefore a logical conclusion for us, which we have drawn from our previous experience. Due to the prevailing diverging broad gauge conditions, the raw materials currently have to be trans-shipped at the border, which represents a significant obstacle. With an EU standard sought by Innofreight, in the future, handling could be faster, resource-efficient and cost-effective.

An important step that we have already taken in this direction this year is the first broad gauge wagon- the FinnoWaggon, which was successfully put on the rails in Finland. As Finland has the same gauge as Russia, we see this step as a milestone for future development.

A Moscow visit of the Innofreight management to the Russian Railways was extremely positive this year. The joint talks made clear that an opening to Russia is of mutual interest and is possible in the near future.







Not only back, we also want to look forward on the occasion of this year's anniversary. What will happen to Innofreight in the future, which projects are pending and what can you expect from us in the future?

For the next 5 years, we have set ourselves the goal of increasingly offering containers for finished products such as steel, paper or wire rolls. Since our innovative transport and container systems are currently increasingly specialised in the transportation of raw materials in general, we would like to open the borders for the transport of all types of products in the future.

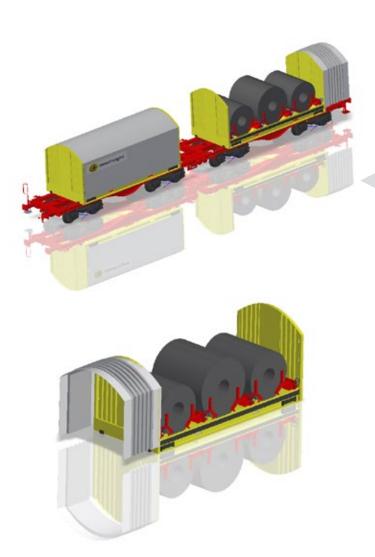
The enthusiasm for our products, the tireless spirit of innovation of all our staff and, above all, the special closeness to our customers have made it possible in the last 15 years for the majority of European railways to trust Innofreight technologies. We do not have time to rest on our achievements, because in the future we follow a very clear vision of what needs to be implemented.

With the continual expansion of our portfolio of innovative solutions, we want to become a systems vendor in this area in the future, helping the sector develop new EU standards and usher in a railway revolution in Europe, with the aim of becoming the number one in Europe on our 25th anniversary!

#### **WIRE ROLLS CONTAINER**

One of our latest innovations is certainly our developed wire rolls container. This 20-foot container is innovative and at the same time specially designed for transporting wire rolls. The specificity is that the container is stackable both in the empty and in the loaded state and that with it wire rolls can be transported so to speak in the double-decker method on an InnoWaggon. Whether on truck or by train, our system can be used inter-modally. Thus, a perfect solution which, on the one hand, guarantees higher loading and, on the other hand, brings many other benefits for distribution traffic.

Currently our wire rolls container is in the test phase. The very good results, however, already suggest that we will be ready at the latest in the 3rd quarter of 2018 to go into production.



#### COILTAINER

A flexible logistics solution that has been optimised especially for the respective loaded goods is also our newly developed CoilTainer. The intentionally shorter container with its 3 load recesses – special wagons usually with 5 load recesses - ensures a loading increase of up to 3 tons. In addition, we also worked on the operation of the sliding roof.

With our innovative CoilTainer, the entire load space can now be exposed, something that was previously not possible in this form. Thus, the handling can be significantly optimised.

We are currently working on two prototypes, which will be completed by the end of February 2018. The production delivery follows in the 3rd quarter of 2018.

#### Pallets for Round and Cut Timber

With our pallet system, the modular Innofreight concept can be optimally applied to a wide variety of long goods. Our pallet system has been extensively developed and can now be used not only for the transport of round timber but also for other goods such as cut timber.

Therefore, the pallet system is perfect for the use in the sawmill industry. This ensures maximum performance and, in addition, the manifold advantages of the modular concept.

The combination of pallets with a container wagon enables maximum loading in rail transport while at the same time allowing container transport flexibility. Work safety during loading and unloading is also increased by scientifically high stanchions.

Already 80 of these new carrier wagons will be delivered by us up until the end of February 2018.







#### **CHEMIETAINER**

Also, newly designed was the ChemieTainer, which is perfect for transporting corrosive bulk materials and chemical products of all kinds.

"Unique", that is the best way to describe this 20-foot container. Its pneumatically operated swing roof and the simple tilting of load goods over the tailgate make the handling of chemical goods particularly easy. In addition, we have pro-

vided the container with a stainless-steel floor and a special inner coating, ideal also for transporting corrosive materials. In combination with our InnoWaggon, this results in great loading advantages.

Currently our ChemieTainer is still extensively being testeda production delivery is already planned for the 2nd quarter of 2018.









Our so-called FinnoWaggon is in the future underway on broad gauge, more precisely on the Finnish broad gauge. On 9th November 2017, our goods wagon, which was developed together with VR Transpoint (Finland) for railway goods transport in Finland, was delivered to Helsinki.

The main objective of this cooperation was the development of an InnoWaggon adapted to the Finnish broad gauge railway network, so that in the future Finnish railway goods transport could also benefit from the modularity advantages of the Innofreight system.

And as if that is not enough: the fruitful cooperation is of double importance to us. On the one hand, we are pleased that Innofreight is now also successfully represented on the Finnish market with its innovative solutions. On the other hand, this step is an important step nearer to our goal of opening up to Russia and China. Both countries have the same broad-gauge railway network as Finland. By establishing our Innofreight system, it would be possible in the future to significantly simplify, considerably optimise and considerably revolutionise the handling of loading goods using containers on the border.





#### **PORTROTATOR**

The loading of bulk material of trains onto ships is currently associated with considerable effort. Much time and sufficient space to temporarily store the material and repeated dredging works have previously been necessary for this.

To make this process more efficient in the future, Innofreight has developed an innovative solution with PortRotator, which is currently being tested for Rauanheimo Logistics (Finland) in the Finnish port of Kokkola.

The PortRotator is a specially developed unloading system with its own internal power supply, which can be used to transfer the bulk material directly from the train to the ship using a container crane and 360 ° turning unloading. Innofreight thus provides an especially efficient solution. The current test phase of the PortRotator is to be completed next spring and the development of a production-ready solution is to be completed by July 2018.









## STATIONARY UNLOADING STATION FOR MONDI ŠTĚTÍ

The company Mondi Štětí (Czech Republic) is known far beyond the Czech borders as a well-known paper manufacturer. With planned expansion investments of the company, Innofreight was taken on board in the form a 10-year contract. Part of this major expansion was also the construction of a stationary container unloading plant in the factory, which we were allowed to develop and build as a general contractor.

At the end of this year, the stationary unloading station can be officially commissioned.

The development of rapid and process-reliable unloading techniques was our priority. In the future, the new plant will ensure very short cycle times and, above all, high safety, including at low temperatures in winter operation.

## Innofreight Team



#### REACHING OUR GOAL TOGETHER

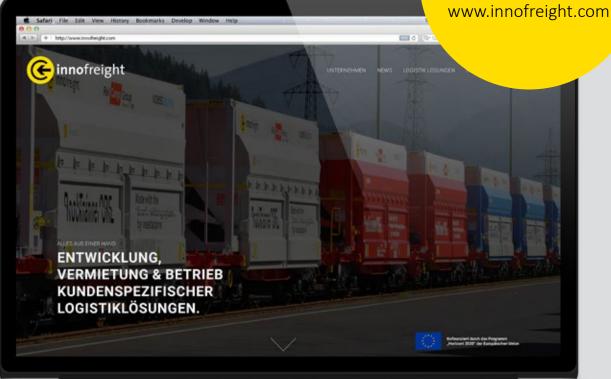
Success is not only the result of successful management. In fact, the success of a company is an expression of the special commitment and loyalty of its employees. We can proudly say that this applies to Innofreight in every way.

Every one of our 65 employees has made a total commitment to Innofreight this year, just as in the years before, making a significant contribution to the great success and innovative development of our company.

This most successful balance is the result of our great joint effort. A warm thank you goes to our great Innofreight team: All the successful projects, innovations and development wouldn't have been possible without you.

Thank you for these great achievements and we are looking forward to working together in the years ahead!

Visit us
on our new website and see what
we have achieved together:





For 6 years the extreme athlete and ultra-runner Andreas "Rambo" Ropin has been on the road. With sport he defeated his fight against alcohol - a performance that deserves support in our eyes!

It was a special pleasure for us to sponsor him in one of his biggest sporting projects so far. This summer Rambo beat the 7 highest mountain peaks of the Alpine countries and covered 45,000 meters and 1,394 kilometers by running non-stop in just 24 days. At his finish at Brucker Hauptplatz we celebrated with him his incredible success.





Innofreight has been supporting "Österreichischer Zivilinvalidenverband" for several years.

Together with the chairman Werner Boberger, we were able to hand over two electric wheelchairs to the African club Kapfenberg. We were able to sustainably improve the mobility of two paraplegics.

# SOCIAL COMMITMENT

In November this year, a hockey event for Sportbündel, an association for athletes and athletes with special needs, took place. The event was organized by the ice hockey player and participant in the Red Bull Crashed Ice Challenge, Florian Graf.

We support him in his sporting endeavors, in return he set up the social event for us together with the 2014 Red Bull Crashed Ice World Champion Marco Dallago. For the participants of Sportbündel and employees of Innofreight, an exciting program was delivered on ice- from warm-up exercises on the ice, on an exciting parkours and small competitions, to a hockey match as the crowning glory, everything was there.

Most important was the fun that all participants of Sportbündel and Innofreight had!









THANK YOU for the good cooperation



Co-funded by the Horizon 2020 programme of the European Union