

ONLINE

A Merry Christmas and a healthy and prosperous 2018
from everyone at VTG Rail UK

Repurposed wagon wins top award

VTG Rail UK ended 2017 on a high, winning the prestigious Freight and Logistics Achievement category at the National Rail Awards in September.

VTG took the top prize for its conversion of redundant coal wagons into revenue generating aggregate hoppers.

A delighted Rob Brook, VTG's Managing Director said: "We are absolutely thrilled to have won this award."

"It's a huge pat on the back for everyone involved in the project."

VTG anticipated there was going to be an issue with coal wagons becoming redundant following the government's decision in April 2015 to double the carbon floor price – effectively making coal uneconomical as a power station fuel.

Rob explained: "We were convinced that this problem could also be a business opportunity, so we invested in the conversion or "repurposing" of the coal wagons to carry aggregates."



Rob Brook receives the NRA's Freight and Logistics trophy from the BBC's Huw Edwards.

"As coal carriers, the wagons were 18.3m long with a maximum payload of 75 tonnes. Now they are shorter but payload has increased to 78 tonnes."

"This conversion is faster and less expensive than producing new build wagons and the wagons are able to carry significantly more product in a train of the same length, which is a clear benefit for our customers."

"On behalf of everyone involved in the project, including the team at VTG, our suppliers and customers, I thank the judges for recognising the effort they have put in and the results we have achieved."

"It's another example of VTG pushing the boundaries for the whole industry and delivering success."

The bravery of our transport heroes

The National Rail Awards also paid a moving tribute to the British Transport Police and the Manchester Victoria, Arriva Rail North staff for their services and bravery during the London Bridge and Manchester terror attacks earlier this year. Both teams were honoured

with Judges' Special Awards.

Secretary of State for Transport Chris Grayling also presented PC Wayne Marques with a special gold-plated NRA trophy to recognise his gallantry in confronting three knife wielding terrorists at London Bridge.

VTG AG boosts revenue in first nine months of 2017



Dr. Heiko Fischer

– Railcar capacity utilization at highest level since the end of 2008

Hamburg, 16. November 2017

- Further increase in revenue
- Railcar capacity utilization at highest level since the end of 2008
- Revenue and EBITDA up again at Rail Logistics
- One-time charges prompt slight decline in Group EBITDA and Group net profit

VTG Aktiengesellschaft (WKN: VTG999), one of the leading railcar leasing and rail logistics companies in Europe, increased its revenue in the first nine months of 2017. Group revenue improved to EUR 750.2 million, slightly up on the same period a year ago (9M 2016: EUR 742.0 million). Despite this increase, EBITDA of EUR 250.7 million fell just short of the previous year's figure (9M 2016: EUR 255.9 million). This drop is attributable essentially to one-time charges for the preparation of unleased wagons and the planned takeover of the Nacco Group. Accordingly, Group net profit of EUR 44.1 million was slightly down on the figure for the same period of the previous year (9M 2016: EUR 45.0 million). Earnings per share (EPS) followed suit, slipping from EUR 1.24 in the comparable period of 2016 to EUR 1.21 in the period under review.

"The numbers for the first nine months show that we are consistently maintaining the positive revenue trend witnessed in recent months. Development at the logistics divisions is satisfactory, and capacity utilization at Railcar has reached the highest level since 2008," explains Dr. Heiko Fischer,

Chairman of the Executive Board of VTG AG. "Regrettably, one-time charges for the preparation of unleased wagons and the planned acquisition of Nacco slightly put the brake on our EBITDA. At the same time, continuing growth in demand for our products and services is an indicator for the development of our business."

Railcar: Revenue up in third quarter – Fleet capacity utilization at highest level since 2008

Revenue at the Railcar Division rose 2.7 percent in the third quarter of 2017, up from EUR 128.5 million in the second quarter to EUR 131.9 million. Revenue thus totaled EUR 386.0 million in the first nine months of 2017 (9M 2016: EUR 387.7 million), corresponding to a minor year-on-year decline of 0.4 percent. The sustained positive trend in revenue [in the past two quarters] thus virtually made up for the rather lackluster start to the year. At EUR 249.1 million, EBITDA for the division was

of new and used wagons and, hence, into tangible assets – above all to expand the fleets in North America, Russia and Europe.

Increase in EBITDA at logistics divisions

The Rail Logistics Division saw revenue increase by 5.7 percent to EUR 247.2 million in the first nine months of 2017 (9M 2016: EUR 233.7 million), again continuing the positive trend experienced in recent months. Sustained positive business development in southeastern Europe is the main reason for this gain. Transports for the metalworking industry and in Project Logistics likewise plotted a positive trajectory.

On the back of this revenue trend, the division's EBITDA improved by 10.4 percent to EUR 5.1 million in the first nine months of 2017, up from EUR 4.7 million a year ago. The EBITDA margin for Rail Logistics, which is based on gross profit, edged up by 0.8 percentage points from 22.0 percent in the same period a year ago to 22.8 percent in the first nine months of 2017.



VTG has created Retrack as a wholly-owned freight operating subsidiary of its Rail Logistics division.

2.5 percent down on the same period a year ago (EUR 255.5 million). One-time charges totaling EUR 4.2 million for the planned takeover of the Nacco Group and the preparation of newly leased wagons were the main reason for this dip. On the other hand, one-time income of EUR 3.2 million had positively influenced EBITDA in the third quarter of 2016. The EBITDA margin for this division, which is based on revenue, thus edged down 1.4 percentage points to 64.5 percent (9M 2016: 65.9 percent). Capacity utilization for the entire fleet increased to 92.1 percent (9M 2016: 89.8 percent), the highest level since September 2008.

Investments of EUR 211.8 million in the first nine months of 2017 were substantially higher than the figure of EUR 154.8 million for the same period a year ago. Most of this money was channeled into the purchase

Tank Container Logistics posted revenue of EUR 117.0 million in the first nine months of 2017, a year-on-year decline of 3.0 percent (9M 2016: EUR 120.6 million). The transportation volume was higher but freight rates were lower in the period under review. The temporary closure of the key railway line near Rastatt, southwestern Germany, also had a negative impact on revenue development in the third quarter. Despite this slight decline in revenue, the division's EBITDA improved in the first nine months of the current financial year, climbing 8.4 percent from EUR 7.7 million in the same period of 2016 to EUR 8.3 million in the period under review. The EBITDA margin, which is based on gross profit, was up by 1.0 percentage point to 37.0 percent, slightly higher than at the same point in the previous year (36.0 percent).

PAM's the one for us!



In our Summer edition we introduced the project that is bringing VTG's wagon maintenance regime firmly into the 21st century.

This vitally important piece of work is called ProActive Maintenance (PAM). In this edition we take a closer look at how it is being managed.

Less than a decade ago, few people would have thought it unusual for a company to have a string of computer based management systems that probably didn't talk to each other and which were 'supported' by paper-based systems.

Thankfully, times change and VTG has engaged software experts 3Squared, the people behind the popular RailSmart system, to help the wagon company play its part in the drive towards a joined-up, digital railway as the UK's rail companies bring their processes up to date.

It's widely acknowledged that the digital railway is much more than the development of sophisticated signalling systems that create the capacity needed to enable the rail network to run more trains. Companies are also looking at ways of using technology to become more efficient, faster to react and more consistent in their approach to managing their businesses and their people.

VTG is now working towards the creation of new systems for managing the maintenance of its wagon fleet. Responsibility for delivering the modernisation project rests with

Sam Hunt, VTG's Project Engineer.

Sam takes up the story: "It began around two years ago when VTG thought it time to carry out an independent review of its processes. "The company had been using a central IT system that operated through Microsoft Access." Sam said. "Although these systems work, ours was decades old and modern technologies can offer so much more."

"Having the independent assessment corroborate our view that things needed to change, we began the process of scoping the project."

"When setting out the requirements for this new system, we decided that rather than just replicate what we have currently on a more up to date platform, we would set about improving our processes and, in turn, our business."

At the time of the independent assessment, VTG MD Rob Brook had begun talking to the Sheffield based software company 3Squared to seek ways of digitalising the company's wagon maintenance processes and management.

A bespoke system called ProActive Maintenance (PAM), is now being developed by VTG and 3Squared to deliver a new system that brings the management of rail freight wagon maintenance into the 21st century.

PAM will be a web-based online and mobile app and will replace existing and inefficient paper-based processes whilst allowing for improved data collation and analysis. This will in turn act as a condition-based management tool that will spot trends and predict the optimum time for maintenance events on the wagon fleet.

"There's a lot of pretty useful information out there that is currently very difficult to obtain, especially on a regular basis" says Sam, "we therefore want to capture some of this information through PAM and then use it to improve our maintenance regime. From tracking wheelset wear to following component failure trends, we will be able to streamline our maintenance processes to further improve on our, already industry leading, levels of wagon availability and reliability, ultimately saving time and money for all stakeholders."

"Having a system that predicts when a wagon needs attention will be a major benefit, and importantly, it will link to existing systems."

"Currently all maintenance records are written on paper and filed away, which means that no one is utilising this valuable information to its full potential."

"PAM will enable VTG, as both wagon lessor and Entity in Charge of Maintenance, to better service our customers and improve our operational effectiveness through better quality information and operational insight in partnership with our suppliers."

PAM using agile project management methods

But what is agile project management?

Sam explains: "Traditional projects have a project scope which is followed from beginning to end. There is usually some communication in between and ultimately a final product."

"A common issue with the traditional approach is that if there are any problems with the final product that are not picked up early on it can be costly and time consuming to make any changes towards the end of the project."

"By running in agile project management,

the project is broken down into incremental steps called sprints.

"Each sprint contains a number of 'stories' or deliverables which should be available for key user testing by the end of each sprint."

"Key users are 5 or 6 colleagues selected from each department, whose role is to be kept informed and essentially ensure we have covered everything that we need to cover."

"At the end of each sprint, which typically lasts 2 weeks, we are then able to review progress and make any necessary changes while the problem is still small and manage-

able. This improves the chances of having the exact product that we want by the time we go live."

The next PAM milestone is the first key user testing.

During the testing, those key users will use the product and say whether or not it is working and give necessary feedback. If something is wrong it shouldn't have a big impact on the final project because the testing is incremental, rather than get to the end of the project and find there is an issue and have to go back through it all to find the fault.

Collaboration gets PAM off to a "great start."

By Tim Jones,
3Squared Managing Director

We are extremely excited to be working on the ProActive Maintenance project with VTG.

PAM is a first for the industry that through the application of technology and digitisation will bring VTG closer to its customers and suppliers.

It will improve visibility of the maintenance process for all stakeholders, provide an enhanced level of detail and increase the timeliness of information delivery to help individuals make more informed decisions.

PAM will also provide VTG with a solid and scalable technology platform that can grow and change as the demands of the business change. This will give VTG the capability to move PAM and its data into areas such as predictive modelling and preventative maintenance.

Moving beyond that, cutting edge technologies such as Machine Learning and Artificial Intelligence could be introduced to automate some of this analysis too.

In the future, we're looking to integrate the 3Squared developed RailSmart applications with PAM, further delivering benefit to VTG customers in deeper parts of the customers organisation.

The sky really is the limit.

The project itself has got off to a great start thanks to the collaborative nature of VTG and their willingness to adopt the agile methodology for delivering this project.

The 3Squared team work closely with VTG UK and VTG Germany and are in constant communication as we work through the process to deliver PAM.

The project is progressing well against plan and the collaborative mechanisms put in place by 3Squared and VTG ensure that any blockers, risks or assumptions are quickly resolved.

3Squared has also established a 'project hub' for PAM for members of the 3Squared PAM delivery team to meet and review progress, lock down designs and discuss issues. A drop-in space that's being used formally and informally by the team.

As we progress through the project we hope to share more information on PAM including a sneak peek at some of the interface designs for PAM web and PAM mobile.

The rail industry is undergoing unprecedented change. It's great to see such a renowned and respected brand such as VTG innovating within the sector to stay ahead of those changes.

Spotlight on:

Nigel Day, Head of Engineering

When did you join VTG?
October 2002.

How long have you worked in engineering and how long have you been Head of Engineering for VTG?

I am an "engineering lifer" as they say. I started building passenger trains straight out of school in 1987 at Metro Cammell, Washwood Heath, then spent 8 years on design, production and commissioning at Hunslet.

I've been VTG's Head of Engineering for 4 years.

What do you do on a day to day basis?

I am responsible for safety (internal personnel, external personnel and wagons). I am also responsible for QA and Environmental management systems, maintenance contracts, supplier performance and budgets.

Who is in your team and what do they do?

Russ Campbell (Senior Engineer). Russ is responsible for overseeing the maintenance contracts and contractor performance which extends to fleet issues and customer issues when we have problems.

Adrian Freely (Fleet Engineer). Adrian, is our trouble shooter and works for Russ. Adrian is usually dealing with fleet and supplier performance.

There's a new role for a new recruit (Safety and Performance Engineer) - to manage our Safety Management System, Integrated Management Systems and Reliability Management Systems.

What three words best describe your team?
Happy, motivated, skilled.

Who within VTG do you work most closely?
Rob Brook and Russ.

With Rob it's mainly around strategic moves in supplier base, digitalisation etc and ensuring I am running the Engineering team in line with the business expectations.

With Russ is bouncing fleet, customer and supplier issues around to conclusion.

What is the most challenging aspect of your job and how do you do it?

Keeping the customers happy and the suppliers performing

Primarily by keeping close to customers

and ensuring they get listened to and answered.

With suppliers it's about continuous improvement and ensuring they have the structure to deliver their service.

What is your or your team's greatest work-related success and how did you do it?

After a 7 year journey, we have a successful re-structured maintenance regime and supplier base that focuses on each company's speciality and delivers on a daily basis.

We started to re-structure in a dark room with a lot of white boards to ensure we get it right, then we re-structured with a tender process and new contract structure for each supplier. This was all completed with a new IT

platform called SWIFT (supplier web interface for transport).

Tell us about any major lessons you have learnt since becoming Head of Engineering

Probably the biggest lesson is that we are on a journey to continuously improve and we never reach the end. You have to be patient with strategy and have the long-term vision.

Name one thing you would like your customers to do differently

On the hopefully very rare occasions when problems do occur, not to presume VTG wagons are guilty before the evidence is concluded.

What would you be if not an engineer?

According to my psychometric profile I should be a teacher but I think I would have liked to be a Doctor or Dentist.

And finally, any observations about your sector, your role, people you deal with etc?

Railfreight is a great sector to work in but, we need to ensure we are not the 'poor relation' to passenger trains, and to keep campaigning to take lorries off the road to reduce the traffic congestion that's all of us. To this end Railfreight needs so much more help from the Government, for example central distribution hubs and total logistics solutions. A lot of good people are applying pressure in this direction but sometimes unfortunately progress can seem very slow.



HS2 materials removal needs collaborative approach

High Speed Two (HS2) is the planned new high-speed rail network connecting London with the West Midlands, Manchester and Leeds. During its build millions of tonnes of excavated material – significantly more than that generated by Crossrail – will need to be moved from the sites along the route. But with demand for box wagons at a high, how is that going to be accomplished?

The HS2 plan says the high-speed line is to be built in two stages. Phase one is a 225 km (140 mile) route from London to the West Midlands due to be constructed by 2026. Phase two, from Birmingham to both Leeds and Manchester, would be built by 2033.

This is good news for engineering companies.

HS2 will provide the sector with a huge boost, generating £8.6 billion of major civil engineering contracts in phase 1 during which there will be 46 km of tunnels and 74 km of cuttings created.

Which will leave some 132 million tonnes of phase 1 excavated material to be disposed of.

How it is to be moved is a matter that needs attention now.

According to Ian Shaw, VTG's Sales and Marketing Director, the experience his company gained during the building of Crossrail suggests that the rail freight industry is more than capable of meeting HS2's project goals. However, whilst estimates vary, it could need a fleet around 400 box wagons just to remove the excavated tunnelling spoil as well as other wagons to supply inbound materials such as aggregates, tunnel segments and track panels into work sites during the project.

No single company is likely to have 400 spare wagons to move HS2's materials, so where are these wagons going to come

from and who knows enough about rail freight to make it happen?

VTG certainly does.

The multi-national wagon lessor is the UK's number one supplier of box wagons for spoil movements, much of this from tunnelling activities, most recently during the Crossrail project. VTG's wagons also played a major part in the construction of the London 2012 Olympic site as well as many other major infrastructure projects.

During the building of Crossrail eight tunnelling machines excavated a total of 3.4 million tonnes of material, over 90% of which was moved from site by rail – much of it in VTG wagons. Ian adds: "VTG understands the key role that rail plays in these major projects and the importance of not only providing the right wagons for the job but also in ensuring fleet availability levels are maximised in this most arduous of activities. We work closely with customers and suppliers to plan the correct maintenance at the most appropriate times to ensure the wagons fleet is available where and when required. One of the most vital things to understand is that once the tunnel boring machines start working it's a 24/7 operation and the spoil produced has to be moved without delay.

Although that project is more or less complete and the movement of excavated mate-

rial has ceased demand from elsewhere for VTG box wagons, a large part of its construction sector fleet, remains close to 100%.

And that's before HS2 digs its first hole in the ground.

"No one organisation is going to make this work on their own," said Ian. "What's needed is a collaborative approach involving ourselves, the freight operating companies and the main contractors involved in phase one as well as the HS2 project team themselves.

"As well as synchronising the future availability of our existing fleets with predicted demand, at this point in the project there is also time to look at alternatives such as repurposing redundant coal wagons or new build. Assuming all goes smoothly, an order for new or repurposed wagons placed now could see them available for traffic in between 15 to 18 months' time."

Ian concluded: "VTG would like to see a collaborative approach to this discussion involving the consortia, the freight operating companies, government and other key opinion formers.

"It's too important to be left unresolved."



VTG's new JNA box wagons.

Crossrail's tunnels – VTG's experience

Working closely with Crossrail's project management and rail freight hauliers, VTG's fleet of box wagons were employed in taking spoil from the tunnelling operation and moving it to Northfleet in Kent. From here the material was loaded on to barges and moved to Wallasea Island, Essex where it was used to create an RSPB nature reserve. In total 1,528 barge shipments delivered 3 million tonnes of excavated material and nearly 80% of all Crossrail related material was transported by rail and water, removing approximately 150,000 lorries from London.

The network of new tunnels to carry

Crossrail's trains was built by eight giant tunnel boring machines. Each tunnel is 21 km (13 miles) long, 6.2 metres in diameter and up to 40 metres below ground. They weave their way between existing underground lines, sewers, utility tunnels and building foundations from station to station at depths of up to 42 m.

The machines were operated by "tunnel gangs" of 20 people, working in shifts around the clock to construct the tunnels, carving out around 3.4 million tonnes of earth, over 90% of which was removed by rail, much of it in VTG wagons.

Investing in the future

High Speed Two (HS2) is a massive project that will slash rail journey times between London, the Midlands and the North of England.

Once complete, it will take trains travelling at speeds of up to 250 mph just 67 minutes to travel between London and Manchester instead of the current 127. London to Glasgow will be reduced from 271 minutes to 220.

HS2 is said to be one of the most expensive single peacetime project ever attempted by a UK government. With an official total of £55.7 billion the rail project dwarfs the cost of the Royal Navy's new aircraft carrier (around £7 billion) or the Millennium Dome (£1 billion).

VTG – Santa's big helper!



©Keith Skipper

The Christmas season is, for most, a time for celebration and, hopefully, some well-earned relaxation time.

For VTG it includes the annual challenge to satisfy the increase in demand for its wagons to bring goods into the country through ports such as Felixstowe and Southampton.

It's usually around August that demand starts to grow for VTG's container carrying Megafret or Ecofret wagons to import goods into the UK for Christmas.

However, it was probably as early as December last year that companies began to identify what's going to be tucked under our

trees or slipped into our stockings this year.

Stores and outlets will have spent months planning and making decisions on what exactly they want to offer to the public this festive season. Once agreed, orders will have been placed for all manner of items, many sourced in the economic powerhouse of China.

If you ever had any doubt about China's capability to produce the goods the world wants, and that much of the UK's manufacturing base has disappeared, take a look at www.made-in-china.com

It's a huge site offering the commercial buyer thousands and thousands of pages of goods that range from agricultural machinery to zipped food bags and it would appear to include literally everything in between including 12,439 jeans-based items and countless thousands of toys, items of garden

furniture and sporting goods to name but a few.

Wholesale goods are purchased and loaded into predominantly, 40-foot containers and sent to the UK on ships not dissimilar to the one pictured above. It's the CSCL Globe arriving at Felixstowe on its maiden voyage to the UK a couple of years ago.

Approximately 25 per cent of the containers it holds would have moved from the port on train loads of wagons to distribution hubs around the country for onward delivery by rail or road to the end customer – an occurrence repeated day after day throughout the year.

Imagine the impact on the environment if they all left by lorry.

Thankfully the economic advantages offered by VTG's Ecofret, Optifret and Megafret wagons make rail a viable alternative.

Multimodal – join us

VTG will be joining other Rail Freight Group members at the Multimodal 2018 exhibition which will take place at the NEC, Birmingham between May 1st and 3rd next year.

The RFG is hosting the first ever "Rail Freight Pavilion" which, as well as VTG, will showcase other organisations active in the sector including Colas Rail, Direct Rail Services, Freight Industry Times, GB Railfreight, Pauley, Rail Freight Group, Russell Group, Victa Railfreight and, of course, VTG Rail UK.

In line with the main theme of Multimodal, VTG will be focussing on its comprehensive Intermodal fleet offering, but our team will be on hand to discuss wagon your requirements relating to any sector of the rail freight market.

We look forward to welcoming you to the VTG stand during the show. If you would like to arrange a meeting with a member of the VTG team to discuss a particular project or topic please call Caitlin Lippitt on 0121 421 9198 (or email caitlin.lippitt@vtg.com) to make an appointment.

Christmas cheer

We will give to charity the money saved by having an e-card.



This year we are supporting
TACT (The Adolescent and Children's Trust)
CHECT (Children's Eye Cancer Trust)
Greyhound Trust
MND – Motor Neurone Disease

Wagons up close!

Maria Connolly's Service Delivery team joined Russ Campbell, VTG's Senior Fleet Engineer, for a wagon familiarisation day at Long Marston in September.

Maria explained: "Although we work with the wagons operationally on a daily basis, we rarely see them 'in the flesh'. This was a good opportunity for us to get up close and personal with a variety of wagons.

"We also looked at stored wheels and bogies. It was very interesting to see the various bogie types in close proximity.

"We all enjoyed our day, finding it not only informative and beneficial but also a good opportunity to do a bit of team building."

