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Welcome to Rimaster

Rimaster is a leading supplier of cable harnesses, electrical cabinets, electronics, and cabs for special vehicles and industrial systems.

We are a global group with origins and head office in Rimforsa, Sweden. Rimaster today has over 1,150 employees operating in ten companies around the world

We have organizations for sales, design, development, and production in Sweden, Poland, Belgium, France, Germany, China, and Serbia.

Welcome to our world of Simplicity.

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We continue to build capacity!

As we enter a new decade, we can confirm that the 2010s have been the most expansive decade in Rimaster's history. We have had the privilege of experiencing strong growth together with our customers, both in terms of sales and the number of employees. We have established new production facilities and sales units and have managed to maintain growth without losing control.

So, what can we expect in the future? Instead of fully entering the consolidation phase, we have chosen to listen to our customers' requests for additional capacity in terms of development, production, and new technology. In this issue you can read about our continued capacity expansion and our investment in overmolding. The latter will provide us with completely new opportunities for meeting our customers' demands for high-quality and customized solutions offering higher efficiency and reduced delivery times. We have also identified two trends that we believe will guide the development of special vehicles in the long term - conversion to electric and hybrid systems and autonomous vehicles - and talk more about the demands these will place on the development of electrical systems.

In the short term, we believe that the market will level off. However, this is

not something that will affect Rimaster's willingness to invest and development plans. We are in the privileged position of being able to cooperate with long-term customers, many of whom are world leaders in their segment. We want to prove we are worthy of this trust by offering continued development of our expertise in system design and production capacity. The result is spelled quality.

A big thank you to our employees and customers for good and inspiring cooperation over the past year. Welcome to continued development for the future together with Rimaster!

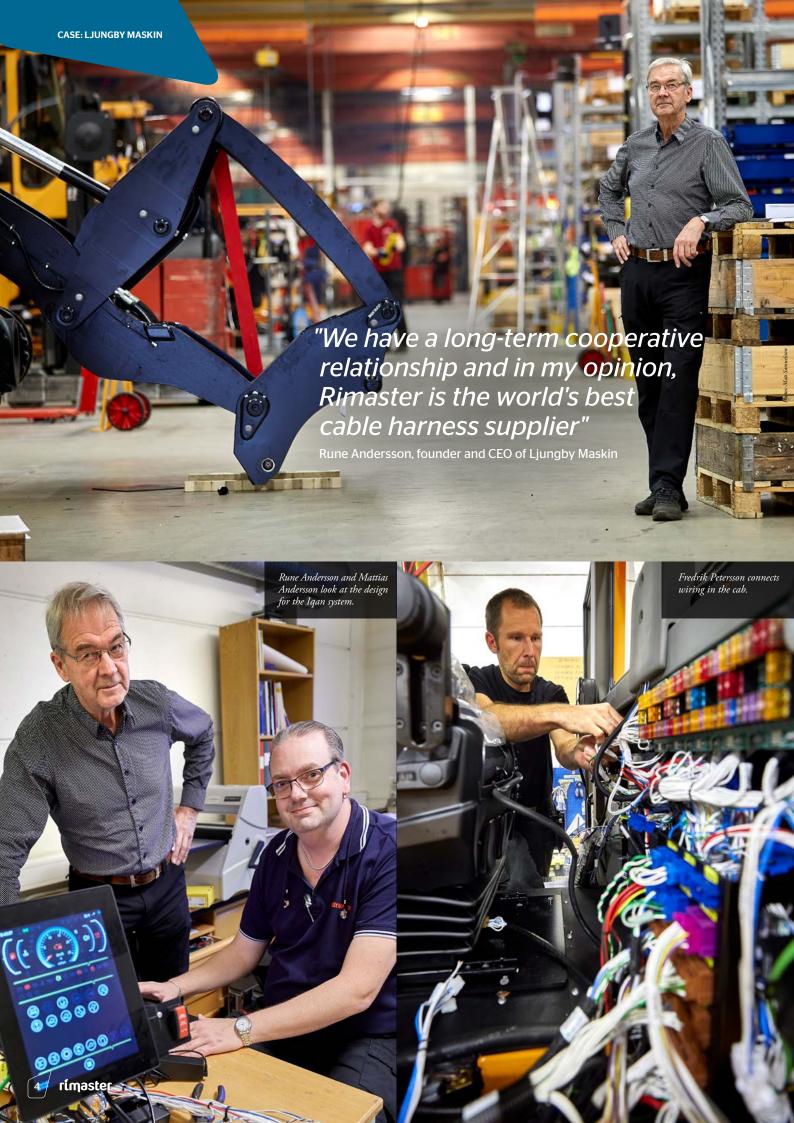
Tomas Stålnert, CEO Rimaster Group







Wheel loaders have been manufactured in Ljungby in Sweden for almost 40 years. The wheel loaders from Ljungby Maskin are known for their flexibility, which places the customer at the center. The next generation of machines is now being launched, developed in cooperation with Rimaster.





Mattias Andersson and Bengt Johansson are going through the functions of the electrical system in a machine that will soon be delivered.

Ljungby Maskin is the Swedish manufacturer of wheel loaders for tough jobs. The machines are characterized by a solid design and long service life. The basic idea is to offer customers great flexibility in terms of design, thereby ensuring high productivity through both functionality and reliability. Ljungby Maskin's wheel loaders also stand out through their larger engines, cab suspension for increased comfort, and greater steering angles, which results in a nimble machine.

Machines unique to customers

Many of Ljungby Maskin's customers have specific requirements regarding the machine and want it to be adapted to their specific needs. These include customers handling active products such as salt, fertilizer, pellets and the like.

"We make machines that are unique to customers and almost every wheel loader is made entirely according to the customer's wishes. This places great demands on our engineers' expertise in areas such as design, mechanics, hydraulics, and electronics. Our machines are constantly under development, often in close cooperation with customers. In this way, many practical solutions have over time also become part of the standard design," explains Bengt Johansson, Development Manager at Ljungby Maskin.

Completely new control system

The intensive development work also means that Ljungby Maskin chooses its cooperation partners with care. The relationship with Rimaster has now progressed to the second generation of machines and includes both the development and supply of wiring.

"We started our cooperation in 2005, in conjunction with the development of the previous generation of wheel loaders, and

"The system is specifically designed for this type of special machine, which makes it extremely functional"

we have been working together ever since. When the time came to develop a completely new machine that meets Tier V emission standards, we naturally turned to Rimaster Development for help," says Bengt Johansson

The machines that will be fitted with new engines comprise sizes 9-30 metric tons, L9-L30, and in conjunction with the conversion, Ljungby Maskin has also chosen to change the control system. After having previously used DASA, the company has now switched to IQAN.

"The technology has developed rapidly in recent years and we therefore wanted to take the opportunity to modernize the entire system and thus further increase functionality and reliability. Rimaster's expertise has been valuable in this work. We have had a close dialog where Rimaster has helped us realize our thoughts and ideas, from solutions to finished wiring."

riFuse provides flexibility

Another major change is the implementation of riFuse, which is Rimaster's proprietary digital control unit for electrical systems.

"The system is specifically designed for this type of special machine, which makes it extremely functional. The new electrical system includes three riFuse units for increased opportunities for seamless customization," says Daniel Brolin, Technical Manager at Rimaster.

Bengt Johansson sees several advantages.

"This way it is possible to efficiently include and control work lights and a number of other functions that require a lot of power. In the past we have often had to rebuild the system for customers because of the lighting functions. With riFuse, the customer can choose between different high and low beam functions via the control system display and we do not need to build them into the system itself. This gives the customer flexibility and increased choice."

The new machines entered production in fall 2019 and were immediately in demand. Some 70 customers were waiting in line even before the start of production.

Long-term relationship

Since Ljungby Maskin is a relatively small company with great flexibility and short decision-making paths, new design solutions can quickly be put into production.

"From this perspective, the relationship with Rimaster Development is important. To be honest, we would like to get even more from them. This is why we welcome the fact that Rimaster is now expanding their capacity further," says Bengt.

The machines are manufactured on site in Ljungby and the engines are supplied by Agco/SISU Diesel and Scania. Sweden is Ljungby Maskin's largest market, but exports are increasing steadily. Today, the company has its own subsidiaries in Denmark and the Netherlands, as well as resellers in several other European countries.

For a company with such a fast pace of development, long-term and trusting relationships with sub-suppliers are crucial," says the company's owner and CEO, Rune Andersson.

"We have a long-term cooperative relationship and in my opinion, Rimaster is the world's best cable harness supplier."

RIMASTER IS READY!

Expanded capacity meets customers' needs in all markets

Following extensive investments in development and production capacity in our markets, we are now ready to address challenges from new and existing customers.

"In the past year, Rimaster's production capacity in Europe has expanded significantly.

This means that we can offer our customers a high level of availability and great choice regardless of geography," says Pernilla Norman, Executive Vice President of Rimaster.

Competitiveness in Central Europe

In December 2018, we commenced production at the new facility in Serbia. The factory is located in central Serbia, around 16 km south of Belgrade. A year on, production is fully up and running and we are now investing further.

"We are already building new premises and this investment is an important part of our expansion in Serbia. At the moment we have 90 employees, and the goal is to grow further as new customers and assignments flow in."

Construction in Serbia has also freed up capacity at Rimaster's production facility in Poland.

"In our Polish production facility we have increased production significantly. We have been established here for more than 20 years and can offer extensive local expertise and experience. Rimaster Poland has a well-functioning supply chain in the High-Mix Low-Volume area, which is highly appreciated by customers."

"We have managed to build strong development capacity despite tough competition"

Investments in Sweden

The capacity expansion also includes Rimaster's Swedish facilities. Following investments in larger premises and the installation of a new laser cutting machine, Rimaster Cab & Mechanic is a highly efficient production plant for customized cabs in the High-Mix Low-Volume segment. The expansion of the Söderhamn facility is now completed and capacity has increased both in terms of premises and equipment.

"Instead, we have now started the expansion of new production facilities in Rimforsa, which will increase the production area by 30 percent. This is being done in parallel with our investments in overmolding and injection molding to meet customers' needs for molded connectors. But we are also preparing for an increase in our production of cabinets," says Pernilla Norman.

Growth in development

Demand for Rimaster's development expertise is growing strongly in all markets, and therefore new investments have been made to meet customers' needs locally, according to Rimaster's proximity concept.

As of fall 2019, we are able to offer our customers local development expertise in both Rimaster Belgium and Rimaster France, which is a valuable addition to our combined and growing development expertise in Sweden.

"The fact that Rimaster attracts valuable development expertise is a good sign. For our customers, many of whom do not have core competence in electrical systems inhouse, it is extremely valuable to have access to skilled designers. We have managed to build strong development capacity despite tough competition - and this is something we are very proud of!"



Pernilla Norman, Deputy CEO



Stefan Westelius

Design Engineer, Söderhamn

What will you be doing at Rimaster?

Design and develop wiring and provide technical solutions for special vehicles and machines. I have previous experience of product development in mechanical engineering from the sawmill and contracting industries and the glass molding industry. Industrial electrician training and Bachelor's degree in Industrial Design. For the last nine years, I have worked as a mechanical engineer. Previous products I have designed and been involved in developing are glass molding machines for Emahart Glass, sawmill machines for USNR, hydraulic quick-release fasteners for SMP, and parts and training machines for Nordic Gym.

Why have you chosen to work at Rimaster?
Rimaster is a successful and family-owned company with interesting challenges that allow me to work both locally and globally. I have a great interest in technology both professionally and privately and look forward to producing designs and being part of the Rimaster family.

Ying BanDesign Engir

Design Engineer, Söderhamn

What will you be doing at Rimaster?

My tasks are to design wiring and electrical systems for special vehicles. I previously worked as an economist in China - since I came to Sweden, I have trained as an electrical engineer and worked as a consulting electrical engineer in the mining sector and heavy industry.

Why have you chosen to work at Rimaster?
Rimaster is really specialized in its products. I like that there is such a close interaction between development and production, because it gives me the opportunity to gain deeper understanding of electrical design. Furthermore, I am impressed by the corporate culture at Rimaster and feel welcome and accepted. There is a strong feeling of family and at the same time the company has an international platform with great development opportunities. I look forward to varying assignments from different customers and know that I will enjoy opportunities for both breadth and depth in my work.



We are now strengthening our development resources with new employees around the world.
Regardless of the market, you can receive support from skilled staff for your development process
- locally and easily!

Benoit Terezol

Development, Rimaster France

What will you be doing at Rimaster?

I will work with development and project management with responsibility for the development of wiring, including in the form of 3D modeling and diagrams. I have 15 years of experience from Volvo Trucks and during that time I expanded my competence in several areas - including electricity, mechanics, and molding. I like to work creatively and have an open attitude, while also being meticulous, qualities that I hope customers in our French market will appreciate.

Why have you chosen to work at Rimaster?
I look forward to being involved in developing the development services at Rimaster France. Development work for special vehicles is fun

and challenging because you get to work with so many different types of customers and products, which will also help me develop professionally. In addition, I like the fact that Rimaster is a family-owned company; in Rimaster you are never just an employee number!



Bart Maes

Technical Sales Manager, Rimaster Benelux

What will you be doing at Rimaster?

I am going to be working in both sales and development and have more than 15 years' experience of developing agricultural vehicles and towed equipment. In my customer relationships, I always use my technical expertise to find solutions and improvements for the customer's end product. I will be involved in supporting development and in processing customers' data or undertaking new development, and will also provide support for customers who do not have their own development department or feel that they lack sufficient experience in this field. My goal is for the customer to feel that we are always on hand and able to solve their potential problems in a simple and convenient way. I want to create long-term relationships.

Why have you chosen to work at Rimaster?

Sometimes you have to get out of your comfort zone to grow as a person - and Rimaster, which is a family-owned company, felt like home right away. Working at Rimaster gives me the opportunity to work in many different areas with new challenges in different market segments. It is absolutely impossible to get bored.



Rimaster enters cooperation with Optiqo

Rimaster has entered into a new, exciting cooperation agreement with Optiqo Sweden AB. The assignment includes prototypes and circuit boards for a display unit containing a paper-thin E-Paper-Display whose energy consumption is minimal.

Optiqo Sweden AB is an innovative market leader in Facility Management and offers web-based management tools for time and quality control. It is an international business with customers in 12 different markets and it can be applied to property management in many different industries.

On behalf of Optiqo, Rimaster has built the prototypes for a display card used in the product Optiqo Qlvr Box. The display on the card is a so-called "E-Paper-Display", a paper-like and compact display that consumes minimal amounts of energy - virtually none at all when the display is not updating itself.

This particular product is usually located in public toilets, for example in connection with restaurants, airports, and other public places. The product replaces the traditional cleaning list that staff fill in by hand each time they clean. Instead, they just touch their card against the device to log the cleaning in the cloud. The property owner can see whether and when the toilet has been cleaned. The unit also has a sensor that registers the number of visitors, which makes it possible to optimize cleaning intervals for best the hygiene and cost-efficiency.

Rimaster has built the prototypes for version 3 and an upcoming version 4. We also supply the circuit boards for version 3, which is currently in production.



NEW IN ELECTRONICS

New Key Account for electronics

Joakim Gunneriusson is a new Key Account Manager specializing in electronics. Joakim is trained in engineering, physics, and mathematics and has a background as a high school teacher in these subjects. He will now be putting his knowledge into practice, together with customers who want to further develop their products in the field of electronics.

"I have extensive technical expertise and a passion for technical problem solving - and I like things to be neat and tidy," says Joakim, who believes that his considerable knowledge in the field will be of benefit to customers.

Joakim will also work closely with Conny Nyström, Rimaster's Key Account Manager in wiring and electrical systems, in order to ensure that customers receive seamless total solutions.

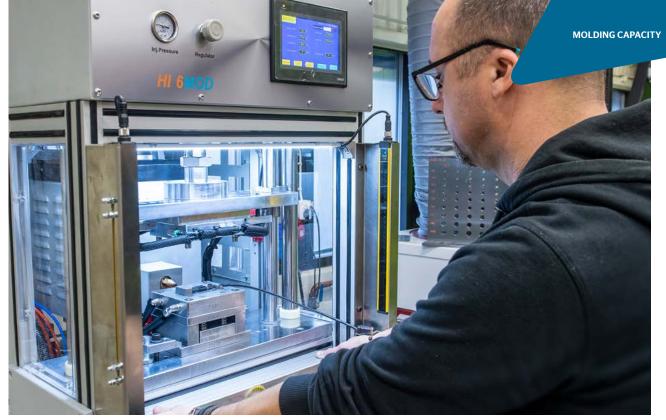




The development is clear. Rimaster's customers are quality conscious and prioritize tight and robust systems that can withstand vibrations. This is why we are now investing in new overmolding capacity. "For us it is natural to be able to offer high-performance and customized products," says Julien Fambrini, Managing Director of Rimaster France.



Julien Fambrini



The new overmolding machine was commissioned in Rimforsa in November.

Rimaster invests in overmolding

As special machines become increasingly complex, the investment value increases. This means an increased focus on productivity and elimination of downtime - and ultimately high-quality expectations regarding components, according to Julien Fambrini.

"Here at Rimaster we have extensive experience of heavy special machines for tough environments. We know what expectations our customers have and we know what the electrical systems in these machines must be able to do in everyday life."

Optimal customization

Rimaster's production unit in Rimforsa already performs injection molding. This fall, a new facility for low pressure die casting, often referred to as overmolding, is being installed in order to meet customers' needs for small series production.

The technology is ideal for all types of machines that work in harsh environments and have high requirements relating to tightness for components, including connectors. Now that we have this technology in-house, Rimaster is able to offer overmolded,

"By undertaking development and manufacturing in-house we are not only becoming more proactive - we are also able to optimize customer values"

customized connectors with the right cable lengths, which results in improved cost efficiency, shortens lead times, and is better from an environmental point of view. As a product owner, Rimaster will also be responsible for quality testing and CE marking.

"Off-the-shelf overmolded products are often expensive and lead times can be long. The integration possibilities are not guaranteed, which means that extra work is often required. For example, if we buy overmolded "pig tails" in a standard design, they come with a 2-meter cable that more often than not has to be cut to be integrated

into the solution. This should not be the case. We want to be able to control our production process ourselves according to customers' wishes, not be governed by standard solutions. By undertaking development and manufacturing in-house we are not only becoming more proactive - we are also able to optimize customer values."

In line with strategy

This gives us the flexibility to choose a method depending on performance requirements, volumes and cost efficiency. An investment that is fully in line with Rimaster's focus on High-Mix Low-Volume, according to Julien Fambrini.

"Our High-Mix Low-Volume strategy is the driving force behind the business and is the incentive for this investment as well. Our goal is to offer our customers innovative and accessible solutions across the board. From design to prototype and series production everything is developed to meet the needs of the market. This is an important step for Rimaster and we look forward to presenting our new solutions soon!"

Ditch Witch - customization together with Rimaster

In a brand-new project, Rimaster will help U.S manufacturer Ditch Witch and its dealers in Europe to customize their machines. In close collaboration, Rimaster Cab & Mechanics are developing a bespoke cab for the new JT 24 horizontal directional drill, offering unique opportunities to create customized solutions.



Ditch Witch is a true American success story. Founded in the 1940's, when a compact trenching machine was created to replace the pick and shovel for installation of underground residential utility services, Ditch Witch is now one of the world's leading developers and suppliers of high-quality directional drills, vacuum excavators and trenchers. You'll know it's a Ditch Witch by its color – Halloween orange.

"Rimaster has valuable know-how about the European market"

Customized in every detail

Developed and manufactured in Oklahoma U.S. the Ditch Witch machines are sold globally; in Europe by independent dealers, for example by JLM Scandinavia in Malmö, a company operating in Sweden, Denmark,

Finland, Poland and Ukraine. Usually the Ditch Witch machines are customized according to the local market's preferences and the individual customers' needs.

The dealers in Europe have requested a common solution for the cases when end-customers require a cabin for the driver environment. Starting with the JT 24 horizontal directional drill, Rimaster has developed a prototype of a cabin, which was displayed at the Ditch Witch distributor's



event in Barcelona in October. The next step in the project is to finalize the solution to fulfill requirements from the different dealers around Europe. This will mean a very close collaboration between Rimaster Cab & Mechanics, the Ditch Witch development facilities in Oklahoma and leading European distributors.

After evaluation, the cab will be taken into serial production at the Rimaster Cab & Mechanics production site in Sweden,

each and every cab manufactured according to the customers' preferences.

Specialists in High Mix- Low Volume

"We've developed a number of solutions regarding ergonomics, lighting, air condition, heating and cameras – giving the resellers and customers the possibility to find a perfect match. As specialists within the High Mix-Low Volume segment we have the capacity to develop a cabin that is

very flexible and customer oriented, and yet be effective in the production", says Claes Hull, managing director of Rimaster Cab & Mechanics.

Seth Matthesen, Category Manager HDD, at Ditch Witch is equally positive.

"Rimaster has valuable know-how about the European market within special vehicles and we are really looking forward to the launch of this new, innovative Ditch Witch feature with anticipation."



Two strong trends spearheading development

Sustainable development is the major challenge for special vehicles in the future. The transition from conventionally powered vehicles to electrically powered vehicles and autonomous vehicles are the hottest areas right now. Rimaster's CEO, Tomas Stålnert, and System Development Manager, Ulf Almén, talk about this development and give concrete tips for those who want to move forward.



Trend 1. Transition from conventional fuels

Tomas Stålnert: Finding new, energy-efficient ways to reduce climate impact and improve the working environment is a key issue - and my view is that the development of special vehicles and large machines is actually progressing faster than on the passenger car side. We can clearly see in the market that the future will involve either hybrid solutions or pure electric power, depending on the vehicle and application. The mining industry has been spearheading development in this area and new applications are now being introduced in infrastructure and transport. It is also important to be able to operate machinery quietly and without

emissions in connection with excavation works in inner city areas and other densely populated areas. One example is Rimaster's customer Epiroc, which, in collaboration with Northvolt, has developed fully battery-powered underground mining machines; machines for which we have delivered the wiring.

Ulf Almén: There are several things to consider in connection with the development of hybrid and electric power, not least the fact that complexity increases when you have two parallel systems. Since the cables for hybrid power usually have a large cross-sectional

area and a large bend radius, it is difficult to place them in the machines. Being able to include them in computer drawings, so-called 3D routing, already at the design stage is invaluable. Higher voltage and current levels also mean that there will be a lot of new material - and it can sometimes be difficult to find materials with the right characteristics that fit in a vehicle environment. Often the existing low-voltage system (12 V or 24 V) is also affected to such an extent that it would be better for it to be redesigned from scratch. These are three different development aspects that we at Rimaster have extensive experience of.



Trend 2. Autonomous vehicles

Tomas Stålnert: Autonomous vehicles are not just about increased efficiency - for many stakeholders it is purely a work environment issue. In mining and civil engineering projects, or in warehouses and ports, a self-propelled vehicle may be an alternative to people entering and risking their safety. We also foresee autonomous vehicles becoming an increasingly important part of automated processes in the manufacturing industry. The great challenge when leaving the entire job to the machine and controlling the processes remotely is, of course, a high level of operational and machine safety. A good control and electrical system is crucial for control. Rimaster has experience of such assignments - among other things, our cus-

tomer Toyota has developed an autonomous robot where we have helped to develop and manufacture critical parts of the charging station and wiring. This means that we have a well-functioning supply chain for products intended for this type of system.

Ulf Almén: Since there are usually more sensors, valves, etc. in an autonomous application, it is very important that the system is well designed and produced with respect to the environment in which the machine will operate. Otherwise, the system could easily become unstable and develop operating failures. It is also essential that designs include stable sensors to be able to measure e.g. angles, distance, and pressure.

We have extensive experience of designing and producing high-quality systems with a high level of reliability and which have been tailored according to customers' requirements and the environments where they will be used.





Ulf Almén

Tomas Stålnert



Proximity, both geographically and in the dialog with our customers, is part of Rimaster's DNA.

We are now taking the next step, which is to bring the problem solution with us to our customers. Our demo trailer riTrailer is coming directly to you, loaded with innovative solutions - wherever you are in Europe.

"The Rimaster Group's combined capacity and competence can be found in riTrailer: Everything from development and manufacturing, wiring and electronics to a wide range of technologies - including our injection molding and low pressure die casting offerings. We will also be able to perform qualified demonstrations of our riFuse products", says Claes Hull at Rimaster Cab & Mechanics, who has developed the trailer.

Inspiration on site

Of course, the idea is to save customers thinking time by offering inspiration and problem solving on site at the customer's premises.

"By bringing a 'Mini-Rimaster' to customers, we can also enter into a constructive and effective dialog immediately, which we know is appreciated by many customers. It is a completely different experience from a

PowerPoint presentation," says Claes Hull.

Once the riTrailer is on site, the doors are quickly folded out and the trailer is transformed into a small exhibition stand. The content will be replaced over time, but can also vary according to the wishes of individual customers.

Call us and we will visit you!

riTrailer was launched in Europe in the fall, embarking on an inaugural tour of France in November.

"But the whole point of the riTrailer is that we will come when our customers need us. If you are curious about our offering - call your Rimaster contact and make a booking, we will be on our way!"

Rimaster is a leading supplier of cable harnesses, electrical cabinets, electronics, and cabs for special vehicles and industrial systems.

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