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January 2009



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THE ONLY MONTHLY & BUSINESS AUTO LOGISTICS monthly

Boxing

causes less damage

The continued growth of new car sales in the BRIC markets could see an increase in containerisation reports *Sam Ogle*.



Paul Donaldson

Imagine shipping your finished vehicles directly from the factory to their final destination where they will arrive in perfect condition, inside and out, every time. There will be no incidence of theft, no

exposure to dirt and dust, no dents or scratches and no need for handling at any point between the factory and the destination. Just a pipe-dream? It needn't be. Because those are precisely the advantages offered by containerised transportation.

For many years, the accepted wisdom has been that cars are transported from the factory by road and/or rail, transferred to RoRo ships for overseas markets, offloaded and stored at car terminals and finally moved to the dealerships once more by road or rail. In an industry which is

still deeply conservative, few challenge the status quo, even though damage in transit is expensive to repair and difficult to avoid.

"Damage in transit sucks money out of the sector and gives it to the repairers and the insurers," says Matt Holmes, director of Poundgates Vehicle Management Services. "Based on 15 million vehicles a year in Europe, around three percent will be damaged in transit from the manufacturer to the dealer. Each will cost on average around 450 euros to repair. This comes to around two million euros a year." These figures are simply for Europe. Globally, the numbers are staggeringly high. In a difficult economic situation this is cost which the industry can ill afford.

The outlook for car manufacturing is of great importance to container shipping. Although globalisation has meant that major manufacturers have in many cases started production in the countries where they will eventually sell their cars, the transport of vehicles and component parts still



generates considerable container traffic. Car manufacturers are facing a scenario where sales in established, mature markets are falling sharply and growth can only be achieved in emerging regions such as the BRIC countries (Brazil, Russia, India and China). One consequence of the economic recession is that vehicle manufacturers are looking closely at more regularly moving cars in small batches as volumes decline.

In a country as large as Russia where vehicles often have to be transported over very great distances visibility, security and damage control become major issues. Paul Donaldson, managing director of Trans-Rak International makes a strong case for shipping cars in containers. "The only truly intermodal carrier is the container," he affirms. "There are over 30 million containers in the world and the last major product to be containerised is probably

the automobile. Containers can carry any product and allow for door-to-door delivery. The container makes car transport simple, safe and secure. You can store many more cars per acre in containers than you can on parking lots."

Trans-Rak International, based in the UK midlands, has been trading for some six years but Donaldson's business partner Martin Clive-Smith has been involved in container design for nearly 30 years. "We reckoned that the market was moving towards finding ways to make cars more secure in transit and so we decided to design

something that went inside a container," says Donaldson. "Carrying cars in containers is not new but carrying multiple cars in containers is an innovation. We developed the first 40ft., high cube, Trans-Rak system just over three years ago which we built and sold to Maersk."

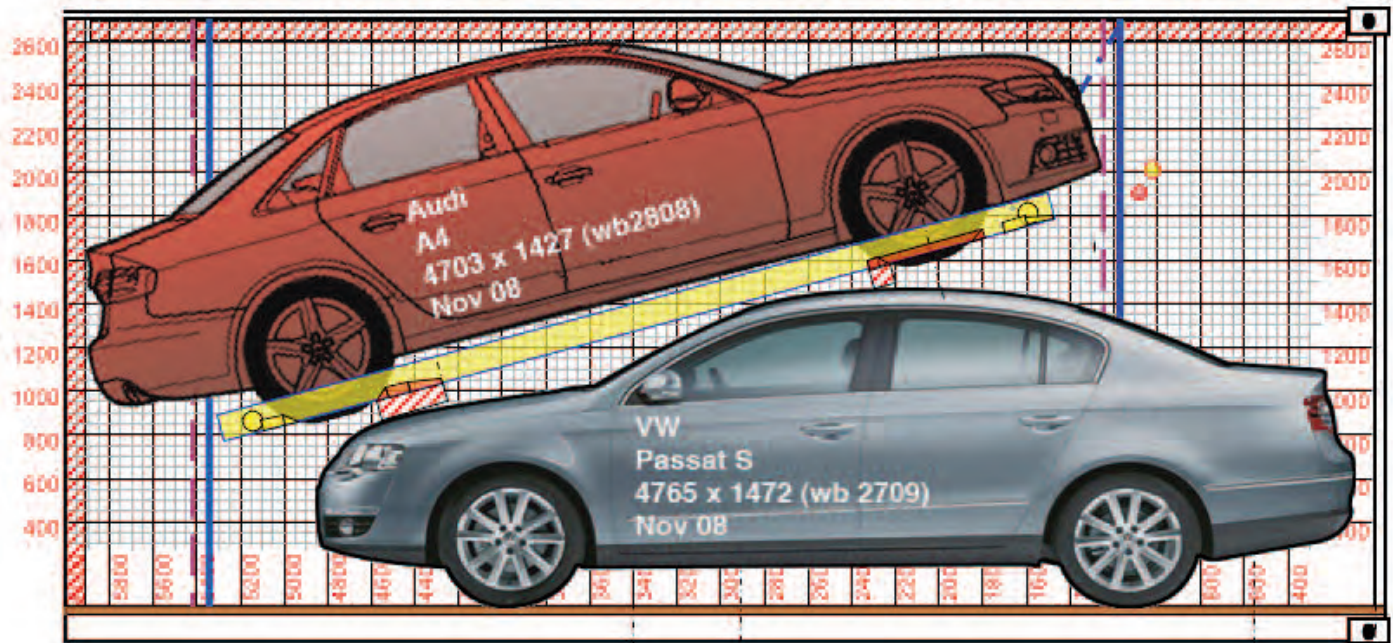
Trans-Rak is a simple, fixed frame system which is fitted into 20ft, 40ft, 45ft, 53ft and pallet wide ISO containers and which ensures the safe, simple

and secure transportation of vehicles in those containers. The system is easy to operate; cars can be loaded with no special skills required. Trans-Rak adjusts for all car shapes and can be raised into the roof of the container to allow for backloading with general cargo, one of its key selling points. "You can't put general cargo on a RoRo ship," says Donaldson. "At the moment, there is an awful lot of fresh air being moved around the world."

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Paul Donaldson

There are, admits Donaldson, advantages in the more traditional form of transport. "If you are moving vehicles from Japan to Europe, 5,000 at a time, from quayside to quayside, the RoRo ship can handle that mass movement very well. Today, however, the markets are such that it is not always mass movement into one area which is required. The emerging markets of BRIC (Brazil, Russia, India, China) are areas where the vehicle manufacturers are now moving their plants to build cars to service those markets. RoRo ships cannot put into every port or every quay, but container ships go



all round the world all the time. A container ship can carry 8,000 or 10,000 boxes with a combination of every type of goods.

“The vehicle manufacturers we talk to now and the shipping lines who do business with them are saying that they don’t want to move 5,000 cars in one go, but rather 500 vehicles here, 1,000 vehicles there and 200 vehicles somewhere else. We currently have our system on a shipping line moving cars out of China; 150 vehicles out of Shanghai into Georgia. There is no RoRo port they can put into. They have to be containerised otherwise the Chinese car company cannot sell into this new emerging market. The advantage of container ships is that they sail every single day into every single port. The disadvantage is that you are not moving a mass of cars. I think there is room for both to be involved in this business.”

One thing the BRIC countries have in common is that they are all enormous in geographical terms. “In the UK, you are probably never moving cars over a distance of more than perhaps 100 miles,” says Donaldson. “If you arrive with a RoRo ship in Vladivostok, how do you get your cars from there to Novosibirsk or central Siberia? You will

have to move them by rail, and you are not going to do it on open rail cars. You are going to containerise them. From Vladivostok to Moscow is 9,000 kilometres. By road it would take weeks even if you could manage to get there at all. It’s the same from north to south in India where you are looking at around 2,000 miles. In Brazil, where there is a big Ford plant and a big Toyota plant and they move cars to Venezuela and to Colombia, it is eight days by road and three days by train. From northern China to southern China would take an eternity by road but it works by rail.”

In today’s recessionary environment the car manufacturers are moving less vehicles, but they want to move them more quickly into their markets and sell them. Over the last few months, according to Donaldson, there has been a surge in the number of manufacturers wanting to put their cars into containers. “We have just introduced the first 400 or 500 units of the Trans-Rak system into an Indian rail company which transports cars from northern India to southern India. Previously, they were moving them on open rail cars and they were getting damaged and having bits stolen off them. It was a real problem. When you put them in

a container, no-one knows what's inside."

One of the consequences of the slowdown in retail sales is that cars are spending longer in storage at ports and car terminals. Port operators prefer containers because they are stackable. "On an acre of land you can park around 250 cars," Donaldson points out. "If you put them in containers, four to a container, and stack them five or six high you will get 2,500 cars on that acre. In ports like Vladivostok, ports in Finland, even ports in America such as Long Beach, there is a great sea of cars sitting on parking lots just waiting to be sold. Storage charges are eating up a large percentage of the profit margin on those cars. The current economic difficulties will concentrate the minds of the vehicle manufacturers and the shipping lines on the fact that they can't continue the way they are."

UK-based manufacturer Lotus was one of the pioneers of the containerised transport of new cars. Having had enough of the damage inflicted on its cars in transit, Lotus now uses the Trans-Rak system to distribute their cars worldwide. They go from the factory, where they are loaded by a Lotus employee, to the final destination where they are unloaded by a Lotus employee, and they are not touched in between.

"You can put five Lotus cars in a container," says Donaldson. "It takes about 35 to 40 minutes to load, seven or eight minutes per vehicle, which is no different to driving one onto a ship. Unloading takes even less time because you simply drop the ramp and drive them off. It takes 20 minutes. You are taking the car all the way from the factory. You are not putting it onto a car carrier, then transferring it to a ship, then offloading it into a compound. Typically, a car will be handled 15-20 times between the factory and the dealership if it is transported by RoRo ship. By the time it gets to

the customer it's almost secondhand. Our alternative is two moves – one into the box and the other out of it. You are handling five cars at once in a hermetically sealed box and, when they reach their destination, they are in the same condition as when they left the factory."

The multimodal nature of the container, its suitability for road, rail and sea, is particularly useful in today's market. "Shipping line freight rates are dropping like a stone," says Donaldson. "Twelve months ago, the container rate from China to Europe was 2,500 dollars. It is now 1,100 dollars. Shipping lines and logistics companies are now looking for new types of cargoes and putting four or five cars in a container, especially when you can use that container for return general cargo, seems like a very attractive commercial proposition.

"It is the intermodal nature of the container which is most important. The use of containers will grow because they are more convenient. At the moment they tend to be 20ft. and 40ft. We are now developing into 45ft. and 53ft. The 53ft. container is used in North America where they are looking to move six cars in one direction and general cargo in the other direction. In Europe, we are working very closely on projects with ATG and Deutsche Bahn. They are looking at containerisation because they want to move into new markets and they know that open rail cars will cause problems."

The advantages of the containerisation of new cars in terms of damage reduction are unarguable. The ability to facilitate general cargo backloads is also an enormous plus. It remains to be seen whether more and more vehicle manufacturers, shipping lines and logistics service providers find the advantages too hard to resist. 