Boxing above their weight

Suppliers of car container equipment are gaining ground by providing fast, flexible shipping options in specific global markets. **Anthony Coia** reports

Shipping vehicles by container has long been an option for carmakers, although on major volume lanes it can rarely compete with the scale and loading efficiency of pure-car-and-truck carriers and ro-ro vessels. Shipping in a container, after all, means that vehicles must be loaded individually into boxes, in systems that often involve the use of forklifts or other loading equipment, and pose damage risks when drivers open doors in the containers. For carmakers on medium or large trade lanes, it is not worth the hassle.

However, the market for containerised vehicle logistics is gaining ground, thanks in part to its flexibility and speed in shipping to certain markets, its versatility across transport modes, as well as its declining price. A number of rack, cassette and loading systems have also simplified the loading and unloading process in many instances, helping containerised car shipments to grow in certain segments.

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Rutger Noorlander, commercial manager for Netherlands-based Unit 45, which offers a speciality frame for moving vehicles, claims that containerised vehicle transport sales rose by around 20% in the first half of 2016 compared to the year before.

As ro-ro carriers tend to be equipped to supply large, high volume markets, their service to smaller markets is often far less frequent than container lines. Liner services may therefore reduce the lead-time for smaller shipments because of their broader service options.

Containerised shipping has also become less expensive thanks largely to problems in the wider carrier market. Richard Cox, chief executive of Kar-Tainer International, which provides car-holding cassettes, points out that freight rates have been dropping because of an overabundance of container vessels. "For example, from Europe to the Far East, freight costs are less than one-half compared to one year ago," says Cox, whose customers on such routes include Daimler and BMW.

Another driver of growth, at least among a number of rack and cassette manufacturers, has been the potential to move semi-knockdown kit (SKD) bodies in specially equipped containers. Companies such as Trans-Rack International, Kar-Tainer and Unit 45 have extended services or adapted equipment to handle a number of such trade lanes.

Racking them up

Among the largest suppliers of containerised vehicle shipping equipment is UK-based Trans-Rak, which offers its R-Rak system, a specialised, removable rack that fits into any high cube container.

Paul Donaldson, managing director, says that besides holding two vehicles per 20ft container and four per 40ft one, the R-Rak accommodates six vehicles per 45ft container and six larger vehicles in a 53ft unit. The R-Rak packs up into a small pod which can be relocated, fitting up to 60 pods into a 40ft high cube container.

The R-Rak is used across a number of logistics providers and carmakers on a number of global export routes, as well as increasingly within and across vehicle flows in a number of Asian countries.

Another method is a cassette-based system, such as the one that Kar-Tainer offers. For Kar-Tainer, all vehicles are loaded onto systems externally, with cassettes loaded and pre-staged outside the container, says Richard Cox. It also typically holds 3-4 vehicles, depending on their size. As with R-Raks, the cassettes are not attached to the container, so they can be used to return other freight. For every 10-15 loaded containers shipped, one container is returned with Kar-Tainer equipment.

Another racking system on the market is Unit 45's Vucaframe, which fits the entire shape of a container. Cars are loaded into the frame, which is then loaded into the container; it is designed especially to be flexible with multimodal transport.

Vucaframe offers four racks with gooseneck floors – recesses in the floor at each front end that allow the container to lie lower – and more recently flat floors as well; they are 40ft or 45ft in length and either 1,500mm or 1,700mm height. Noorlander says that these sizes can handle more than 75% of all cars currently in production. He adds that the equipment allows for much greater storage capacity at compounds compared to that of other systems because the Vucaframe can be stacked up to seven high.

Noorlander points out that one of the differences between Vucaframe and Trans-Rak is that with Trans-Rak, cars on the upper deck must be angled, and lashed from underneath, whereas with Vucaframe, the lashing is done outside of the frame. A disadvantage of the gooseneck floor, however, is less flexibility in return cargo options, though the company has improved this with its flat floor design.

We spoke to:

Rutger Noorlander, commercial manager, **Unit 45**

Richard Cox, chief executive, **Kar-Tainer International**

Paul Donaldson, managing director, **Trans-Rack International**

Christoph Seitz, chief executive, **CFR AutoDirect**, managing member, **CFR Rinkens**

Jereon van Oekel, head of automotive for EMEA, **APL Logistics**

David Horwell, founder, **Auto Box Logistics**

Electricity in a box

A number of third party logistics providers offer services for shipping cars in containers. One of the most prominent recent examples has been for electric carmaker Tesla, which has used CFR Rinkens, a non-vessel-operating common carrier based in California, to ship a share of its vehicles in containers to various locations in Europe and Asia.

According to Christoph Seitz, chief executive of CFR AutoDirect and managing member of CFR Rinkens, Tesla chose the provider in 2013 as its primary carrier to move its vehicles by container. CFR uses a racking system to load the Teslas; before using the racks, only two vehicles could be floor-loaded per container.