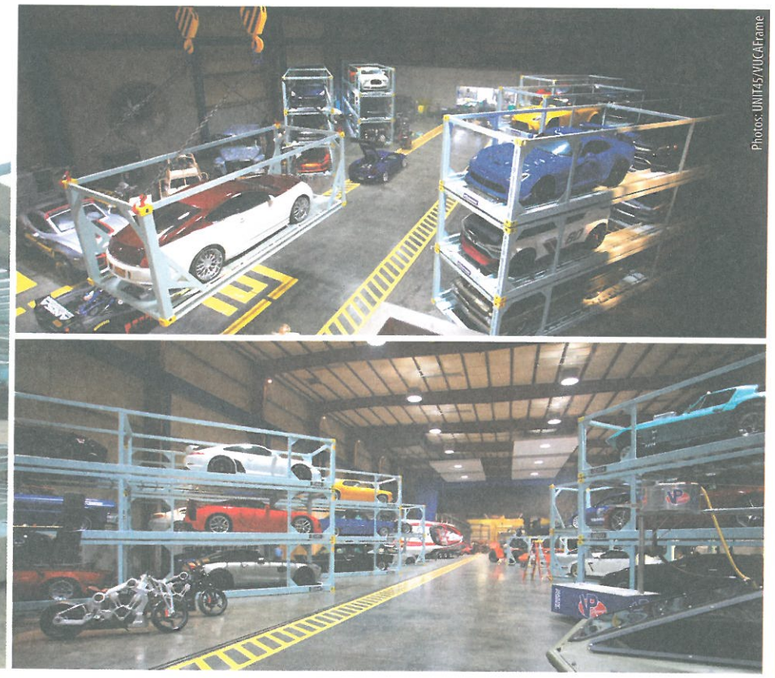
Re-framed

by Rutger Noorlander, *UNIT45's Commercial Manager*

Since its emergence, the simple yet ingenious invention of a 20-foot box has seen many modifications – high-cube, hard/open-top, ventilated, reefer, tanker, even bulk, to name just a few. However, vehicle transports used to be reserved for specialized sea & land car carriers. This may change sooner rather than later thanks to yet another container variation.

Photos: UNIT45/VUCAFrame



Photos: UNIT45/VUCAFrame

A couple of years ago Van Uden, one of our well-respected customers, asked if we could develop a frame to be used for car transportation on-board barges. After a few meetings they agreed that the frame had to meet a few requirements, namely it must be based on standard ISO shipping container dimensions; it had to be easy to use; provide fast loading/unloading of transported vehicles; as well as be approved for rail/road/sea transportation. The inquiry made by Van Uden gave birth to the VUCAFrame, a multimodal FEU/45-foot-based car frame, which we believe will bring significant cost savings and logistic benefits not only to those who deal with finished vehicles transport, but also to the entire terminal-car dealer supply chain, not least the environment.

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In the frame

The VUCAFrame comes in different sizes – FEU or 45-footers as well as 1.5 m or 1.7 m high. This makes it possible to load it onto over three-quarters of all cars currently produced worldwide. Moreover, the frame can come with or without a gooseneck tunnel; there are models with flat flooring, hence other than cars cargo (e.g. standardized pallets) can be loaded as well (10 tn of maximum payload). There's also no problem having a tarpaulin-covered VUCAFrame, which protects the cars even more against adverse weather conditions, vandalism, theft, and dirt. Last but not least, special-sized frames can be built upon request.

All of these features promise cost cuttings due to simplifying the supply chain. For starters, less people are needed to handle the cars – the car manufacturer drives his vehicles straight into the VUCAFrame and lashes them (the frame has hundreds of lashing points, while the ramp is only a few centimetres high, so every car or forklift can easily drive into the frame). Next, a track & trace device is placed on the frame and on each car. This RFID tracks the frame and its exact location which is important when dealing with high density compound storages; in combination it also tracks every single car if it's on the frame or unloaded, helping to prevent car theft. The frequency how many times a signal is sent can be adjusted as well, a handy solution for high value car transports. Alike other boxes, the VUCAFrame is stowed on-board a vessel, train (stacked two-four high if possible, e.g. in the US), or a truck (in this case even up to eight pieces) with the use of standard container handling equipment. By fewer vehicle handlings and lashings, damages can be reduced. Lastly in this regard, VUCAFrames can increase terminals and compounds' storage space by a factor of three, as the frames can simply be put one onto another, something which cannot be done with "bare" cars.

What's important, too, the VUCAFrame has the Convention for Safe Containers (CSC) certification, and can also have proper rail approvals for almost every country (all certification is thoroughly done by DEKRA). In contrast, with car trailers it happens that vehicles need to be unloaded due to different state legislations. These "cross-border issues" cost a lot of time, and are a source of drivers' annoyance. With VUCAFrame, one can easily drive from one country to another without having to change anything.

Farewell, empty mileage. Welcome eco-gains!

Because the VUCAFrame is a container – a specialized one for finished vehicle logistics, but still a container – it can be used in both directions. The FVL industry has inherently been struggling with the empty mileage issue, because car carrying trucks can hardly be used for backhaul transports of other commodities. The VUCAFrame, in turn, can also take on-board palletized freight, hence offering more versatility to logistics companies.

But it's not only about transports, the environment counts as well. Alike governments and other business sectors, the FVL industry is looking for ways to reduce its carbon footprint. In an ideal frame-based distribution chain, a car only needs to start its engine twice – at the factory and at the local dealer. This is more or less up to ten times less than how things are run today, meaning a reduction in polluting emissions by over 70%. Indirectly, many more reductions can be achieved; for instance, fewer damages lead to less repairs and handlings, hence providing additional CO_2 reduction gains. The cars are also delivered clean to the local car dealer due to the tarpaulin that is covering the frame, thus saving water and cleaning agents.

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Nonetheless, the biggest emission savings come from eliminating or limiting the empty mileage issue in the FVL industry. No empty trains and/or trucks are needed anymore to reposition all the empty car distribution equipment. While precise calculations are still pending in this regard, it is believed that the VUCAFrame can reduce a FVL company's carbon footprint in the range of 35%-50%.

All things said, we put faith in the VUCAFrame not only because it's a product that we've put on the market, but because it can change finished vehicle logistics in such a way that the industry will become leaner, safer, more efficient, and environmentally-friendlier. By the way, the frame's use can go even beyond its core business, as the VUCAFrame recently starred in the eighth instalment of the *Fast and Furious* series (*Fast 8* hits the screens in April, 2017). ■

VUCAFrame is a 2014-established joint venture between Van Uden and UNIT45 aimed at simplifying car transportation. The frame is available worldwide, has been designed and developed in Rotterdam, and is produced in China in accordance to customers' needs (colours, logotypes). For more information, check out the website www.vucaframe.com, or contact us directly via info@vucaframe.com.