

Innovators in intermodal transport

At UNIT45 B.V. in Rotterdam, the Netherlands, innovation focuses on 45ft containers for intermodal transport. The company known as “the intermodal innovator” concentrates on the development, construction, financing and delivery of containers designed to meet clients’ specific requirements. Based on the use of lightweight constructions in superior quality, its concept solves a wide range of logistical modality problems. The company’s product portfolio is fully compatible with European legislation and confirms its leadership position within a clearly defined market segment.

Because of their robust appearance, containers are often considered unwieldy and heavy. For many transporting companies, the 40ft unit seems the limit in terms of size and weight. The larger, heavier 45ft container tends to be used only for lighter cargo such as shoes or technology products. The UNIT45

concept, however, combines the best of both worlds. “While normal 40ft containers weigh 4,300 kg, our 45ft container weighs only 4,260 kg,” emphasizes Jan Koolen, managing director and shareholder. “The difference lies in the construction. Rather than wooden floors and ordinary weathering steel, we use light-



Jan Koolen, managing director and shareholder

weight flooring materials such as bamboo and laminated birch and extra high-strength steel grades.” The result is a 45ft container that weighs 600 kg less than a container this size would normally weigh. Weight is a decisive factor for transport on the road, also in view of the currently valid weight limitations, says Mr.

Koolen. “The truck, the chassis and the container are allowed to weigh a maximum of 44 t,” he adds. “In other words, if the container weighs 600 kg less, it is possible to transport 600 kg more cargo.”

Designed to conform to EU legislation EN253, the UNIT45 dry freight container offers the highest cubic capacity and payload of any standard 45ft design. The gooseneck design makes maximum use of the legally permitted maximum height. Well-positioned castings reinforced at critical points ensure ease of transshipment within each modality. The pallet-wide version ensures that europallets can be transported in an efficient loading arrangement of 33 units. The 45ft container can be handled with the same infrastructure as 40ft containers, for example spreaders, frontlifters and straddle carriers. Apart from standard solutions, UNIT45 offers a number of variations to ensure optimum intermodal transport. Short sea shipping, for example, requires a strong watertight construction, while other forms of distribution benefit from a box-type



The UNIT45 dry container, a standard unit that provides the highest cubic capacity and payload of any standard 45ft container design



The 45ft container contributes to the efficiency of road transport and is still indispensable especially at the start or the end of the distribution chain

container that can be loaded from the side. The UNIT45 curtain-sided unit features a patented base structure that provides a side aperture height of 2,394 mm between floor and top rail. Customers can choose between different types for loading/unloading from two or three sides. The first of its kind in Europe with sufficient cargo capacity to handle 33 europallets, the lightweight UNIT45 reefer container can be supplied with a built-in cooling system, providing maximum performance and excellent energy-economy. UNIT45 offers the all-electric reefer, as well as the diesel-electric reefer, which makes refrigerated transport by rail available to clients who were

unable to use it before. The use of high-quality foam in the reefer walls prevents loss of temperature inside, and the use of the best Green Tech cooling units for both diesel-electric and electric reefers results in the least-damaging emissions possible. Intermodal transport is a contribution to sustainability in itself and gives the advantage of less emissions and pollution. Rather than building more roads, bridges and railways, it makes more sense to better utilize the existing infrastructure by transporting more with fewer movements, switching between rail, road and water. There are different ways in which UNIT45 helps transport companies to reduce their own

carbon footprint. Diverse options contribute to smarter and greener transport and a healthy environment, for example the use of waterborne transport or of bamboo as a fast-growing construction material produced in sustainable plantations. "On behalf of Flora Holland, we set up the Green Rail project for the transportation of flowers," adds Mr. Koolen. "The project involved the development of our own Flora unit for 43 carts rather than pallets. Conditioned transport between China and Europe is another future-oriented project. The unit we are testing at present accommodates 33 standard europallets and can be self-supporting for up to 20

days. The results are very promising and are viewed with great interest by multinationals like HP, Acer, Dell, BASF and Volvo." The company's future-oriented designs have been patented for proprietary use. A customer portfolio that includes prestigious names in the industry such as A2B Online, Samskip, BG Freight, H.E.S.S., Transfennica, ECS, J.S.V., Valo and P&O Ferrymasters confirms its leadership position. Special features such as designs incorporating customers' colours, galvanized components and structural modifications are part of a support and service program that leaves nothing to be desired. "We may be a small business in terms



Switching effortlessly between rail, road and water: UNIT45 containers are ideal for intermodal transport



Larger volumes mean speedier transshipment, so the UNIT45ft container is a familiar sight in short sea shipping



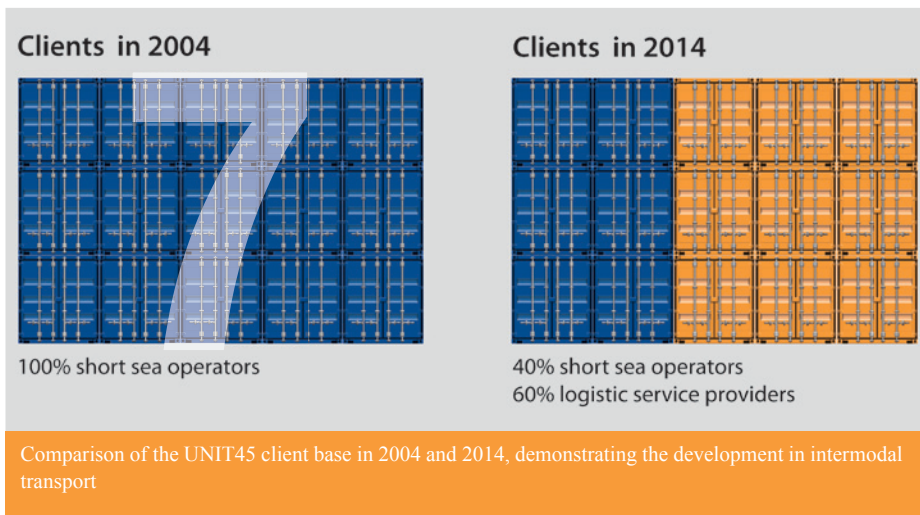
The lightweight UNIT45 reefer container, an ideal combination of aluminium and high-strength steel

of the number of staff, yet we hold a 60 to 70% market share where 45ft containers are concerned in Europe and are hoping to realize a turnover of 80 million EUR this year. Innovation has opened up new and unexpected markets and gained us the respect of big multinational clients as well as ministries in countries where transport is important.”

Founded by Peter van Dijk in 2002, UNIT45 is owned in equal shares by three investors today and has eight highly qualified employees. Production of the containers takes place in three factories in China that

work in close cooperation with the Dutch enterprise. UNIT45 invests substantially in R&D in order to live up to its reputation of excellence. The PRS Passive Refrigerator System for example is currently under development and expected to prove a revolution in cooling units. A hotel container offering accommodation for example at major sports events, an open container for up to three cars and a 168-seat stand container providing an easy-to-handle seating solution for platforms and stadiums are other creative solutions that underline the company’s enormous

development potential. Hardly surprising, UNIT45 benefits from the recommendation of satisfied customers and considers word of mouth to be one of its most important marketing instruments. The company’s rental fleet of 12,000 units can hardly be overlooked and contributes to its popularity. Major trade fairs such as the Intermodal Europe or the Transport Logistics provide welcome opportunities to present its existing product portfolio, introduce new developments and underline the trendsetting role UNIT45 has gained in intermodal transport. ■



IN BRIEF

Core Competence

Development, construction, financing and delivery of 45ft containers designed to meet clients’ specific requirements

Facts & Figures

- Founded: by Peter van Dijk in 2002
- Structure: owned in equal shares by three shareholders
- Branch offices: cooperation with three production plants in China
- Employees: eight
- Turnover: 55 million EUR
- Export: market leader in 45ft containers in Europe

Products & Services

- Development, construction, financing and delivery of 45ft containers
- Dry freight containers in different design versions
- Curtain-sided containers
- Reefer containers

Target Groups

Transporting companies, logistic service providers

Fairs & Exhibitions

Intermodal Europe, Transport Logistics and other international fairs

Philosophy

Innovation in intermodal transport

Future

- Heavy investment in R&D in order to maintain or even enhance trendsetting role in intermodal transport
- Expand operations on a global scale

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