

## **BRIEF HISTORY OF CONTAINER TRANSPORT**

**Forty years ago, on 3 May 1966, Sea-Land's container ship 'Fairland' arrived in Rotterdam for the first time. The ship loaded and unloaded 35-foot containers with its own on-board cranes. Together with three sister ships, all with a capacity of 226 containers, the Fairland operated a weekly container service between North America and Northwest Europe.**

**Ten years after the start in the United States, containerisation in Europe began from Rotterdam. Right from the start Rotterdam was the largest container port in Europe, only four years after becoming the biggest port in the world for all cargo.**

**Sea-Land did not invent the container, nor was it the first shipping company to transport them across the Atlantic Ocean. It was, however, the first to load its vessels solely with containers and start up a fully containerised transatlantic service. Sea-Land's founder Malcolm McLean is therefore generally regarded as the 'father' of containerisation.**

**In Rotterdam it was F. Posthuma, the director of the Rotterdam Municipal Port Management at that time, who saw the huge potential of these cargo containers. From 1963 onwards he built up a good relationship with McLean, ensured that the infrastructure was adapted to handle containers, and ultimately steered the traditional stevedore companies with a firm hand towards cooperation in the Europe Container Terminus (ECT).**

**From 1966 onwards a close relationship developed with Sea-Land, which was to develop Rotterdam as the centre of its European activities and its biggest container customer, with the world's first automated terminal as the basis. In 1999 Sea-Land was taken over by the shipping company Maersk. The Danes in turn also acquired their own terminal in Rotterdam (APM terminals on the Maasvlakte) and act as a catalyst in increasing the scale of container traffic. Maersk led the move from a capacity of about 4500 TEU ('Twenty foot equivalent unit', the standard measurement for containers) per ship to 6000 TEU with the launch of the Regina Maersk in 1996. Since then the shipping company, followed by all the others, is well on the way towards achieving 10,000 TEU per ship.**

**Maersk also exerts influence on activities in the Rotterdam port in other areas: following the take-over of Sea-Land it then took over P&O Nedlloyd, the most important container client at that time, in 2005.**

**During the entire period from 1966 to 2006 some 85 million containers (130 million TEU) have passed through the port.**

### **Pre-history**

Containers have been used for transport for a long time. In World War I the Americans transported their ammunition in containers to Europe. From 1928 onwards the European railways used them for door-to-door transport to facilitate the exchange between train and lorry, and in this way to improve their competitive position.(\*). The Dutch door-to-door forwarder Van Gend & Loos, for example, transported goods to and from the train, first in wooden containers and later in metal ones.

After World War II, the emphasis turned back to the sea once again. The English railway companies transported containers across the English Channel and 'boxes' were transported by shipping companies between European ports. Until the mid-1960s this type of maritime transport was still child's play in Europe and there was virtually no standardisation. In the United States, however, container transport had been going from strength to strength since April 1956. One of the driving forces behind this was the road haulier Malcolm McLean, the founder of Sea-Land.

### **America as pioneer**

McLean was a major American road haulier. On his north-south transport routes he encountered many problems because of each state's varying stipulations on the dimensions and axle weight of his vehicles. For this reason, from April 1956 onwards he used containers on a converted tanker, the 'Ideal X' with 58 containers, in a service from Newark (near New York) to Houston (Texas). Initially these containers were transported complete with chassis, but later without so that some stacking was possible.

It became a success because it was faster and cheaper than the difficult road transport. It was not long before MacLean had dozens of converted tankers and dry cargo ships, plenty of which were available from the surplus war fleet, plying the route.

The network was expanded from the east coast and included some 25 ports along the coast of the United States, Puerto Rico, Alaska, the Dominican Republic and Panama. These ports were adapted to provide more storage capacity for the containers. The ships too underwent more fundamental conversions for container transport, such as by installing bridge cranes on the ships. Other shipping companies such as Matson and American Export Line also followed the trend.

MacLean used a container 35 feet long, derived from American standard units of measurement. Since the Far East and Europe were also transporting goods by container, a more universal length needed to be developed. During tumultuous international meetings – since everyone had been developing its own dimensions – the standard size eventually agreed on was 20x8x8 feet. (= 1 TEU). Weights, the precise construction of the containers, stowing order in the holds of the ships, etc., were also stipulated. There can be no logistical development without standardisation!

Countless variants could then be made to the standard size: according to use (tank containers, open tops, refrigerated containers) and format (longer: 40 feet or 45 feet, slightly higher: 8 and 9 feet 6 inches and the European dimensions etc.).

Partly because of this differentiation, the shipping companies also introduced computerisation to organise their shipping. In the USA container transport received an enormous boost due to the war in Vietnam and its tremendous need for supplies. Compared to the USA, container transport in Europe in 1996 did not amount to very much.

### **Modification of sites**

In Rotterdam the Eemhaven district was developed, still based on the perspective of conventional general cargo. Sites with 40 to 60 metres of free space between the warehouses and the quay were standard for such cargo. However, containers require more space, and that is why an undeveloped site 170 metres deep, to the north of the Beatrixhaven, was reserved for container shipping. Initially this was used by stevedore company Quick Dispatch, which handled the first containers for Sea-Land in 1966.

### **First service**

In April 1966 the United States Lines (USL) started up the first transatlantic scheduled service with containers. However, this was still done with four partially converted ships. They transported conventional cargo together with 140 20-foot containers each week. The first ship for this service was 'American Racer'. Müller Progress at the Prinses Beatrixhaven was the stevedore for USL.

Sea-Land Inc. followed a month later with its first service of full-container ships. The first ship for the service to Europe, the 'Fairland', arrived on 3 May 1966 in Rotterdam. It set out from Elizabeth (New Jersey) on 23 April with 226 35-foot containers on board and later also called in Bremen and Grangemouth (Scotland). The 'Fairland' and its three sister ships each had two bridge cranes to load and unload the containers. Later quayside cranes were built specifically to handle containers.

Originally containers were handled by conventional stevedores such as Quick Dispatch and Müller Progress. The specialised Europe Container Terminus (ECT) was set up by five Rotterdam stevedore companies and the Dutch Railways. The ECT terminal received its first ship, the 'Atlantic Span' of shipping company ACL, on 31 August 1967 at the terminal on the Prinses Margriethaven, now filled in.

One year after the arrival of the 'Fairland', Sea-Land had transported 6,000 containers to and from Rotterdam. Now the entire port handles almost 6.5 million (about 10 million TEU) in a single year. In the entire period from 1966 to 2006 some 85 million containers (130 million TEU) have passed through the port of Rotterdam.

(\*) See <http://www.nmld.nl/showobject.php?object=1328&owner=13&lan=nl>

and <http://www.rtm-ouddorp.nl/overgang.htm> for examples