

Port of Hamburg will first benefit from the **PORT FEEDER BARGE**

Acute container congestion at ports is a growing problem throughout the world. Container terminals being the interchange between the various modes of container transport are nowadays a congestion hotspot. Many ports suffer not only from a shortage of their quayside facilities but also railway and especially road capacities have been more than exhausted affecting smooth hinterland and internal port logistics.

Within the Port of Hamburg the "Köhlbrand" bridge - the main connection between the western and eastern part of the port - is the major bottleneck for road vehicles, especially for intra-terminal transport. Any bypassing by conventional waterborne transport (e.g. pusher barges) suffers from the availability and the high costs of the huge quayside gantry cranes which are especially designed to serve the big deep sea vessels. One move by gantry crane today is more costly than the entire trucking within the port. Thus alone the conventional waterborne box transport within the port can not be competitive.

The innovative **Port Feeder Barge** is a self contained cost effective alternative to road trucking. The self propelled 168 TEU vessel is of double ended configuration and is equipped with its own 40 tonne capacity container crane. It shall ply between the various terminals in order to shift the intra-terminal box transport from road to waterway. The design concept is secured by international patents.

The first **Port Feeder Barge** is intended to be deployed within the Port of Hamburg on a quay-to-quay basis soon. A daily round-the-port-service will be offered. The operation is secured by signed co-operation agreements with the local terminal operators. The vessel will call at all major terminals on a regular basis but will also serve smaller facilities on demand where boxes are stuffed, stripped, repaired or stored.

One additional regular call will be at a central berth to meet with the inland waterway vessels for direct ship-to-ship box transfer in order to spare them their time consuming trips around the port.

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PORT FEEDER BARGE Main Data

type: _____ self propelled double-ended geared container barge

length o.a.: _____ 63.90 m

length b.pp.: _____ 63.70 m

beam: _____ 21.00 m

beam o.a.: _____ 21.20 m

height to main deck: _____ 4.80 m

max. draught (as seagoing vessel): _____ 2.00 m

max. draught (as harbour vessel): _____ 3.10 m

deadweight (as seagoing vessel): _____ 1,000 mt

deadweight (as harbour vessel): _____ 2,500 mt

gross tonnage: _____ approx. 2,000 BRZ

engine configuration: _____ diesel-electric

propulsion: _____ 4 x rudder propeller of 4 x 280 kW

engine make: _____ Caterpillar

speed: _____ 7 knots at 3.1 m draught

class: _____ GL + 100 A5 K20 BARGE

equipped for the carriage of containers SOLAS II-2 RULE 19

+ MC AUT

capacity: _____ 168 TEU (thereof 50% in cellguides)

14 reefer plugs

crane: _____ LIEBHERR CBW 49(39)/27(29) Litronic

(49 t at 27 m outreach)

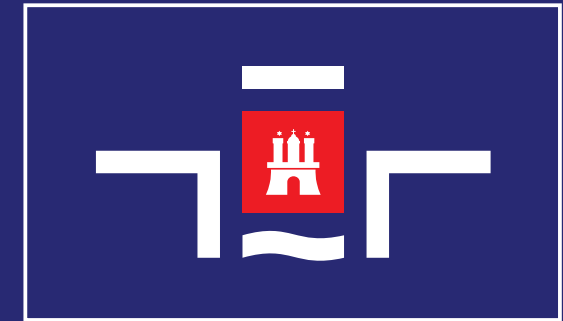
spreader: _____ automatic, telescopic, 6 flippers, turning device,

overheight frame (telescopic)

accommodation: _____ 6 persons (in single cabins)



engineering by **SCHIFFKO** Hamburg
www.schiffko.com



PORT FEEDER BARGE HAMBURG

*innovative waterborne
logistics for container ports*



PORT

Container Trucking



A lot of intra-terminal container trucking is done within many major ports causing additional congestion to the already existing bottlenecks in hinterland container logistics.

The **Port Feeder Barge** is designed to shift intra-terminal trucking from road to waterway. Due to its own container crane the Port Feeder Barge is capable of transferring containers between the terminal quays independently from quayside equipment.

Compared to trucking the **Port Feeder Barge** can provide intra-terminal box transfer ...

- at competitive costs,
- for a huge number of containers at the same time,
- for oversized containers,
- environmentally friendly,
- much safer,
- even if terminal gates are closed.

FEEDER

Feeder Operation



In many large container ports feeder vessels need to call at several different terminals.

The **Port Feeder Barge** can distribute and collect the feeder boxes to/from the various terminal quays enabling the feeder vessels to concentrate on the major terminals only. Hence the time consuming and costly operation of vessel shifting within the ports can be reduced.

Midstream Operation

Even the typical Hong Kong midstream operation can be much improved by deploying **Port Feeder Barges**.



BARGE

Inland Waterway Operation



Valuable berth capacity for deep sea vessels should not be blocked by small vessels for inland navigation. Like feeder vessels, inland waterway vessels waste much time by hopping from terminal to terminal and carry even less boxes!

Transshipment of ocean boxes to inland waterway vessels can be fully delegated to the **Port Feeder Barge** which would collect the boxes from the terminals and bring them to a central inland navigation berth and v.v. For ship-to-ship transfer operations a quay is not even required. Direct box transfer between the **Port Feeder Barge** and inland waterway vessels can be performed midstream at the dolphins.