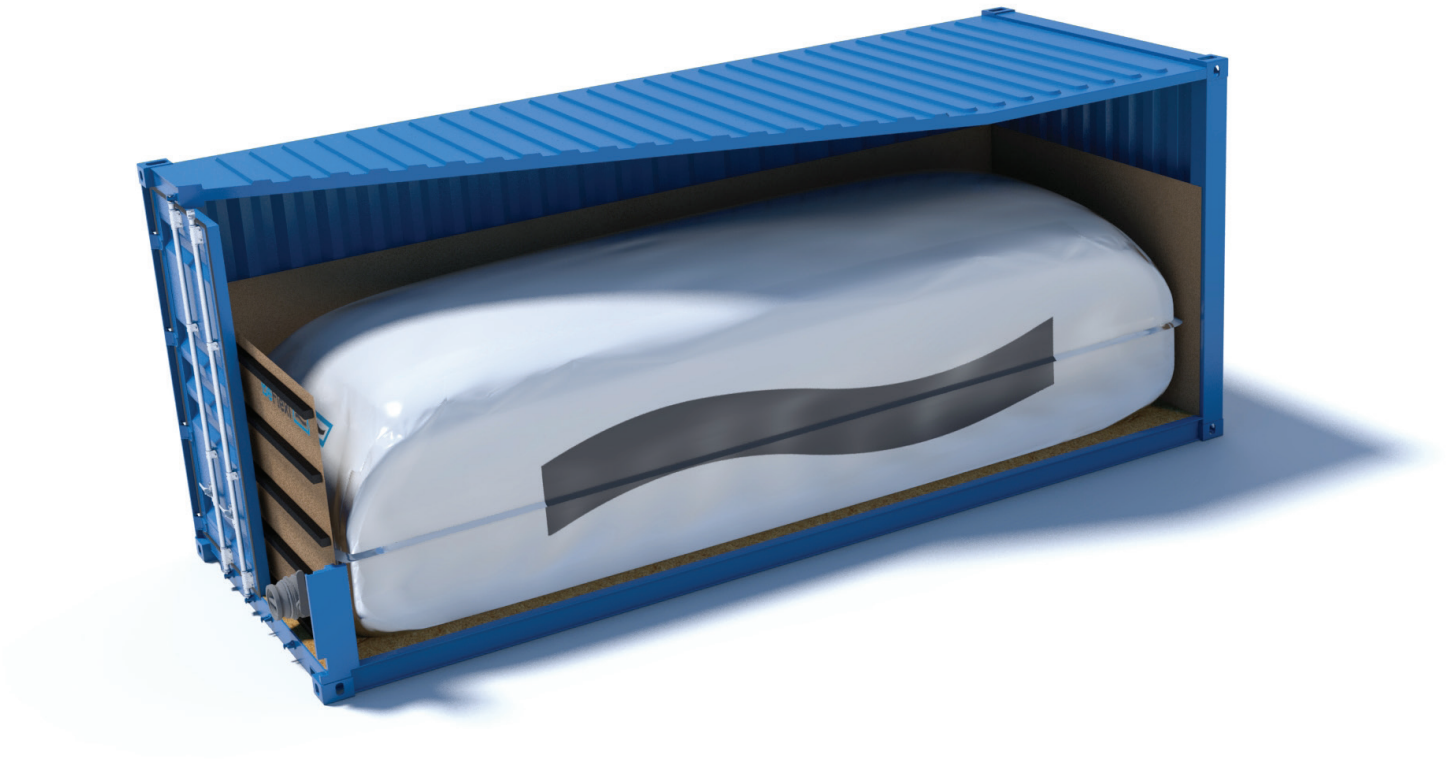
BeFlexi

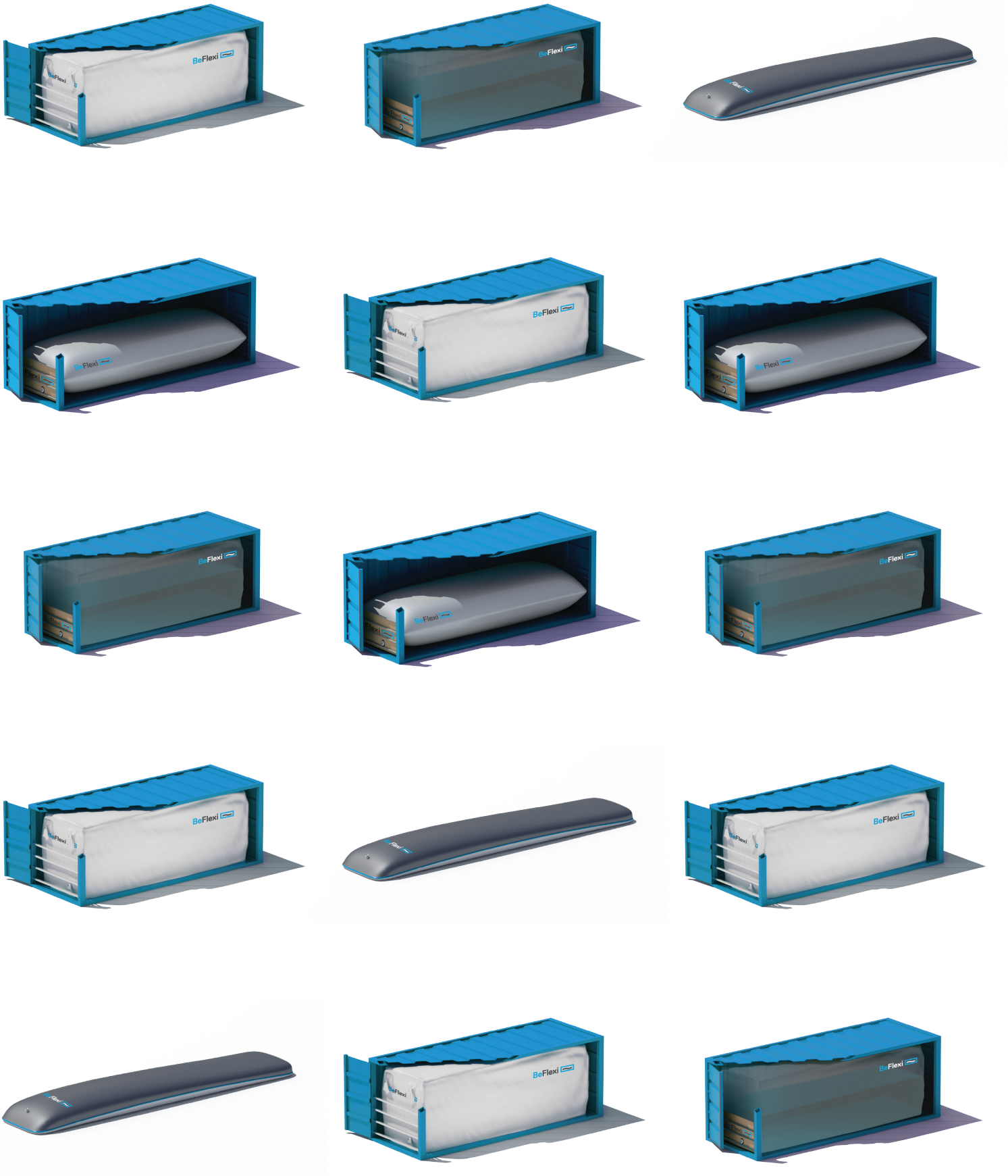


A NEW DAWN FOR THE FLEXITANK INDUSTRY:

more transparency, less risk

In partnership with

SGS



This report was compiled and written by BeFlexi Ltd.

Imperial House, Office 201, Kallitheas 4, Limassol 3086, Cyprus
T: +357 2525 4020 | F: +357 2525 4030 | E: info@beflexi.com
beflexi.com

CONTENTS

In brief 2

Glossary 4

Market overview 5

Regulations 6

Risks 7

The flexitank “grey area” 8

Shining the light 9

In brief

The flexitank market is booming. More and more petrochemical and agricultural companies are enjoying the **benefits** of this technology and, consequently, a great number of third parties are starting to offer flexitank related services.

While manufacturing processes and product **quality** standards are controlled and regulated by international organizations (such as the Container Owners Association [COA]), flexitank operations are neither regulated nor standardized. As such, a 'grey area' has formed, allowing mispractices to occur in the bulk liquid transportation segment. Companies lacking clearly defined procedures, expertise and experience may cast a shadow over the whole industry; not to mention increase risks for their customers.

The implementation of **widely acceptable standards** for flexitank operators will reduce risks related to flexitank shipments and lead to more competition and **transparency** in the industry. This will in turn enable newcomers to pick up best practices.

Bruno Silva

Managing Director at BeFlexi

“The shipping and freight forwarding industry is a very cyclical one. Over the past two decades, these cycles have become more extreme, taking with them companies’ profits. On top of this reality, we still belong to a very old-school class, where the digitalization process has only just begun.

This brings new, challenging and interesting times ahead. In this environment, it’s important not only to identify new cargo streams, new customers, new services; but also, make sure that you can cope with the requests of increasingly demanding customers.

To manage these two realities and to deliver the full benefits that flexitanks can bring to all members of the supply chain (end users, logistic operators, shipping lines, etc.), it’s important that we operate within a safe, cost-effective and environment-friendly framework. This is only possible with the development of standards that allow streamlined operations at lower and more predictable costs.

We envision a world where standards and certifications are in place and ordering a flexitank is as routine a task as placing a booking with a shipping line or calling your hauler to ask for a truck the next day. You don’t care about the brand of the truck, right?”

Yan Chizhevskiy

Business Development Director at BeFlexi

“The rapid pace of development of the flexitank sector against the tumultuous background of the multimodal logistic industry is pushing freight forwarding companies to test themselves in a flexitank logistic market. The lack of regulatory standards in the field of flexitank local operations gives enormous flexibility to all service providers involved in the relevant supply chains. The question raised in this document is if the flexitank industry as a whole can afford it or not.

On the one hand, the less regulations are imposed, the quicker the more innovations can be introduced; when there is no framework, everyone thinks out of the box. On the other hand, working with liquid cargo shipments, especially chemicals, demands a certain level of the expertise. Furthermore, since the technology is still relatively new compared to other means of bulk liquid transportation, the failure of one may cast a shadow over the whole industry.

This document is aimed at drawing readers’ attention to the regulatory gap, with a purpose of triggering a broader discussion about the issue. We hope you enjoy reading it and look forward to your feedback.”

Glossary

Cargo owner: an international trade agent who possesses liquid cargo that can be shipped in flexitanks.

Shipping line: a maritime container carrier company.

Flexitank: a single-use bladder, which is typically installed in a 20ft standard sea container, allowing the transport of up to 24,000 litres or 24 MT of liquid cargo.

Flexitank manufacturer (Supply): a company that produces flexitanks.

Flexitank distributor & operator (Supply & Fit): a company that arranges flexitank distribution and offers local services, such as container selection and preparation, container lining, flexitank installation, loading supervision, quantity control, sampling and emergency response service.

Flexitank operator (Fit): a company that offers required local services for flexitank shipment only.

Flexitank forwarder (Freight): a company that focuses on the transportation of containers with flexitanks by road, rail, sea and river on behalf of cargo owners. They might also be involved in the above-mentioned supply chain.

Market overview

The total number of flexitanks shipped globally in 2016 was expected to reach 1,400,000 units (TEUs), accounting for almost 28 million MT of cargo (non-hazardous liquids and pastes). For the last five years, the flexitank industry has been growing by 20% annually with a projected growth of 18.7% by 2022.

Annual growth
for the past 5 years

20%

Projected growth
by 2022

18,7%

Today cargo owners have three options:

1. Buy flexitanks from manufacturers directly, building supply chains from scratch.
2. Nominate flexitank operators to supply flexitanks and provide local services, buying sea freight from shipping lines.
3. Fully outsource logistic functions to third parties, i.e. flexitank forwarders.

Demand creates supply. There are around 30 flexitank manufacturers producing stocks of different specifications and varying quality. Some of them try to maintain high standards and comply with international regulations set out by the COA, which gives them the opportunity to sell their products overseas. Their clients are either cargo owners who handle the logistics themselves or flexitank operators and forwarders.

Regulations

There are two documents regulating the flexitank industry:

1. Code of Practice, for a single-use flexitank system, Version 5 – September 2016, and published by the COA.
2. PAS 1008:2016 specification for the performance and testing of a single-use flexitank issued by the COA and published by BSI.

Both documents are aimed at increasing the quality of flexitanks by setting standards for manufacturers.

"PAS 1008 is for use of flexitank manufacturers in the manufacture and testing of flexitanks".

The Code of Practice "forms part of the COA shipping line (carriers) risk assessment process and requires flexitank manufacturers to comply with the Code and ensure a safe and reliable flexitank system".

Even though the Code of Practice addresses all members of the COA (for instance, Operators and Shippers), it is still mainly focused on manufacturers.

"a COA member company shall meet the requirements of a COA Certificate of Compliance… to obtain the Certificate of Compliance, the manufacturer should complete four audits".

Today, the majority of flexitanks manufactured in accordance with PAS 1008:2014 (or the latest version, PAS 1008:2016) are of a good enough quality irrespective of which country they are produced. There are some specific technological features here and there, which might be of help or not, but that is a different story.

The IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units (CTU Code) published by the International Maritime Organization on 16 December 2014 serves as a guideline for shippers who use flexitanks; however, the processes are still not standardized or regulated. This is a flexitank "grey area", which brings additional risks to the cargo owners and casts a shadow on the whole of the flexitank industry.

Risks

Cargo loss is the most obvious risk in the supply chain. Regardless of whether flexitanks, bulk vessels, ISO tanks, drums, or IBCs, etc. are used, almost every cargo owner considers the risk of “leakage”.

This problem is deeply rooted in historical data. Twenty years ago, when pioneers of the flexitank industry started to promote the technology it was not advanced enough. In other words, the quality of the flexitanks was not sufficient to ensure the safety and security of shipments. This fact triggered the implementation of the aforementioned standards.

Today the situation is the mirror opposite: according to industry data, the percentage of failed flexitank shipments is very small. More importantly, the majority of all these incidents (def: any undesired event in the supply chain) are caused by wrong installation and are not due to improper flexitank quality and happen at the place of installation or port of loading (PoL).

Therefore, engaging professional local flexitank services is a key to reducing risks to almost zero.

The flexitank “grey area”

How many times have you heard a story about a bad flexitank experience as the main reason why a cargo owner or a logistics company does not want to use flexitanks?

BeFlexi speaks to a Managing Director of a palm oil refining company based in Malaysia.

BeFlexi: *So why did you stop working with this flexitank operator?*

MD: *We had a leakage case. We turned to an operator who explained that this was the fault of the flexitank manufacturer, whose insurance company should cover our losses.*

BeFlexi: *Did they provide you with an emergency response service?*

MD: *No, they did not have the capability to assist us. The container was taken off-board in Greece where it stayed for a couple of days more. It was terrible and we had huge fines from the shipping line.*

BeFlexi: *Were these costs covered by the insurance of the manufacturer?*

MD: *No, the manufacturing company required a detailed installation report and put all the blame on the operator, whose insurance was not sufficient to cover our losses.*

Local operations with flexitanks include: container selection and preparation, container lining, flexitank installation, loading supervision, quantity control, sampling and emergency response service. In fact, not all the companies who operate flexitanks have sufficient resources, expertise and experience. The crucial pillars of a safe flexitank shipment are expertise, resources and experience.

Expertise can be viewed as a mix of implemented best practices and standardized procedures. What should the loading rate be of the flexitank within the first minutes of loading? How can the quality of installation services be tracked and recorded? What equipment is required to provide emergency response services? All these and many other questions should be addressed at management level of the flexitank operator.

There are three groups of resources required: human resources, network and finance. Trained personnel at each level (management to take timely and effective decisions, operations to ensure smooth and coherent supply chain, and local executive teams to execute the work); a network that covers the main points of loading and points of destinations for the supply routes; and wherewithal to ensure sufficient insurance coverage and financing of high quality flexitank stocks.

Experience is the result of the hard work of satisfying customers and building trust.

In the case where all three pillars are in place, then there is no longer a need for a flexitank operator to remain in the “grey area”.

Shining the light

The main question remains the same: how do you build up those pillars?

The implementation of a standard for flexitank operations will bring light to the shadow. Sharing knowledge and best practices within the industry will ultimately lead to the safety and security of all flexitank shipments. This in turn will sustain the growth of the flexitank logistics market for the years to come with more and more petrochemical and agricultural companies enjoying the benefits of the technology.

It is our duty to ensure the outcome of our industry. We must take action and commit to developing standards that will reduce risk and make flexitank shipments safe, efficient and cost-effective. Only by working together will we ensure that these standards are fit for purpose and future-proof.

Be part of the future and get in touch.
It's really that simple.

beflexi.com
bruno@beflexi.com
+357 2504 0705
+357 9512 9482

yan@beflexi.com
+357 25 040 703
+357 96 250 903

BeFlexi

beflexi.com