

2024 GLOBAL TANK CONTAINER FLEET SURVEY



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1998-2023



GLOBAL TANK CONTAINER FLEET SURVEY

2024

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The tank container continues to prove its value as a shipping tank, a road/rail intermodal tank, and as a temporary storage tank

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ITCO – International Tank Container Organisation

Suite 3, Charter House, 26 Claremont Road, Surbiton KT6 4QU United Kingdom

E: info@itco.org | W: www.itco.org

ITCO Survey reveals industry growth of 5.81% in 2023 compared to 8.65% in 2022

Global Tank Container Fleet reached 848,400 by 1 January 2024

The tank container industry has grown significantly in recent years, driven by increasing global demand for bulk liquid and liquified gas transport, the recognition of the tank container as a safe, flexible and efficient mode of transport; and, during the 2020-2022 Covid-19 period, by disruptions in the logistics supply chain.

However, with supply chains returning to normality last year – and volumes of bulk liquids suitable for tank container transport not increasing – there was a slow-down in the rate of growth in 2023.

According to this year's ITCO Survey of the Global Tank Container Market, some 46,600 tank containers were added to the global tank container fleet in 2023, compared to 67,865 in the previous year.

This year's Survey estimates that, at 1 January 2024, the global tank container fleet stood at 848,400 units, compared to 801,800 tanks on 1 January 2023 – a growth of 5.81%.

During the global Covid-19 pandemic, supply chain disruption led to a tendency by chemical companies to overstock and use the tank container as a storage unit. This resulted in an increased demand for tank containers – and, in turn, a demand by both operators and BCOs for tank equipment.

With the general trend by chemical companies to “de-stock”, 2023 saw a decrease in the number of tank containers being held on demurrage – indications at one time were that up to 15% of the global operators fleet was on demurrage. With the de-stocking, equipment was returned to operators (and, when leased equipment), back to leasing companies.

The net result has seen a reduction in tank container utilisation by both operators and leasing companies – and more equipment standing “idle”. Although tank container manufacturers have maintained reasonably high production figures, the rate of growth of new tanks entering the market has decreased – while depots have experienced a huge demand for storage at their facilities.

With large numbers of tank containers – which over the last two years were being held on demurrage by chemical companies on a “just-in-case” basis – now being returned empty to operators, pressure is being put on operators and leasing companies to maximise utilisation, and on depots to find storage space.

At the time of publishing this Report, it is apparent that the impact of the Red Sea crisis is less severe than Covid-19, although the TEU-mile boost (the additional miles required by vessels to go via the Cape of Good Hope) has been significant).

Clarksons' February 2024 Container Intelligence Monthly stated that compared with December 2023, TEU-miles have gone up by around 11%, as around 620 ships of 8.5 million TEU are rerouting from the Suez Canal to the Cape of Good Hope to avoid attacks from Houthi rebels.

Despite the slow-down in the growth of the industry, the massive disruption and challenges in the supply chain over the past three years have proved that the tank container can play a critical role in the “just-in-time” business philosophy of the major end users - the shippers.

The industry continues to be dominated on a global level by a relatively small number of major tank container operators and leasing companies.

The top 10 tank container operators account for over 297,000 tanks, representing over 50% of the global tank container operators' fleet. The top 10 leasing companies account for 317,740 tanks, representing about 85% of the total leasing fleet.

As in previous years, this Survey lists those companies which are operating or leasing tank container fleets of over 1000 units. Companies with tank container fleets of less than 1000 units, (about 200 companies) have not been named individually, but an “educated estimate” has been made for the combined fleets.

The International Tank Container Organisation would like to take this opportunity to thank the various companies who have contributed to this study. Your input and information, statistics and ideas are very much appreciated.

The Global Tank Container Fleet at the beginning of 2024: Overview

Table 1: Global Tank Container Fleet (1 January 2024)

Number of Tank Operators Worldwide	240-plus
Number of Tanks in Operator Fleets (Owned & Leased -in)	587,970
Number of Tank Lessors Worldwide	38-plus
Number of Tanks in Lessor Fleets	376,195
Tanks on Lease to Operators, Shippers and Others Users	312,242
"Idle" leasing company tanks*	63,953
<small>(undergoing M&R, testing, storage)</small>	
Shippers** and Others***	
Total number of Shipper and "Others" (Owned and leased-in)	196,477
Manufactured and Disposals	
Approximate number of Tanks built in 2023	56,600
Approximate number of tanks disposed of in 2023****	10,000
Approximate number of tanks added to the global fleet in 2023	46,600
Total Global Tank Containers	848,400
<i>(Fleet size calculated as follows: Tanks in Operator Fleets + Lessors "Idle" Tanks + Tanks in BCOs/Shippers/"Others" Fleets.)</i>	

Table 1 shows the estimated global number of tanks by industry sector.

- The total operator and leasing fleet is based on the industry response to the Survey and other research.
- The leasing fleet is accounted for within both the "operator" and also the "shipper" fleets, except for those tanks which are "idle". (Definition of "idle tanks" - see next column)
- "Shipper" and "others" fleet is estimated in accordance with the methodology detailed on page 13 of this Survey.
- The Survey indicates that there were 848,400 tank containers worldwide at the beginning of 2024 including approximately 56,600 new tanks manufactured in 2023

- Taking into account an estimated 10,000 tanks which were either scrapped or sold out of the industry, the global fleet on 1 January 2024 had grown to 848,400 tanks, compared to 801,800 at the beginning of 2023.
- This represents a growth of 5.81 % from 1 January 2023 to 1 January 2024.

Notes:

* Idle Tanks

- Tanks might be "idle" because they are in the process of preparation such as maintenance and testing or in the process of being repositioned to a demand area or remaining as new manufacture stocks.
- The idle fleet of leasing company tanks at 1 January 2024 is calculated at 63,953 TEU (17%)

** Shipper (also referred to as "Beneficial Cargo Owner", producer or consignee) fleet

- The "Shipper" fleet comprises tanks owned or leased-in by producers of bulk cargoes, for shipment in tanks - especially chemical and food/drinks companies.
- These tanks may be operated by the shipper themselves, or by an operator on their behalf
- These tanks can be units for specific logistics operations, dedicated services or for use within a company's own production process. They are also sometimes "special" tanks - manufactured or modified to meet a specific need and include tanks designed to transport liquefied and refrigerated gases.

*** Others

- "Others" (ie "Other Tank Users") include the many tanks operated by organisations such as military, shipping and barge lines, rail, oil and mining industries, China domestic and companies that use tanks for storage or special transport operations such as bitumen.
- Some of the tanks disposed from operator and lessor fleets might be modified and utilised within this category.

**** Disposals

- Tank containers are normally depreciated over a residual life of 20-25 years - but often remain in service for a longer period. Operators have recognised that the operational life of the tank can be extended. Evidence indicates that tanks can now last longer
- The service life of the tank can be extended by remanufacture or refurbishment. This is an especially viable option when the price of new tanks is at a higher level.
- Owners might dispose of tank containers for commercial and technical reasons. These might be repurposed into other uses, such as storage.
- Some tanks are sold for re-cycling as scrap metal, especially if the tank is seriously damaged beyond economic repair.
- Scrap might be a viable economic option when the commercial price of scrap stainless steel rises.
- Precise data about tank disposal and scrapping is difficult to research. For this year's survey, we have estimated a nominal figure of 10,000 tanks being disposed of in 2023, which is higher, compared to previous years.

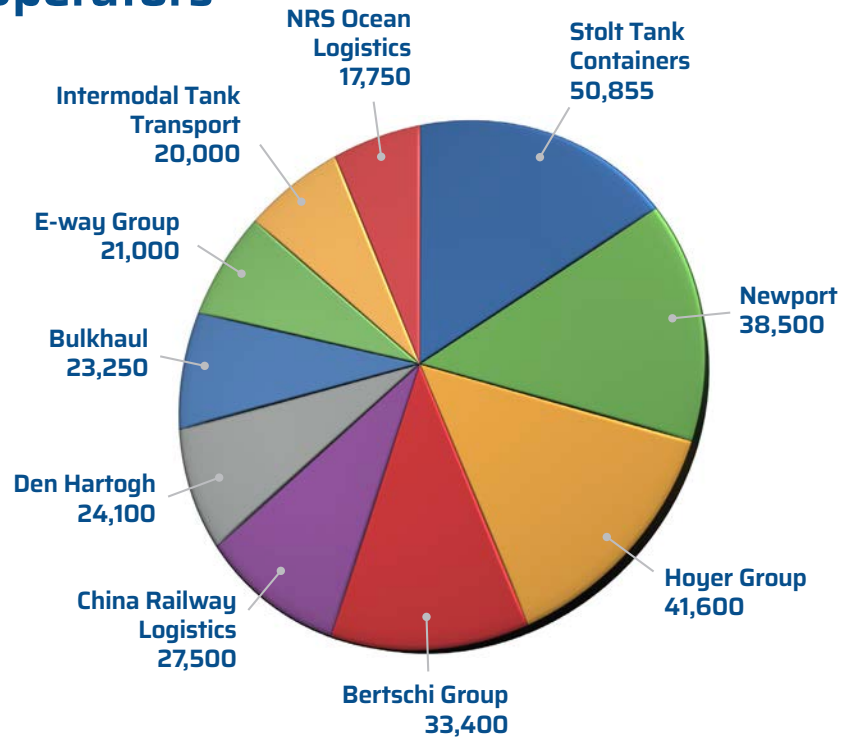
Top Ten Tank Container Operators

There are over 240 operators of tank containers known to ITCO, ranging from very large global companies to relatively small niche and regional players.

Shown by Figure 1, at 1 January 2024, the top ten operators accounted for over 297,955 tanks representing over 50% of the global tank container operators' fleet (587,970 tanks).

At the same time last year, the top ten operators accounted for over 287,250, tanks representing over 50% of the global tank container operators' fleet (568,760 tanks).

Figure 1: Top Ten Tank Container Operators (at 1 January 2024)

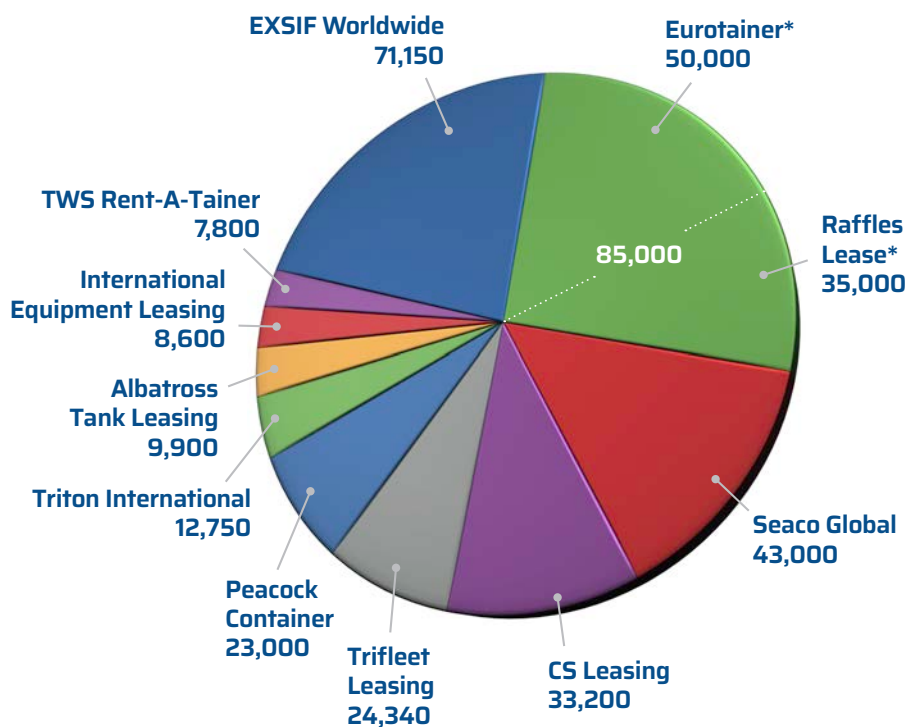


Top Ten Leasing Companies

At least 38 companies worldwide provide tank container leasing services. These range from large global lessors to regional and local companies.

As shown in Figure 2, at 1 January 2024, the top 10 lessors accounted for 317,740 tanks, representing about 85% of the total leasing fleet (372,195 tanks).

Figure 2: Top Ten Tank Container Leasing Companies (at 1 Jan 2024)



(*Same owner)

Table 2: Annual Global Tank Container Growth (1 Jan 2013 - 1 Jan 2024)

Players/Tank Type	Year	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
	Operators - Number		240	240	235	230	218	212	210	209	205	194	176
Total Operators Fleet (Owned and leased-in)		587,970	568,760	489,895	443,110	418,500	381,750	365,000	342,500	329,080	305,700	265,550	228,460
Leasing Companies - Number		38	38	37	37	37	35	36	36	36	33	34	27
"Idle" Leasing Company Tanks		63,953	36,930	38,755	44,400	45,840	42,785	32,000	28,500	20,175	23,400	17,650	15,000
On-lease to Operators, Shippers, Others		312,242	323,995	284,195	272,310	259,775	243,200	213,000	186,765	181,575	171,600	158,850	135,400
Total Lessor Fleet		376,195	360,925	322,950	316,710	305,615	286,000	245,000	215,265	201,750	195,000	176,500	150,400
Shipper / Others													
Total (Owned and Leased)		196,477	199,110	211,285	199,140	188,010	180,165	155,000	137,400	110,950	107,460	103,000	94,800
Manufactured (in previous year – approx)		56,600	67,865	53,285	35,800	54,650	59,700	48,500	44,500	43,780	48,200	42,620	39,700
Disposal*		10,000	4,000	3,000	1,500	7,000	7,000	4,500	4,500	2,000	5,000	1,000	-
Grand Total		848,400	801,800	737,935	686,650	652,350	604,700	552,000	508,000	458,200	427,560	385,200	338,260
Growth % compared with preceding year**		5.81	8.65	7.3	5.26	7.88	10.81	8.66	8.5	7.16	10.99	13.87	n/a

Notes:

*** Disposals:** This year, we are again looking more closely at the disposal of older tanks, as some equipment built over 20 years has started to move towards the end of their operational lives. Up until now this has not been a big issue, but unlike box containers, the tanks normally have a much longer life span. We had started to see more of the older tank containers being disposed because of age related problems, or with too heavy a tare weight or smaller capacity barrels or too expensive to repair etc.

In its research for this edition of the fleet survey, ITCO has added a question to our members requesting data to include how many tanks have been disposed from their fleets. In addition we have the input from a new ITCO member, who is in the business of disposing of old tanks.

We believe this data will prove very useful for our members who are now being requested to provide information on the sustainability of tank containers.

During the past year, because of the pandemic, we have noted that older, smaller capacity, tank containers are not being disposed of at the previous rate. In many cases, they are being repaired and put back into service because of the high demand for the equipment. In addition many of them may even be re-manufactured if the price of new tanks continues to increase at the current high level through this current year.

**** Growth:** Percentage growth is reported showing the growth for the year compared with the preceding Survey.

Table 2 summarises ITCO Surveys completed since 2013. The 2014 and 2015 "shipper & others owned fleet" has been adjusted, to reflect a static position, but the leased part of the fleet shows a percentage increase in line with the methodology.

Table 3: Tank Container Production and World Fleet (1991 - 2023)

Year	Production	Fleet at 1 January (of year shown)
1991	6,500	
1992	8,000	67,000
1993	9,000	73,000
1994	11,000	81,000
1995	12,500	88,800
1996	14,000	97,800
1997	15,000	110,650
1998	13,000	121,960
1999	9,500	129,640
2000	10,500	136,440
2001	9,500	144,140
2002	9,000	149,240
2003	11,000	157,400
2004	13,000	164,000
2005	14,500	172,000
2006	16,000	178,400
2007	14,000	190,000
2008	15,000	206,000
2009	20,000	220,000
2010	25,000	236,000
2011	28,000	257,000
2012	39,700	282,000
2013	42,620	338,260
2014	48,200	385,200
2015	43,780	427,500
2016	44,500	458,200
2017	48,500	508,000
2018	59,700	552,500
2019	54,650	604,700
2020	35,800	652,350
2021	53,285	686,650
2022	67,865	737,935
2023	56,600	801,800
2024		848,400

Data Source: tank container manufacturers, operators and leasing companies.

Table 3 shows:

1. The estimated annual tank production since 1991. The ability to increase economic production of new manufactured tanks has been one of the drivers of the tank container industry growth.
2. The estimated global tank container fleet since 1992
3. A figure of 10,000 tanks being disposed in 2023 from the world fleet

Figure 5: Tank Container Production (1990 to 2023)

Tank production is largely centred in China where there are several manufacturers building tanks for the international and domestic market. Tanks are also manufactured in South Africa and Europe. Tanks manufactured in other parts of the world tend to be for local shippers and the domestic market.

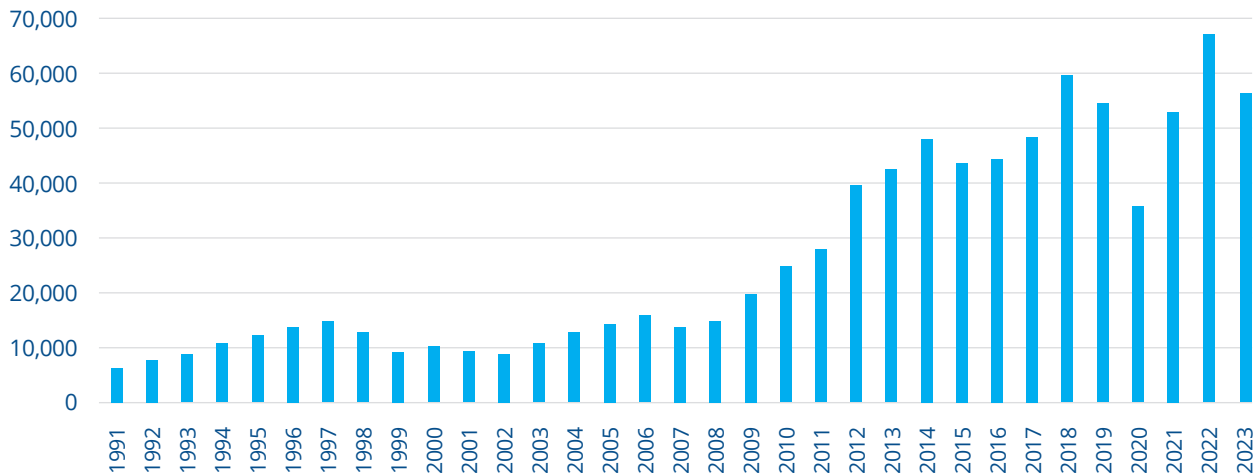
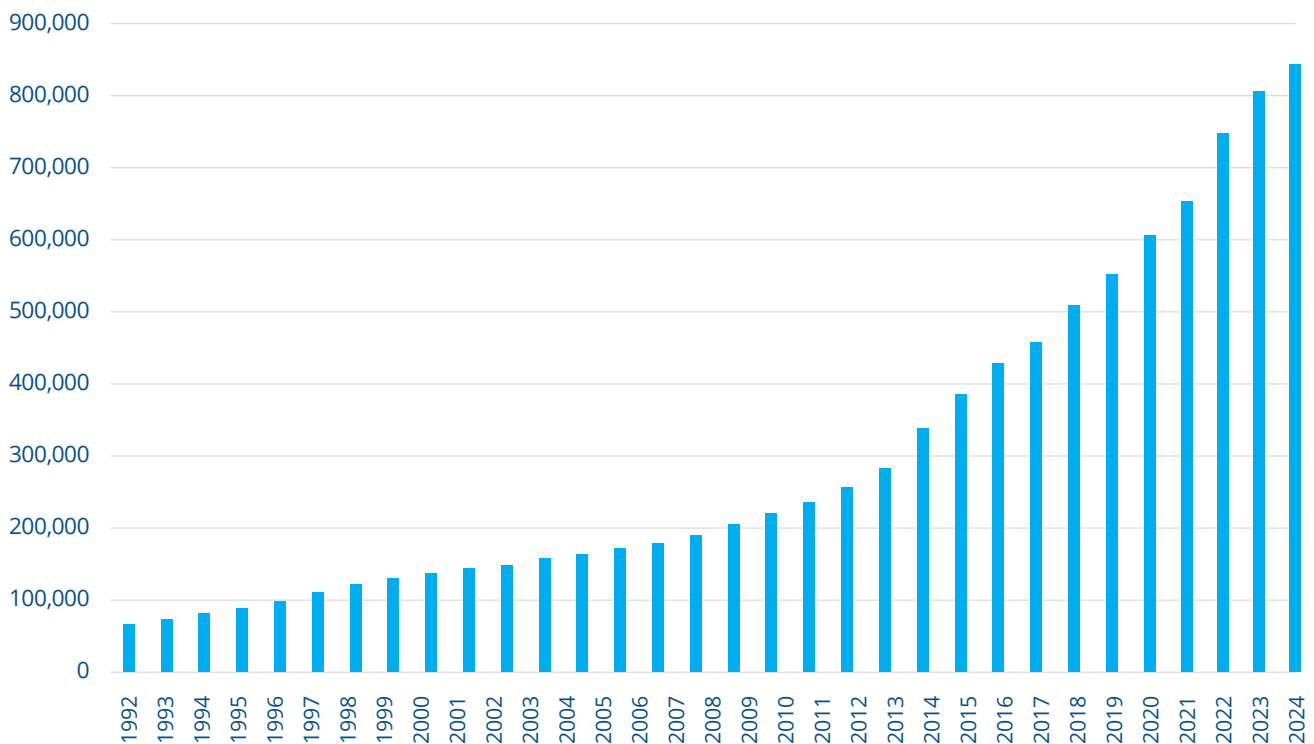


Figure 6: Total Fleet size (at 1st January of each year)



Global Tank Container Fleet: Leasing Companies Fleet at January 2024

Tank Container Leasing companies provide tank containers to operators, shippers and others - usually on a contractual term basis, where the lessee takes “quiet” possession and operates that tank as if it were owned. Leasing company fleet listings include all tanks within the leasing company fleet including owned outright, managed on behalf of investor owners and any other financial means of acquisition.

Table 5: Leasing companies’ fleets (at 1 January 2024)

Criteria: Companies with over 1000 tanks in their fleet

LESSOR	Headquarters	Fleet
Albatross Tank Leasing	China	9,900
Combipass	France	1,500
CS Leasing	USA	33,200
Eurotainer*	France	50,000
EXSIF Worldwide	USA	71,150
International Equipment Leasing	USA	8,600
Matlack Leasing	USA	2,500
MCM Management	Switzerland	2,600
Modalis	France	5,000
Multistar Leasing	South Africa	4,955
Noble Container Leasing	Hong Kong	2,180
NRS Lease	Japan	5,000
Peacock Container	Netherlands	23,000

LESSOR	Headquarters	Fleet
Raffles Lease*	Singapore	35,000
Seaco Global	Singapore	43,000
Tankspan Leasing	UK	2,020
Trifleet Leasing	Netherlands	24,340
Tristar Engineering	Switzerland	1,100
Triton International	USA	12,750
TWS Rent-A-Tainer	Germany	7,800
Unitas Container Leasing	Bermuda	1,600
VTG	Germany	4,000
Total (above 1000)		351,195
Estimated total for others under 1000**		25,000
TOTAL		376,195

Notes:

* Same owner

**There are a number of regional lessors that are not readily contactable. Accordingly, an estimate has been included.

Methodology

The global tank container fleet comprises a range of tank types including tanks for liquids, liquefied gases, powders, swap tanks and specials. Tanks below 20ft length such as those typical of the offshore oil industry are not included in this Survey.

The tank container is highly regulated and is required to meet stringent standards of operation, including statutory periodic inspection and renewal of test certification. However, there is no global register of tank containers. Data must be collected by systematically requesting tank owners and operators to provide company fleet numbers and manufacturers to report new production. Where firm data is not provided, this Survey provides estimates based on internet research and consultation with experienced industry representatives.

Reported figures are recorded as received or, in the case of the charts within the report, the result of the percentage calculation of data. It is not intended to suggest that calculated figures are accurate to an exact number. Readers should round up, or down, as required.

Leased fleet listings are not included in the total industry fleet figures, except for the relatively few estimated stocks that are idle. The balance of "on lease" tanks is typically estimated to be leased to operators (65%) and shippers and other tank users (about 30-35%).

This percentage might vary by leasing company according to their market strengths and objectives, but is an estimated average. The trend is for a greater proportion leased to operators but for consistency with previous surveys the percentage breakdown remains unchanged.

Whereas there is a trend to outsource tank logistics to tank operators, there remains a fleet of tanks directly controlled by shippers and others.

Shipper (also referred to as producers or consignors) fleet and others are challenging to assess because of the vast number of shippers and others worldwide.

It is especially difficult to compile a list of shipper-owned tank containers, because tank ownership is a relatively small part of their core business and - as a result - fleet figures are not freely available. This also applies to other tank users - such as shipping lines, military authorities, railways, oil companies, mining industry and China domestic. Estimates of the total "others" are included in the Survey.

Despite the ongoing trend to outsource tank logistics, we have shown a small year-on-year increase in the shipper/BCO and "other" fleets (ie fleets which are not tank container operator). Operators might provide logistics services for shipper-owned tanks, but the tanks are not included as operator tanks for the purpose of this survey. It is estimated that on average about 35% of the total leasing company fleet is leased directly to shippers and others.

In the 2013 Survey it was estimated that shippers and others might own, on average, about the same number of tanks that are leased into their fleet. This number remains unchanged in the 2024 Survey and in preceding years. Users of the Survey can make adjustments to suit their needs.

More details on the methodology are given as explanations in the accompanying tables and figures.

ITCO: Setting a new course

ITCO is once again pleased to present the "Annual Global Tank Container Fleet Survey". This is the 12th edition of its industry report, and continues to offer the data and information required by a wide range of stakeholders (e.g. manufacturers, lessors, operators, service and system providers, and investors) to make their key planning and investment decisions.

As you will have seen from the report, the global tank container fleet continues to grow, although at a slightly slower rate in 2023 compared with previous years. This was to be expected, considering the variety of economic and geo-political headwinds being experienced by the chemical industry, and weakness in global GDP growth. We also had to reckon with a correction after the record year in 2022, which had been fed by the supply chain disruption resulting from the Covid 19 pandemic.

However, the global fleet at 1/1/24 now stands at 848,400, having grown 5.81% over 2023.

Our 2023 report noted the ramping up of production to meet short-term demand was likely to result in an over-supply of tanks, and an adjustment in production rates in 2023. The latest report appears to, at least in part, bear out that prediction, although the adjustment may not have been as severe as expected. However, as was already evident in early 2023, chemical companies were returning tanks as supply chain bottlenecks eased and the need to hold 'just-in-case' inventories declined. Operators were also adjusting their fleet levels and taking tanks off-lease.

(The granularity of the data unfortunately does not show the finer details of, for example, finished tanks in inventory, the number of tanks going off-lease, and accurate rates of scrapping.)

Nevertheless, the tank container continues to prove its value as a shipping tank, a road/rail intermodal tank, and as a temporary storage tank, ideally suited to dedicated logistics supply chains. There is also evidence suggesting that with China becoming increasingly self-sufficient in chemicals, and its demand growth lower than forecast, as well as other factors, there could be a trend away from global supply chains to more local-for-local supply chains, which could present a promising opportunity for tank containers supplying less accessible markets.

We wish to express our thanks to the members who have contributed data to this Global Fleet Report, and of course to the ITCO Secretariat for compiling and collating the data and publishing such a professional document in the space of two months.

What's new at ITCO?

At the end of 2023 ITCO said goodbye to its founder and long-serving President, Reg Lee. Much of the growth and success of ITCO must be attributed to his belief in and commitment to the sustainable role the tank container can play in end-to-end supply chains, occupying a key space between large volume chemical parcel tankers plying major trade lanes, and the traditional steel drum. We are grateful for his vision and dedication, and wish him well in his retirement.



ITCO's aim has always been to ensure that all initiatives, projects, and events we initiate and organize are designed to serve the needs of the members, and deliver tangible value. We also recognize that with the change in demographics of our membership, we need to respond to a change in expectations and priorities.

ITCO will continue to drive initiatives supporting safe working practices, environmental best practice, and efficiency improvements through global standards and digitalization. But we will be more diverse and inclusive in our approach, and the first steps have been made by replacing the traditional Board structure with a new, broader Management Committee.

We will also focus on expanding our geographical footprint, recognizing the need to be more present in the Americas, India, and Asia Pacific. The location of our events, and agenda content will also reflect this geographical diversity, and the need to leverage technology advances.

We are looking forward to an exciting and challenging 2024 as ITCO leads a transformation programme aligned to the wishes expressed by our membership.