ITCO

2020

GLOBAL TANK CONTAINER FLEET SURVEY

- Global Tank Container Survey
- Operators and Leasing company fleets
- New manufacture analysis
- Historic Development of the Global Tank Container Fleet
- Future development of ITCO and the Tank Container Industry

2020
GLOBAL TANK CONTAINER FLEET SURVEY

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ITCO 2020 Survey reveals industry growth of 7.9% in 2019 compared to the 10.81% growth 2018

Global Tank Container Fleet reached 652,350 by 1 January 2020

Growth in the global tank container business slowed in 2019 compared to previous years, reflecting the fall in global trading conditions experienced by many sectors of the container shipping industry.

Despite this, however, the market continued to expand – due to a large extent to the continued successful conversion of certain cargoes - previously shipped in drums or transported in chemical tankers – to tank containers. In addition, China continued to see significant growth in the use of tank containers for domestic transport of bulk liquids, while inter-Asia – especially South-East Asia – tank container operations continue to develop strongly.

In 2019, the majority of new tanks were purchased by leasing companies – mainly to service the equipment requirements of tank container operators.

As more leasing company tank containers become available, the industry has seen the growth in the number of 3PLs and 4PLs entering the market; these companies often have little - or no - accredited infrastructure to support their growing fleet of tanks, which (we can assume) they have taken on because of the low lease rates on offer, and on a shorter lease period.

This year's ITCO Tank Container Fleet Survey again reports a record growth in the tank container business during the past 12 months, with production in China continuing to dominate the industry.

According to the 2020 ITCO Global Tank Container Survey, the worldwide tank container fleet grew by almost 8 percent in 2019 over 2018.

This year's Survey estimates that, at 1 January 2020, the global tank container fleet stood at 652,350 units worldwide, compared to the figure of 604,700 on 1 January 2019.

This represents a year-on-year growth of 7.88%, compared to the 10.81% growth achieved in the previous year.

The number of tank containers produced last year was lower than in 2018 and the early indications indicate a hard road ahead for manufacturers unless the market sees a significant turnround. This is the cyclical nature of the industry - a phenomenon witnessed by the industry over the past 25 years.

In 2019, a total of 54,650 tank containers were built, compared to 59,700 in 2018, a decrease of some 5,000 units.

As in previous Editions, this Survey analyses the growth in the world's tank container fleet and the development of production of tank containers on a year-by-year basis.

It shows how, numerically, 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 operators account for over 235,000 tanks representing over 56% of the global operators' fleet. The top 10 leasing companies account for over 240,000 tanks, about 80% of the total leasing fleet. The top three leasing companies account for nearly 155,000 tanks, almost 55% of the total fleet.

Based on its successful growth in recent years, the industry is continuing to attract smaller players to enter the market – often offering "niche" tank services in niche markets, such as south-east Asia.

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 of them) 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.

DISCLAIMER

The Global Tank Container Fleet at the beginning of 2020 - An Overview

Number of Operators Worldwide	218
Total Number of Operator Tanks (Owned & Leased -in)	**418,500**
Number of Tank Lessors Worldwide	37
Total Number of Leasing Company Tank Containers	**305,615**
On lease to Operators/Shippers/Others	**259,775**
Idle* (Calculated at 15%)	**45,840**
Shippers and Others*** **	
Total (Owned and leased)	**188,010**
Estimated Manufacture	54,650
Disposals****	7,000
Estimated Total Global Tank Containers (Operator Fleets + Lessors "idle tanks" + Shippers/Others Tanks)	**652,350**

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 within both the operator and also the shipper fleets, except for those tanks which are "idle". (Definition of "idle tanks" on next column)
- "Shipper" and "others" fleet is estimated in accordance with the methodology detailed at the end of this Survey.
- The Survey indicates that there were 652,350 units at the beginning of 2020 including annual manufacture in 2019 of 54,650.
- Taking into account an estimated 7,000 disposals (scrapped or sold for static storage), the 1 January 2019 fleet size of 604,700 therefore grew to 652,350 at the beginning of 2020.
- This represents a growth of 7.88% from 1 January 2019 to 1 January 2020.
- These figures do not include high-pressure gas tanks.

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.
- This normally represents about 10-15% of the leasing company fleet, but in the current economic climate, we have estimated the figure of idle tanks to be in the region of 15-18% of the leased fleet,

****Shipper (also referred to as called producers or consignors) fleet**

- The Shipper Fleet comprises tanks operated by chemical or food and drinks companies.
- These tanks are mostly 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 years but often remain in service for a longer period.
- The service life of the tank has in the past been extended by remanufacture (refurbishment).
- Owners might dispose of tank containers for commercial and technical reasons. These might be converted 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.
- A nominal figure of 7,000 has been included in the survey, as precise data is difficult to research.
- This figure is likely to increase in future years, reflecting the economics of the comparative reduced price of new manufacture versus the increased cost to repair older tanks.

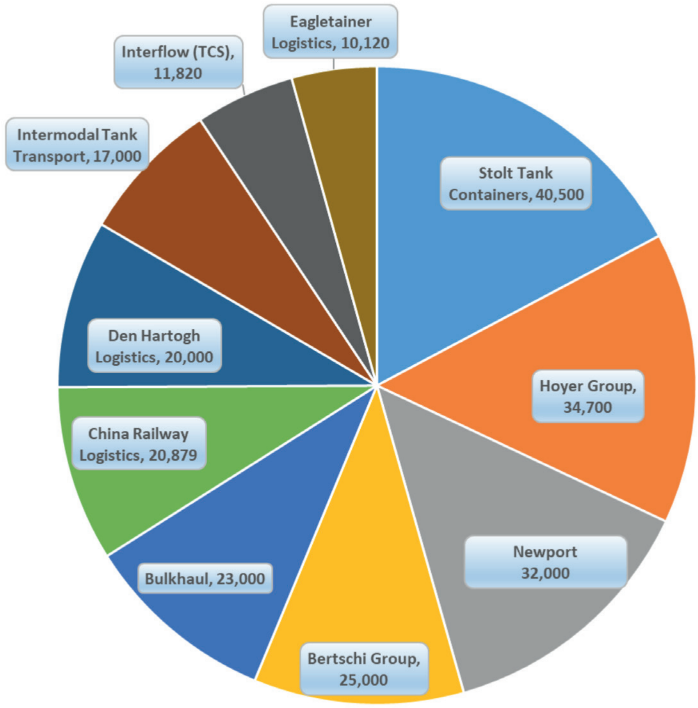
Top Ten Operators

There are 218 operators covered within this Survey.

Shown by Figure 1, the top ten operators account for over 235,019, tanks representing over 56% of the global operators' fleet.

Last year the top 10 operators accounted for 231,519 which represented 59% of the global operator's fleet.

Figure 1: Top Ten Tank Container Operators (at 1 January 2020)

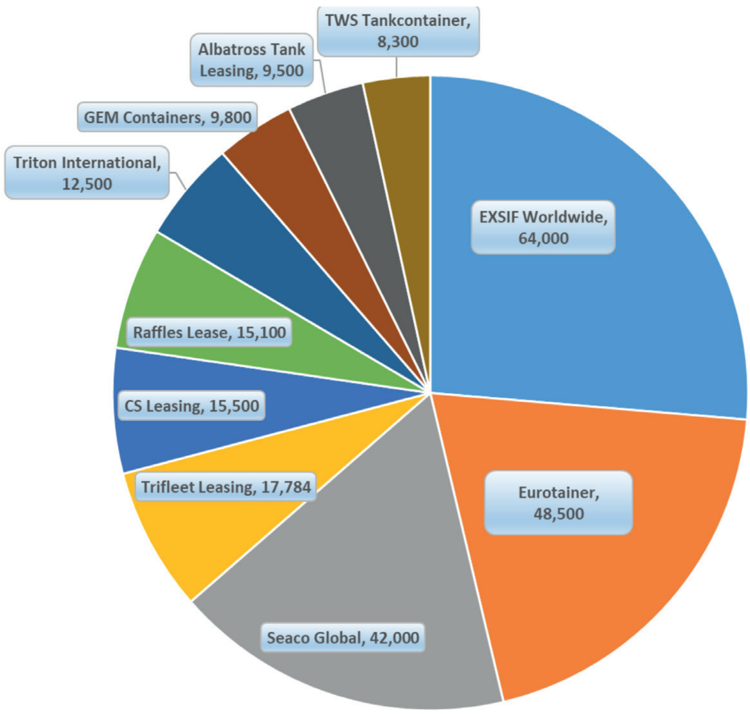


Top Ten Leasing Companies

There are 37 leasing companies identified within the Survey representing 305,615 tanks. The top ten lessors account for 242,984 tanks, about 79.5% of the total leasing fleet.

The top three companies account for 154,500 tanks of the total fleet, or 50.5%, compared with 54% last year.

Figure 2: Top Ten Tank Container Leasing Companies (at 1 Jan 2020)



Leading Tank Container Manufacturers

In 2019, the combined number of tank containers produced by all of the world's manufacturers totalled 54,650 new units.

Tank Container manufacturing is concentrated in China. The only other large volume manufacturer is based in South Africa

The leading Tank Container Manufacturers producing the highest number of tanks are as follows: CIMC, NT Tank, Welfit Oddy, Singamas, JJAP, CRRC and CXIC. These top seven represent 93% of global manufacture.

The majority of production is of the industry standard tank range but nevertheless there is a very active and growing specialised tank sector.

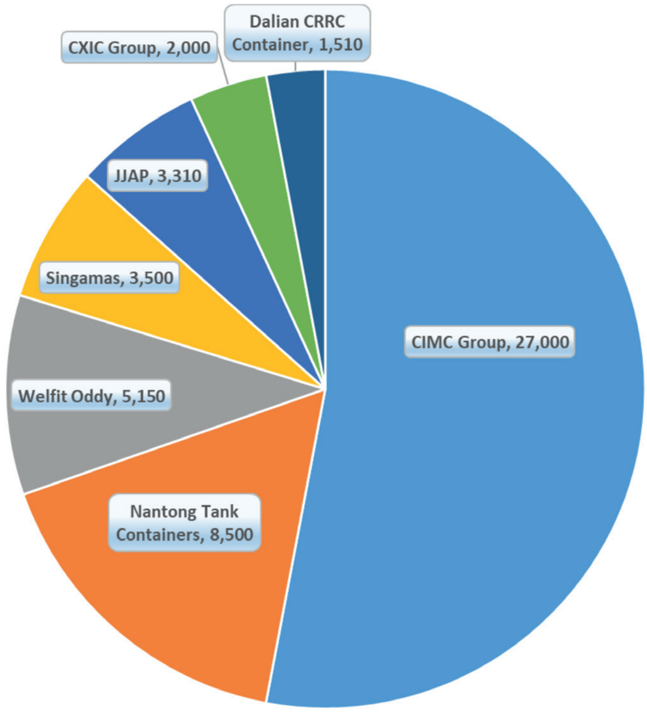


Figure 3: Production figures of the top 7 Tank Container manufacturers in 2019

Table 2: Annual Global Tank Container Growth (1 Jan 2013 - 1 Jan 2020)

Players \ Year	2020	2019	2018	2017	2016	2015	2014	2013
Operators - Number	**218**	**212**	**210**	**209**	**205**	**194**	**176**	**116**
Total Fleet (Owned and leased-in)	418,500	381,750	365,000	342,500	329,080	305,700	265,550	228,460
Leasing Companies - Number	**37**	**35**	**36**	**36**	**36**	**33**	**34**	**27**
"Idle" Leasing Company Tanks	45,840	42,785	32,000	28,500	20,175	23,400	17,650	15,000
On-lease to Operators, Shippers, Others	259,775	243,200	213,000	186,765	181,575	171,600	158,850	135,400
Total	305,615	286,000	245,000	215,265	201,750	195,000	176,500	150,400
Shipper & Others (Military, Offshore, etc)								
Total (Owned and Leased)	188,010	180,165	155,000	137,400	110,950	107,460	103,000	94,800
Manufactured (in the previous year)	54,650	59,700	48,500	44,500	43,780	48,200	42,620	39,700
Disposal*	7,000	7,000	4,500	4,500	2,000	5,000	1,000	-
Grand Total	652,350	604,700	552,000	508,000	458,200	427,560	385,200	338,260
Growth % compared with preceding year**	7.88	10.81	8.66	8.5	7.16	10.99	13.87	n/a

Notes:

*** Disposals:** Figures for disposals are not easily verified due to the difficulty in estimating since respondents tend to not reveal details of their fleets. Disposals result from repair costs exceeding the economic value of the tank and or the age profile required by some users. Prevailing low material prices, exchange rates and interest rates lowered the cost of the new tank. This reflects on the decision whether a heavily damaged unit is economic to repair or remanufacture. Some disposals are purchased by others and modified for continued use outside of mainstream sector and perhaps accounted in this Survey in the "others" category.

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

Table 2 summaries ITCO Surveys completed since 2013. The estimated 2019 growth, compared with 2018 is about 7.88%. Shipper owned fleets are not considered to be growing significantly, due to the trend to outsource logistics to operators. 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 – 2019)

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		652,350

Data Source: Containerisation International 2008 Census and, for more recent years, other sources including 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 7,000 tanks being disposed in 2019 from the world fleet

Figure 5: Tank Container Production (1990 to 2019)

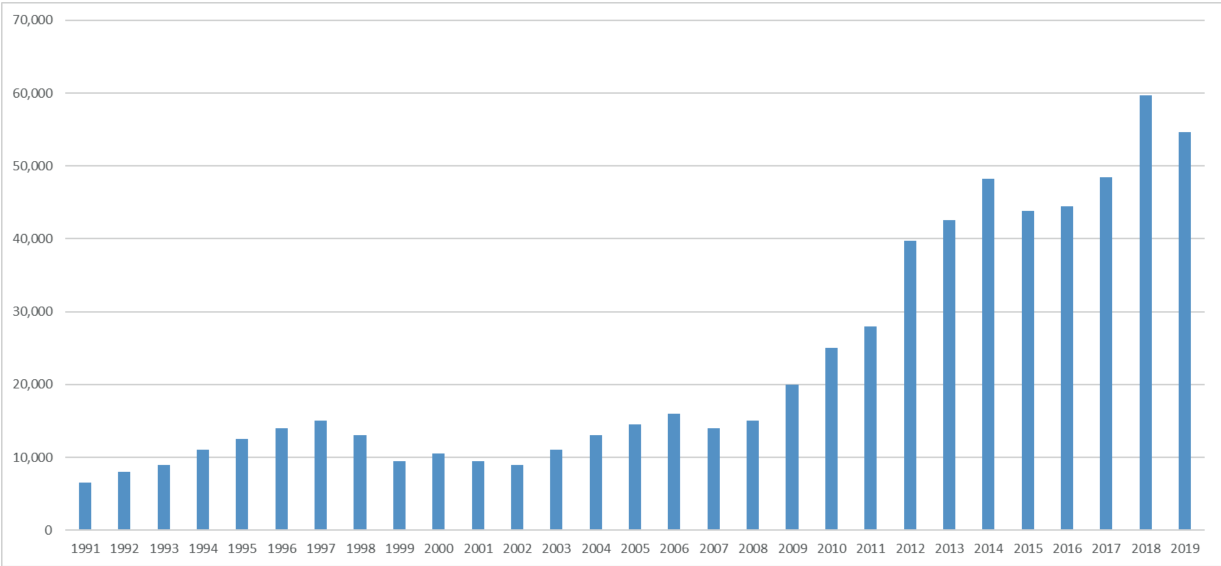
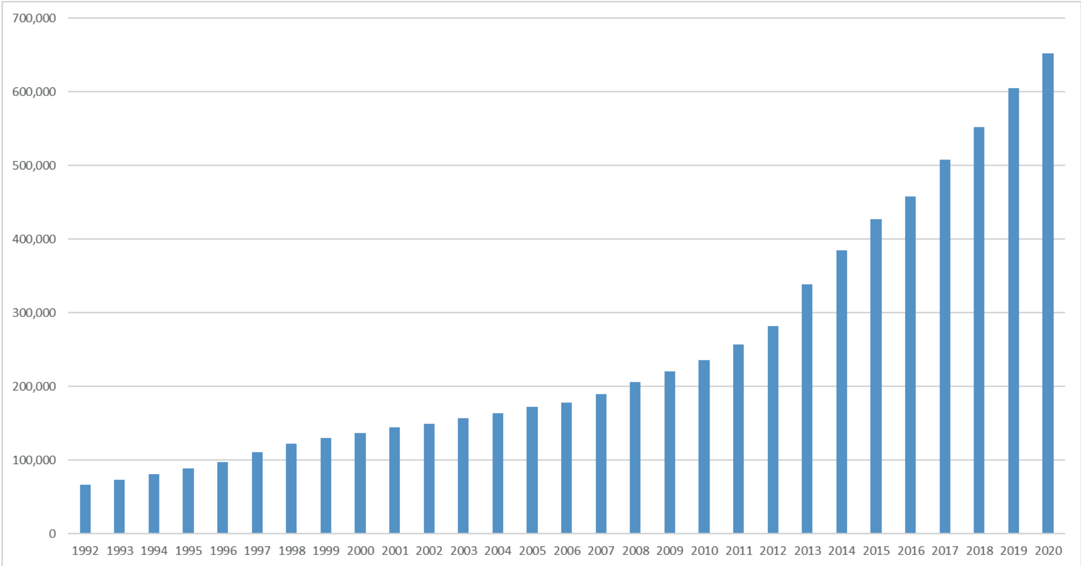


Figure 6: Total Fleet size (at 1st January of each year)



Global Tank Container Fleet:
Tank Operators Fleet at January 2020

Tank Operators are third party logistics companies that provide a door-to-door service to shippers and others that require transport of bulk liquids, powders or gases. The fleet listing for each company includes all tanks operated by that company, regardless of whether the tanks are owned outright, managed, leased or any other financial structure used to acquire the asset.

Table 4: Tank operators' fleets (at 1 January 2020)

OPERATOR	Head-quarter	Fleet
Agmark Logistics	USA	1,600
ATI Freight	UAE	2,000
Alfred Talke	Germany	1,200
Baltica Trans Logistics	Russia	1,500
Bertschi Group	Switzerland	25,000
Bolt	Singapore	1,200
Braid Logistics	UK	2,750
Bulkhaul	UK	23,000
Bulk Tainer Logistics	UK	2,654
Celerity Tank	China	2,000
Chemion Logistik	Germany	1,000
Chemical Express	Italy	1,500
China Railway Logistics	China	20,879
Crossover	Singapore	3,000
Contank	Spain	1,200
Curt Richter	Germany	1,914
Daelim Corporation	Korea	5,700
Dana Liquid Bulk	USA	7,500
Deccan Transcon	Indian	1,141
Den Hartogh Logistics	Netherlands	20,000
DJD	China	1,500
Eagletainer Logistics	Singapore	10,120
EHS	China	1,000
Eway	Malaysia	6,000
Flexitank Inc	USA	2,500
GCA Trans	France	4,000
Goodrich Maritime	India	5,000
Gruber	Germany	1,200
Haesaerts Intermodal	Belgium	1,000
Hengcheng	China	2,600
Hoyer Group	Germany	34,700
Infotech-Baltika M	Russia	5,400
Interflow (TCS)	UK	11,820

OPERATOR	Head-quarter	Fleet
Intermodal Tank Transport	USA	17,000
Katoen Natie Tank	Belgium	1,600
Legend Tank	Singapore	3,175
Lexzau, Scharbau	Germany	5,060
M&S Logistics	UK	8,400
Marenzana Multi Modal Spa	Italy	1,500
Meurer Intermodal (Lanfer)	Germany	1,200
Milky Way	China	1,500
Muto Co Ltd	Seoul	2,400
Newport	Netherlands	32,000
Nichicon Tank	Japan	8,000
Niyac Corp	Japan	2,500
Odyssey Logistics Food Trans	USA	1,100
Paltank	UK	1,900
Protank Liquid Logistics	Taiwan	1,200
Radix	South Korea	1,000
Rinnen	Germany	3,500
R.M.I Global Logistics	Netherlands	4,600
Sinochem domestic	China	1,000
Sinotrans	China	1,360
Spectransgarant (Railgarant)	Russia	5,274
Stolt Tank Containers	UK	40,500
Suttons International	UK	9,000
Ueno Container Logistics	Singapore	1,000
Van den Bosch Transport	Netherlands	4,250
VTG Tanktainer	Germany	9,250
Other Under 1000		
Estimated not accounted*	Asia Pacific	11,000
Estimated not accounted*	Europe, RU	7,000
Estimated not accounted*	Americas	10,000
Estimated not accounted*	IN/Mid-East/AF	7,600
TOTAL		**418,500**

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

Global Tank Container Fleet:
Leasing Companies Fleet at January 2020

Tank 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 2020)

LESSOR	Head-quarter	Fleet
Albatross Tank Leasing	China	9,500
Combipass	France	1,500
CS Leasing	USA	15,500
Eurotainer	France	48,500
EXSIF Worldwide	USA	64,000
GEM Containers	UK	9,800
GRP Multilogistics	Switzerland	1,600
International Equipment	USA	6,000
Matlack Leasing	USA	2,500
MCM Management	Switzerland	1,700
Modalis	France	2,500
Multistar Leasing	South Africa	5,173
Noble Container Leasing	Hong Kong	1,300
NRS Group	Japan	7,000

LESSOR	Head-quarter	Fleet
Peacock Container	Netherlands	6,250
Raffles Lease	Singapore	15,100
Seaco Global	Singapore	42,000
Tankspan Leasing	UK	3,406
Trifleet Leasing	Netherlands	17,784
Triton International	USA	12,500
Tristar Engineering	Switzerland	1,100
TWS Tankcontainer	Germany	8,300
Unitas Container Leasing	Bermuda	1,600
Estimated total for others under 1000*		21,000
TOTAL		**305,615**

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

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Global Tank Container Fleet: Manufactured January to December 2019

Leading **manufacturers** that specialise in international tank container production have been listed. There are other manufacturers worldwide that build tanks for mostly domestic and regional markets, in addition to their core business - typically that of road tank vehicles and process vessels. A nominal estimate has been added to recognise the production completed by regional manufacturers.

Table 6: Tank Containers Manufactured (January to December 2019)

MANUFACTURER	Head-quarter	Fleet
CIMC Group	China	27,000
CXIC Group	China	2,000
Dalian CRRC Container	China	1,510
JJAP	China	3,310
Nantong Tank Containers	China	8,500
Singamas	China	3,500
Van Hool	Belgium	680
Welfit Oddy	South Africa	5,150
Other manufacturers*	Global	3,000
TOTAL		**54,650**

Note: *Nominal estimate on production completed by regional manufacturers.

2020 Vision:
ITCO and the Next Generation of Tank Container Professionals

This Edition of ITCO's "Annual Global Tank Container Fleet Survey" is the 8th Report that the Organisation has published.

As in previous years, a main aim of the Survey is to meet the data and information requirements of a wide range of stakeholders – operators, leasing companies, service providers, manufacturers and investors.

But there is also another reason for publishing the Survey.

ITCO is aware that one of the most important issues facing the tank container industry is how to ensure the successful development and education of a new generation of personnel (management and staff) entering this sector of the shipping industry.

All ITCO Members face the challenge of recruiting staff who can participate in the development of their businesses, introduce new ideas and technology, and ensure the long-term future of their companies.

It is an important aspect of ITCO's role as an organisation representing the interests of its members to create an environment which can attract a new generation of professionals. Within this, ITCO has a responsibility to support its members with the tools to provide training and education.

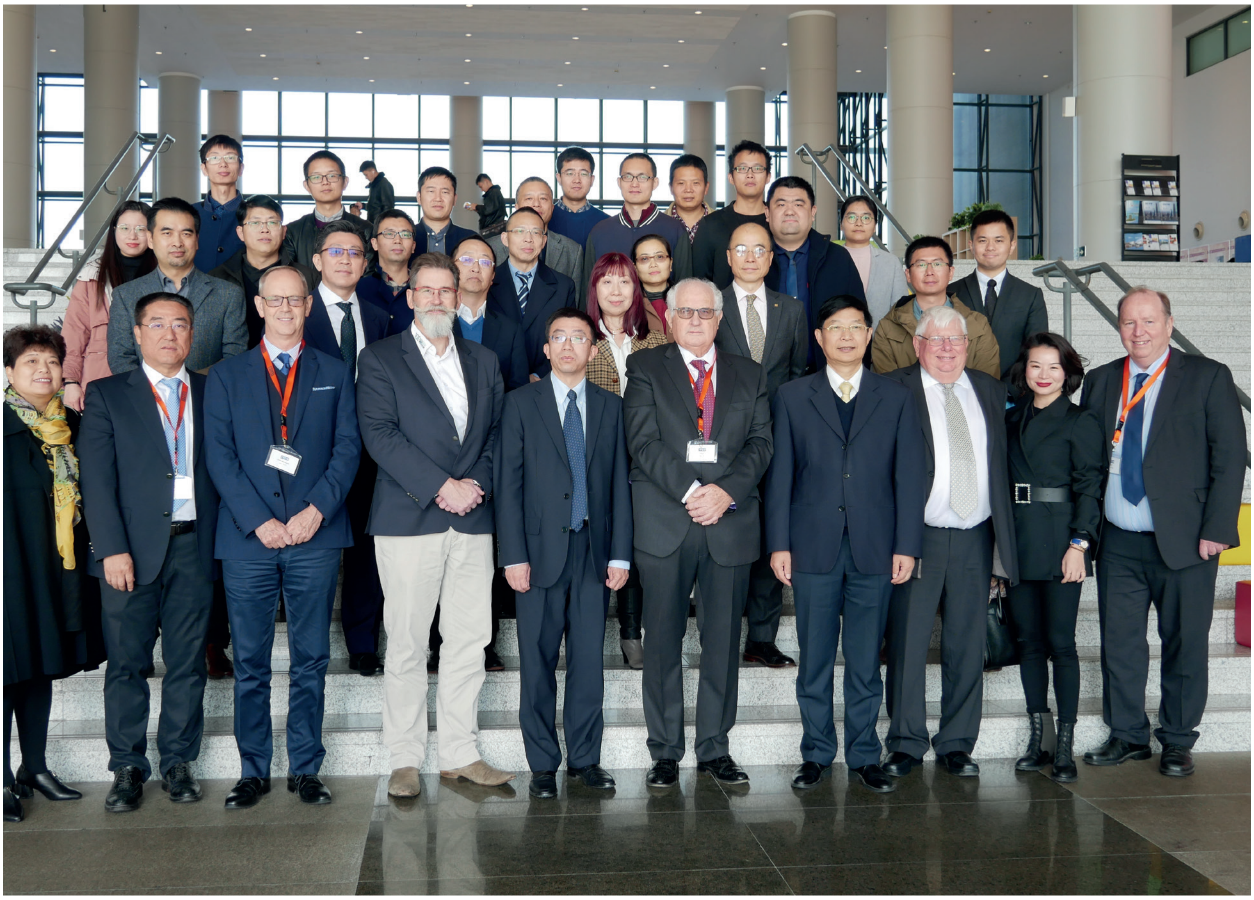
In the early days of ITCO, the Organisation worked with Erasmus University, Rotterdam, to train a number of students and encourage them to enter the tank container industry.

More recently, ITCO has developed a Tank Container E-learning Course, which enables Members to give their staff training in key aspects of the business.

This can be supplemented with "hands-on" training in depots – and, in the case of the tank container now at the Shanghai Maritime University, it can offer practical training to students.

The new generation of professionals also want to see that the tank container industry is taking a serious approach to the environment and sustainability. They need to see that the industry operates, repairs, maintains and cleans its equipment in the correct way.

The tank container industry has a huge responsibility within the bulk liquid logistics supply chain. ITCO endeavours to ensure that its members have the correct tools to recruit a new generation of professionals who can be engaged in the process.



ITCO Donates Tank Container to Shanghai Maritime University for Education Purposes

In November 2019, the International Tank Container Organisation completed the donation of a 20ft ISO tank container to the Shanghai Maritime University, China's leading academic institution for the shipping, ports and logistics industry. The tank will be used by the University for training and education purposes as part of a programme which includes six 1-day training days, together with access by students to ITCO's on-line Tank Container E-learning Course.

The donation ceremony took place at Shanghai Maritime University on Thursday 29 November 2019, when the ITCO/SMU co-operative and donation agreements were formally signed by SMU's Vice-President Shi Xin and ITCO's President Reginald Lee.

The tank was provided by ITCO member Exsif Worldwide, with the fittings supplied by Fort Vale Engineering. The tank's manufacturer CIMC prepared the tank for the University and built the access ladder and walkway. Technical expertise and logistics were supplied by Stolt Tank Depots.

Shi Xin, Vice-President of the Shanghai Maritime University (right) and Regional Lee, President of the International Tank Container Organisation, sign the co-operative and donation agreement