

AXS-ALPHALINER

THE WORLDWIDE REFERENCE IN LINER SHIPPING

TOP 100



AXS-*Alphaliner*

TOP 100 : How it works ?

The **AXS-*Alphaliner* TOP 100** provides a constantly updated ranking of the 100 largest container/liner operators as well as global capacity figures taking into account the fleets of virtually all container operators worldwide. **Alphaliner** has computed it on a daily basis since 1996 and it has become a benchmark for the liner shipping industry. It allows to follow the progression of the fleet of each operator as well as the evolution of their global market shares.

The **AXS-*Alphaliner* TOP 100** is updated every day. It is based on the fleet effectively deployed by each operator. Subsidiaries are consolidated to give a clear picture. The present document explains the way this **TOP 100** is computed and how the market shares are established.

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Selecting the operators and ships included in the liner count

There are some 250 operators, or more exactly operating groups. Thus, for the purpose of the **TOP 100** calculation, we consolidate the teu capacities of Maersk Line, Safmarine and MCC-Transport, which belong to the A.P. Møller-Maersk Group, and we consider it as a single operator. Should every subsidiary be singled out, the number of operators would approach 500.

The subsidiaries (if any) included under an operator heading can be displayed in a separate window. It can be opened using the relevant link in the TOP 100 page (i.e. click on [All figures are consolidated](#))

The operators are selected according to our definition of liner trades. They include every liner service in the common acceptance of the term. Given this common acceptance, are excluded a number of specific, more or less regular services such as parcel trades (steel and other neo-bulk products), pure forest product trades or pure vehicle carrying services. Although some of them are shown in the website for information purposes, we do not include them in our statistics. In fact, they usually do not involve the carrying of containers.

Global figures : the total liner count

A set of global figures displayed at the head of the **TOP 100** page includes the **total TEU capacity and DWT tonnage actively deployed on liner/containers services** on a given day. This count includes :

- All existing ships deployed by all the operators (including small operators beyond the TOP 100),
- Ships on short time unscheduled assignments,
- Ships ending an assignment and not yet on their new assignment,
- Ships positioning (on ballast or with an occasional cargo),
- Ships carrying empties,
- Ships for which the route is unclear or undocumented,
- Ships in routine General Repairs (GR),
- Ships idle as a result of a market slump,
- Ships in transient situations : it applies mostly to multipurpose ships having left a liner service and assumed to pursue their careers on liner trades, or switching alternatively between liner and tramp operations (deletion from the liner count occurs when it can be ascertained that the ship has clearly left liner trades).

Note - Containerships left idle as a result of damages (requiring long time repairs), long term lay up or seizure are **EXCLUDED** from the above total liner/container count.

Display of individual operators fleets

Clicking on the ranking figure of an operator (left column) will display the full fleet list of this operator, in decreasing teu capacity of ships (available for registered users only). The ships shown are those used for the **TOP 100** calculations. In some instances, these lists differ from the lists displayed from the OPERATORS section of the website, where main subsidiaries are differentiated in most cases. Thus, in the OPERATORS section, Maersk Line and Safmarine are shown as two distinct operators, and the fleets displayed are those operated by each other. But as already said, their fleets are consolidated in the **TOP 100** ranking.

- ➔ In exceptional cases, a slight difference can appear when downloading the ship list from the OPERATORS section and the ship list from the TOP 100. It is explained by the fact that the lists displayed within the OPERATORS section include -for information purposes- ships which are to join a given operator, but which have not yet moved in. Because of this particular, transient status, they are logically excluded from the TOP 100 teu count and, as such, do not appear when displaying the fleet list from the TOP 100 page.

Most of the time, these are ships freshly chartered, currently idle or positioning to the first loading port. It concerns however a very few ships (technically, the laycan date is used to include a ship in the TEU count). For the sake of exactitude, these ships are counted in the Total fleet figures displayed at the head of the TOP 100 page (a different indexing scale is used specifically for this purpose).

Computing the TEU capacities

The AXS-Alphaliner **TOP 100** figures result from the automatic addition of the nominal TEU capacities of all ships deployed on a given day by such or such operator. The total TEU liner count displayed at the head of the **TOP 100** page results from the addition of the nominal TEU capacities deployed by ALL operators, including those beyond the **TOP 100** and including ships in transient situations as explained above.

The TEU capacities used to compile the **TOP 100** and the Total liner TEU count are nominal capacities as shown in ship descriptions, for all types of ships, and as reported in the ships data sheets in the website, **provided they are employed on liner trades**.

As we monitor constantly the fleet of every operator, with the deployment of each ship (with each ship assigned to a well identified service, or to a short time spot employment -which remains a rare case-), we assume that the TEU figure derived from this count is the best way to assess the weight of each operator and the market evolution.

It is not however 100% perfect - as explained hereunder and in the subsection [Reliability and accuracy](#).

In the case of multipurpose ships, reefer ships, roros, conbulklers or barge carriers, we use the nominal TEU capacity to compile the **TOP 100** and the Total TEU liner count. Of course, part of the capacity of these ships may be used for non-containerized cargo.

That said, the majority of the **TOP 100** operators employ several non cellular ships which are in fact used as pure container ships, so their TEU capacity is, or can be, used to its maximum.

We insist on the fact that only ships effectively deployed on Liner trades are counted. Ships deployed on non-liner trades are EXCLUDED from the count EVEN IF THEY ARE FITTED TO CARRY CONTAINERS. Thus, the website includes about 5,000 container-friendly non-cellular ships which are NOT deployed on liner trades. Of course, when one of these latter ships is assigned to a liner service, its status is altered to "Liner operation" and it is then taken into account in the **TOP 100** count and in the global figures displayed at the head of the **TOP 100** page.

Computing the market share of operators

The operator market shares shown inside the bargraph and table are computed in TEU terms, based on the overall TEU capacity deployed on liner trades (Total liner TEU count). All types of ships are considered : cellular, multipurpose, roro, conbulklers and barge carriers, as far as they are **effectively deployed on liner trades**.

This calculation is made possible because **Alphaliner tracks the routes of ships deployed by all liner operators worldwide**, operating international lines or important domestic lines, down to tiny companies using one or two ships of 100 or 200 teu.

Ships that are not deployed on liner trades are NOT included in the teu count, even if they are container fitted.

In this respect, even cellular ships can be excluded from this global count in the following cases : ships undertaking long time repairs after an accident and ships under long term lay up or arrested.

We do not exclude ships performing General Repairs (GR) while a given operator operates them, as we consider this a normal event within an operated fleet, affecting all operators. These ships are therefore taken into account when computing an operator's fleet (ships undertake GR on every three to five years and are generally idle for about three weeks).

Reliability and accuracy

The fleet of each operator is monitored with the utmost care. However, as there are human beings behind the computer input, mistakes or omissions surely occur. Remarks are then always welcome.

Technically, the chartered component of an operator's fleet is, if any, the most critical to assess with an accurate timing. Although the Alphaliner team constantly follows the comings and goings of chartered ships, the very day a ship starts or ends a charter (laycan / expiry) is not always known exactly, at least for some operators.

So, the count on a given day may slightly differ from the reality. With this in view, it can be said that the TEU count on a given day is accurate at some point during a period of time lasting one or two weeks, according to operators. This is largely enough to assess the current weight of an operator on the market.

With this in mind, it is therefore not surprising that the TEU figure of an operator can go down from one day to the other, as a chartered ship may have left the fleet while there were no entries. It is a punctual situation. Over a longer period of time, the TEU count will show evidence of its growth.

Pertinence of the TEU count

The **TEU count** is the only way to assess the weight of each operator. Ideally, the **annual turnover** would be the best figure for comparisons. However, it does not work because a number of companies do not publish any financial report while some other ones dilute their liner shipping sales figures in a wider count, including non liner operations (tanker, bulker etc.) and sometimes with activities which have nothing to do with shipping.

Another interesting figure is the **number of TEU carried annually**. Many carriers also do not publish this data, and when it is, it may take into account movements of empty boxes for an operator and not for another one. Or it may count the number of containers carried, which is different from the number of TEUs carried. For regional companies operating short sea shuttles, the figures would even compare with the number of TEUs carried by much larger carriers that ship containers mainly on long haul trades. So, the average distance travelled by containers is needed to balance the result. Obtaining this kind of information is, needless to say, a wishful thinking.

There are two figures which cannot be hidden and represent a good compromise to assess the weight of operators : the cumulated **TEU capacity** and the **Deadweight capacity** of the operated fleet. It is recalled that the Deadweight (DWT) of a ship represents its carrying capacity expressed in tonnes, including allowance for bunkers and other supplies. With containers having invaded the liner trades, the TEU figure can also be considered a yardstick.

Besides its obviousness, the TEU count (or the DWT count) has another advantage, it allows virtually a day-to-day assessment of the operators weights. This could not be achieved with annual figures, or even quarterly figures, of every sort, published by the operators.

→ TEU vs DWT

We have compared the TEU and DWT figures for the Top 50 lines in order to weigh up the TEU against the DWT. We found that the carriers which would be advantaged by a DWT ranking operate multipurpose tonnage along with cellular tonnage. As multipurpose tonnage is generally slower than cellular tonnage, what is gained on one side is lost on another. Furthermore, multipurpose tonnage dealing with breakbulk cargoes as well as containers spends more time in port. Thus, relatively low sea speed and time spent in port offset the DWT advantage.

Therefore, the TEU figure represents, in our opinion, a good yardstick to compare carriers and to assess market shares.

→ DWT capacity assessment

DWT figures are always provided in a variety of official documents as this figure has to be computed mandatorily according to accurate standard rules published by the IMO (the Load Line convention, which has been established in order to avoid the overloading of ships).

However, when going down in the ranking, there are operators that operate only multipurpose tonnage on breakbulk-dominated liner trades. It is why we do not publish the TEU ranking beyond the rank 100 as it would lead to confusion and even unpleasant, understandable comments from the TEU disadvantaged breakbulk liner operators.

→ TEU capacity assessment

There is more controversy for the TEU figure than for the DWT one, as its computation is not governed by strict rules. The only limitations deal with stability, lashing and visibility from the wheelhouse. Basically, capacities shown in the website and used in related statistics are **nominal TEU capacities**.

The **nominal TEU capacity** is the maximum geometric capacity of the ships, taking into account the above mentioned limitations. The nominal TEU capacity does not reflect the real carrying capacity of the ship in laden boxes, called **effective TEU capacity**, as it takes into account a top deck layer of empty boxes (or even two layers in extreme cases) and does not deal with other specific features of a trade.

On some trades where High Cube boxes dominate, there can be a loss of stowage space underdeck (mostly on older ships) due to the inadequate under hatch clearance, so reducing further the effective capacity.

On other trades where heavily laden boxes dominate, the TEU capacity has to be matched with the total weight of the boxes vs. the deadweight of the ship, leading to an effective capacity lower than it would be on "lighter" trades. From these two examples, it can be seen that the effective TEU capacity of a given ship varies according to the trade on which it is employed.

Besides, it is well known that some carriers undervalue the capacity of ships deployed on such or such line, even quoting figures lower than the effective TEU capacity - probably not to terrify the competitors (especially when they are to launch a new service) or to lure competition observers.

The nominal TEU capacity remains the base reference figure for containership capacity, and is even contractual in charter deals.

The nominal TEU capacity of chartered ships is always accurately known as it is contractual and is generally reasonably maximized. The nominal TEU capacity of ships controlled by their operators is another matter. For example, Maersk is well known to strongly under-advertise the capacity of its large ships, but it is not the only one in this case, although for

other carriers, it is generally a thing of the past as they have often re-evaluated the capacity of their ships (often older ones).

All is a matter of capacity above deck.

The deck capacity is a very elastic figure. It depends on how many layers of containers are taken into account. In order to assess the true figures for ships for which the TEU capacity is obviously underevaluated, we simply take the TEU figures of straight sister ships for which it is well known. When this cannot be done, we have worked out ship plans when available and also simply counted the number of boxes on deck when seeing a ship at full load or with the help of photos (taking into account the height of boxes, as the standard container height used to evaluate ships capacities is 8 ft 6 in).

As said above, the upper tier of containers -and sometimes the two upper tiers- consists in empty boxes for stability reasons. These layers of empty boxes are taken into account in the ship contractual descriptions and it makes sense to include them to assess the capacity of all ships. However, there are ships for which other technical limitations occur, such as the resistance of hatch covers (mainly old ships were designed at a time when the maximization of deck capacity was a secondary consideration).

Obviously, there are ships which are seen from time to time with layers of a height rivalling with that of the funnel on their aft deck - this is usually not a normal condition and we do not consider it.

A question often raised concerns the pertinence of retaining the nominal TEU capacity for statistical purposes vs. the effective TEU capacity, or even the capacity in TEU at 14 tons and the fact that the top layer consists in empty boxes. The TEU at 14 tons intake expresses the ability to load a given number of teu containers (of 8 ft 6 inches in height) homogeneously loaded at a total weight of 14 tons, without jeopardizing the ship stability and to remain within the draft allowed by the freeboard rules. This is computed with a given quantity of supplies (included fuel oil) and ballast water.

Although this question makes sense, we answer that :

- 1) it remains a fact that on many trades, containers are stuffed with relatively light goods/packings that compensate for heavier boxes, so that the average TEU weight stands at only 11 or 12 tons.
- 2) empty boxes are part of the logistics game and top layers of empties are welcome for repositioning purposes.

That said, a series of ships that are causing a real puzzle are the largest container ships in the Maersk Line fleet, advertised at 6,600 teu ('S' class) or 11,000 teu ('EMMA MAERSK class). Taking a closer view to these ships, we found that the figures correspond approximately to a four-tier deck cargo. These ships can reasonably accommodate six tiers on deck, and even more in the case of the EMMA MAERSK. We have estimated their capacities at 8,050 teu and 15,200 teu respectively.

Comments on TEU assessment for non-cellular ships

Beyond the 100th rank appear a lot of operators operating **breakbulk ships** with a relatively low teu intake because containerized cargo is only part of their business. It is why we do not publish the TEU count beyond the 100th as it would not be fair (the DWT count would be the best way to assess their carrying capacity). That said, a **TOP 100** ranking based on DWT would disadvantage most of the large liner operators as it would not be weighed against the high productivity and/or speed of container ships.

As far as **reefer ships** are concerned, most of them are deployed on pure reefer trades (carrying fruit, meat and fish). A number of these ships are deployed on regular services (often weekly services) and are used basically to carry fruits (in holds and in on deck containers) by Fruit companies. For these latter ships, containers are often confined to the weather deck. The reefer breakbulk under deck capa is then excluded. It does not matter (in our view) as it is generally seen as a different business.

In the same way, we do not include the capacities of NYKCool, Seatrade etc. This is another business and in this case, the cubic capa is the only way to rank these operators.

However, these reefer ship operators can also sublet the container capacity of their ships to third party carriers. In most cases, it is limited to deck capacity as many of these reefer ships are not designed to carry containers under deck. Well established third party carriers are taken into account in the Liner count, although they are small ones and are far beyond the 100th operator.

There are exceptions : large reefer ship operators such as Dole or Chiquita/GWF operate pure container ships (fully celled) alongside with some reefer ships of more conventional design deployed on well defined regular trades. They are of course included in the Liner/TOP 100 count.

Conbulkers are counted ONLY when they are deployed on liner trades, and are excluded when they are operated on parcel trades or pure forest products trades, even if regular. Actually, conbulklers interfere today only marginally with container trades. In rare cases, container operations are mixed with forest products (such as Westwood or Finnlines), and we include the involved TEU figures in the liner TEU count.

Roro ships usually deployed by companies such as Delmas, Grimaldi or Linea Messina are basically versatile ships able to deal with a large variety of cargoes, including containers. For the TEU count, we retain the TEU intake of these ships, as displayed by these operators, although the TEU volumes can be partly filled with rolling stock and other cargoes, including breakbulk cargoes on MAFI, trailers, or handled with lift trucks. In fact, these cargoes have a TEU equivalent to the TEU capa they fill. Conversely, volumes dedicated to rolling stock only can be used to load containers on MAFI, the capacity of which is usually not counted in the nominal TEU intake.

In the case of Grimaldi, the hybrid roro ships used have a relatively low TEU capa and it does not reflect the overall transportation capa of such ships. However, as these ships are largely used to carry vehicles, this pure vehicle capa is de facto excluded from the count. We also completely exclude from the count the PCTCs deployed by Grimaldi (although they are displayed in the Grimaldi profile for information purposes). This is logical as we exclude all vehicle carriers from our count. In the same way, we do not take into account the PCTCs fleets of NYK, MOL, Kawasaki etc., and we also exclude the Wallenius-Wilhelmsen fleet, today comprising pure vehicle carriers only.

AXS-Alphaliner is a joint production of **Alphaliner**, a leading data and information provider in the liner shipping field, and of **AXSMarine**, a marine software provider.

Alphaliner is an independent consultancy providing an exhaustive and permanently updated inventory of all the world containerships and liner services. Detailed descriptions of the containerships are provided, together with their commercial history and their current status. Liner services data sheets detail the rotation and ships deployed. A full section is dedicated to the liner operators, with trading profiles, fleets and orderbooks. On top of this, **Alphaliner** also provides fleet statistics, forecast and market analysis.

This data is available by subscription at www.axs-alphaliner.com, a website elaborated by **AXSMarine** to harbor **Alphaliner** data and providing sophisticated tools to handle this data.

TOP 100 - Frequently asked questions

Why is the TEU fleet bigger than the Total TEU liner fleet at the head of the TOP 100 ?

It is because you include in your own count all the container-capable ships listed in the database, including those which are NOT deployed on liner trades.

The **total TEU liner fleet figures** displayed at the head of the AXS-Alphaliner **TOP 100** (*Today, there are xxx ships active on liner trades, for yyy TEU and zzz TDW*) results from the addition of the TEU capacities of the ships deployed by ALL liner operators, i.e. those in the **TOP 100** and those beyond the **TOP 100** (down to the smallest operator in the database, with a single ship of 60 teu), as well as ships in transient situations.

The **total TEU fleet computed** through the addition of the capacities of all ships included in the Alphaliner database is not relevant as it includes the capacities of ships fitted for containers, but which are not currently deployed on liner trades (and thus are excluded from the total TEU liner fleet count). Such ships are conbulklers employed on grain trade, timber trade etc., cargo vessels employed on tramp trade or on project cargo voyages (not liner), roros employed as truck ferries on short sea routes etc., and even cellular ships exceptionally deployed on non-container tramp trades.

When one of these excluded ships is chartered by a liner operator involved in the container business, then it is included automatically within the TEU liner count.

Why is one of my operated ships not included in the count of my company ?

Ships are excluded from the total TEU liner fleet when they are idle as a result of an accident (repairs after a collision, a grounding or a fire), a grave engine failure (exchange of a broken engine crankshaft), upgrading the ship (such as lengthening), in long term lay up, or seized.

These ships do not participate to any trade while they are idle and are even not available for charter (at least at short notice), and it is why we exclude them from the operators TEU count, and hence from the total liner count. Of note, the ships lying idle for operators' account as a result of a market slump, or awaiting their sailing slot, remain counted in the operator's fleets.

In the case of a chartered ship, she would even be excluded de facto from the fleet of your company in the case of an accident, which usually triggers the "off hire" clause.

Why some ships owned by my company are excluded from its TEU count ?

The AXS-Alphaliner **TOP 100** is a ranking of the operators, some of which charter out their own ships to third parties, under which fleet they appear. Some ships owned by your company may fall under this case. They are -logically- counted as part of the fleet of the operator to which you hired them out. The same apply to chartered ships you would sublet to a third party.

As far as the owned component is concerned, all the ships owned by your company can be displayed in the OWNERS section of the website (all owned ships – chartered ships are excluded in this case). This list of "owned ships only" includes the ships that you charter out to third party operators, which are labelled **TO** in the status field of the ship data sheets to mark the fact that they are chartered ships provided by operating owners, at the difference of ships provided by non-operating owners (**TO** = charter by opportunity or charter within the frame of an operational exchange – as explained in the [Ship Glossary](#)).

Why do I get a list of ships that does not match with TOP 100 figures ?

It is because you got the fleet list from the “operated fleet” item of an affiliate of a wider operating group.

The fleet listed in the OPERATORS profile are those strictly operated by affiliated units within an operating group. Thus, clicking in the “operated fleet” item of the Maersk Line profile leads to a display of the ships operated under the “Maersk Line” name, excluding those operated by other companies within the APM-Maersk Group, namely “Safmarine” and “MCC-Transport”, the fleets of which appear under their respective profiles.

In order to get an APM-Maersk Group exhaustive fleet list, as used for the TOP 100 daily compilation (consolidating the fleets of Maersk Line, Safmarine and MCC-Transport), you can either click on the ranking of APM-Maersk in the TOP 100 page (this function is active only for registered users), or you can hit the relevant link at the head of the Maersk Line profile.

Why is there a ship named with an APL prefix in the MOL's operated fleet ?

It happens in a few cases that ships chartered (and therefore operated) by a given line are named after the name style of a partner for commercial reasons. Thus, taking an example, it may be surprising to see a ship with a name prefix in APL listed in the MOL's fleet. It is not a mistake. It reflects only that the ship is actually operated by her charterer MOL, but has been given an APL name in order to represent the presence of APL on the trade on which she is deployed. Such a case occurs also when ships are exchanged within a partnership, without changing their names.

Breakbulk services and ships – To what extent are they covered ?

AXS-Alphaliner covers regular, established liner breakbulk services offering transportation of a variety of general cargo/project cargo as common carriers, including containers (such as OPEX or COREX at Safmarine). These services involve mostly multipurpose cargo vessels. Other typical examples include services offered by Rickmers Linie, OXL, Spliethoff's or CEC Lines. Sometimes, the ships are advertised at the last minute.

Of note, some of the breakbulk services displayed focus almost only on breakbulk cargoes, project cargoes or parcels, with the only containers carried being ‘client’ containers (enclosing for example small items accompanying a larger project cargo shipment). The capacity of these ships is excluded from the Global liner count in order to not distort the total liner TEU figure by TEU capable ships that actually do not carry containers (or very few) on the service on which they are employed.

AXS-Alphaliner DOES NOT cover regular parcel services, involving for example full cargoes of steel, or of forest products, or of bagged rice, etc. (even if for several shippers). These services involve mostly open hatch bulk carriers of 20-50,000 tdw, excluded from the website (except when they are conbulklers – listed just in case they would come one day on container trades). Some of these services are however listed in the website as they are in the grey zone between established liner breakbulk services and regular parcel services.

AXS-Alphaliner DOES NOT cover regular captive services (i.e. offering regular services for a single shipper), even if employing multipurpose cargo vessels. It can be for example a regular service between two production units of the same group. Given their nature, there are no published schedules, and by definition they are not common carriers.

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