Measurements

1. Date on which a movement of goods is recorded

The date on which a movement of goods ends is recorded. This is done per tank. Suppose a vessel is loaded from tanks 1 and 2. Total loading starts on 15 February and ends on 16 February. However, loading from tank 1 already ends on 15 February, while loading from tank 2 only ends on 16 February. With respect to tank 1, the mutation date is 15 February and with respect to tank 2 this date is 16 February.

This date is called the “measurement date” or the “mutation date”.

2. Method of establishing physical quantities

Physical quantities are established by means of tank measurements and tank calculations. The liquid level in the relevant tanks is measured after the movement of goods, however can also be measured before. The tanks are measured by means of a verifiable Enraf radar system. Some of our tanks don’t have a automatic gauging system and are therefore measured by hand with tape.

The tank tables of each tank are part of Tomcat. This enables one to calculate in Tomcat what volume and what weight the relevant tank holds on the basis of the liquid level measured. The difference between the tank contents before and after the movement of goods presents the quantity of goods the relevant movement of goods entails.

There is a link between the Enraf gauges and Tomcat. Enraf data are read directly into Tomcat without any human intervention via the interface between Tomcat and Enraf. The Loading Master is authorised to overwrite these Enraf data in a very limited number of cases, for example:

- Measurements in the so-called unmeasurable zone (bottom part of the tank)
- Failure in the Enraf gauges
- Manual measuring tanks
- Emptying a tank
- Simultaneously movements
- Adding additives

The daily stock reports to customers also safeguard the correctness of the stock set down in the system. Customers generally keep a shadow administration of the activities they carry out at the terminal. These customers compare the daily stock reports to their own administration. If there are any discrepancies, they immediately contact the terminal. If there are no discrepancies, no confirmation or acceptance is sent to the terminal.

3. Method of handling goods discharged

The quantity of product discharged in the shore tanks is established by measuring the shore tanks prior to unloading the vessel and repeating this after unloading. In practice this measurement is referred to as the D-measurement. As the D-measurement is the only measurement which indicates the actual quantity received by our terminal. Differences, in this circumstance, are the responsibility of the sender.

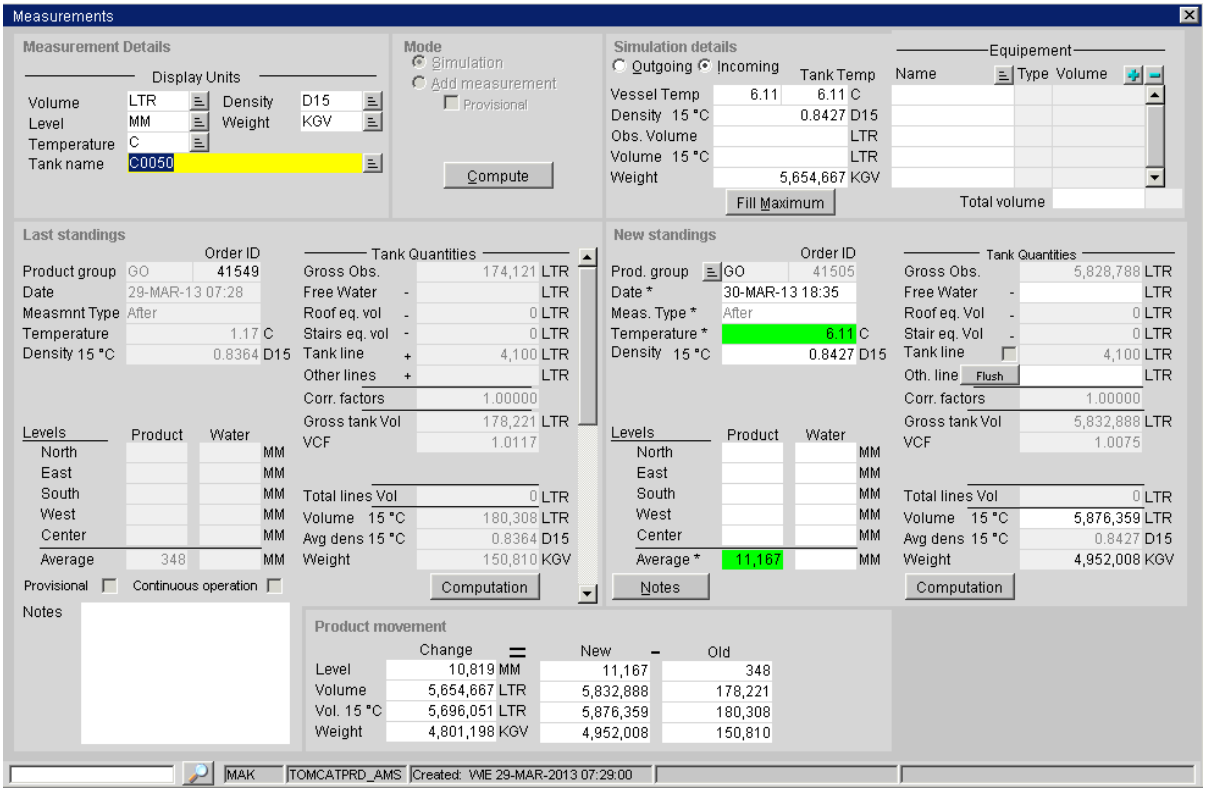
In this paragraph the D-measurement will be explained first, followed by the C-measurement. Thereafter, the differences between the C- and D-measurement are highlighted together with the reporting of supply differences to Customs.

D - measurement
The entry in the stock administration is always done with the actual received quantity by the terminal which is booked in the customs warehouse or the excise warehouse. This is the quantity measured via the D-measurement.
The quantity discharged in the shore tanks is established by measuring the shore tanks prior to unloading the vessel and repeating this after unloading. The discrepancy between these measurements before and after is the quantity discharged.

Immediately after actual unloading of the vessel and discharge in the shore tanks, a provisional measurement is taken by OPS, which only serves as a check with the purpose of quickly establishing whether a vessel can leave or if discrepancies were found of such magnitude that they must be sorted out before the vessel leaves. This provisional measurement is not registered in the stock administration as a tank measurement. The final measurement after discharge takes place about 1 to 4 hours after unloading, on average, since the liquid level in the tank must first come to rest in order to take a proper measurement. The captain will usually not wait for the final measurement, which is the reason a provisional measurement is taken immediately after unloading.

As soon as the D-measurement has been taken, the Loading Master will enter this measurement in Tomcat. As a result, the preliminary measurement is overwritten with the final measurement. There may be circumstances that the preliminary measurement will be the final measurement. In those cases, the Loading Master only needs to put the preliminary to final.

The illustration below shows what the Tomcat screen where the tank calculations are made looks like.



This Tomcat screen shows the content of the tank before and after unloading the vessel. The basis of the shore tank measurement is the liquid level height expressed in millimetres. By means of the tank tables (strapping tables) included in Tomcat, the current tank content in litres is calculated for this position in millimetres. Via the current temperature of the product, the specific weight and the volume correction factor (VCF), the tank content is subsequently set down in kilograms and litres at a temperature of 15°C.

C-measurement

The principal could appoint in a surveyor company (an independent third party) to inspect the procedures involved in unloading a vessel and discharge in the customs warehouse / excise warehouse.

The surveyor company will first have to measure the volume of the vessel before unloading is started. This measurement is also called the C-measurement. When several vessels will discharge simultaneously in the same tank, the survey company will first perform a C-measurement for all involved vessels. For seagoing vessels the surveyor will always apply the Vessels Experience Factor (VEF) if available.

After this C-measurement is taken, the data are processed by the survey company, which passes them on to the Loading Master. The Loading Master compares the measuring results provided by the survey company to the quantity of product as stated on the Bill of Lading, e-AD, T1 or Summary Declaration. Unloading is started if the measuring results of the survey company are consistent with the data on the transport documents (if the differences are within the margin) and once the data from the C-measurement are processed in Tomcat.

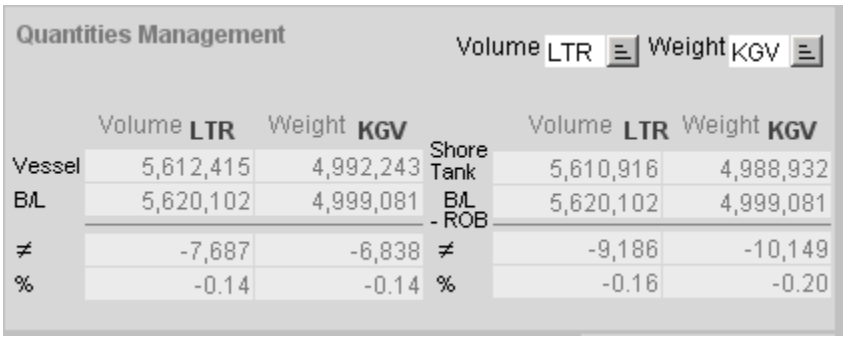
If necessary, this survey company is also authorised to measure the shore tank as part of its survey work before unloading is started (pre-measurement).

After the vessel is unloaded, the survey company is called in again to verify that the vessel is entirely empty.

Differences between the C- and D-measurement and the transport documents.
The quantity stated on the transport document is also included in the administration in order to make any discrepancy clear. Below we will describe more about the C-measurement and the transport documents and the D-measurement and the transport documents.

If the discrepancy between the C-measurement and the quantity as stated on the transport documents exceeds the allowable delivery discrepancies, the Loading Master must take action: he thoroughly re-checks the data, and if there is an inexplicable discrepancy, he issues a “Letter of Protest” to the captain. The Customer Service department is informed of the discrepancy detected, and it will subsequently notify the principal of the discrepancy and, in consultation with the principal, give the Loading Master clearance to unload.

All discrepancies between the C-measurement and the vessel’s documents, meaning the Bill of Lading or other documents on board, must be apparent from the dossier made for every deposit, kept at the administration (Diva). Moreover, the “execution details” screen in Tomcat already states the percent difference between the C-measurement and the vessel’s documents, both for kilos and litres.



	Volume LTR	Weight KGV		Volume LTR	Weight KGV
Vessel	5,612,415	4,992,243	Shore Tank	5,610,916	4,988,932
B/L	5,620,102	4,999,081	B/L - ROB	5,620,102	4,999,081
≠	-7,687	-6,838	≠	-9,186	-10,149
%	-0.14	-0.14	%	-0.16	-0.20

Reporting delivery discrepancies to Customs.

A delivery discrepancy showing at every discharge is inherent to the nature of the goods. In accordance with the decree on excise policy in the Netherlands the following tolerance levels are applied as difference considered inherent to the nature of the goods for transport per truck or barge:

- Gasoline : 0,3 %;
- Kerosine and gasoil : 0,2 %;
- Heavy fuel oil : 0,4 %;
- LPG : 1 %
- Ethylalcohol: 0,3%

For transport over sea the following tolerances apply:
- LPG: 1%
- Other mineral oils & ethylalcohol: 0,4%

With respect to non-Union goods (T1), the terminal applies the following standards:

- Over sea: 1%
- Others: depending on product type. Any discrepancies are reported via the electronic communication systems if applicable, i.e. NCTS for T1 goods and EMCS for AAD.

Further details regarding discharges

Delivery with T1 and e-AD

A vessel may deliver both Union and non-Union goods. An e-AD is on board for Community goods and a T1 document for the non-Community goods.

The quantity discharged is based on the amount the terminal received in accordance with its tank measurement (D-measurement). A customs status is assigned to this total quantity discharged on a pro rata basis.

Deposit in more than one tank

Tank measurements are taken and tank calculations are made for each individual tank. In order to compare the quantity stated on the delivery document with the quantity actually deposited, the total of all relevant tank calculations is compared with the quantity stated on the delivery document. All delivery discrepancies are entered in Tomcat in every tank on a pro rata basis.

4. Method of handling loading goods

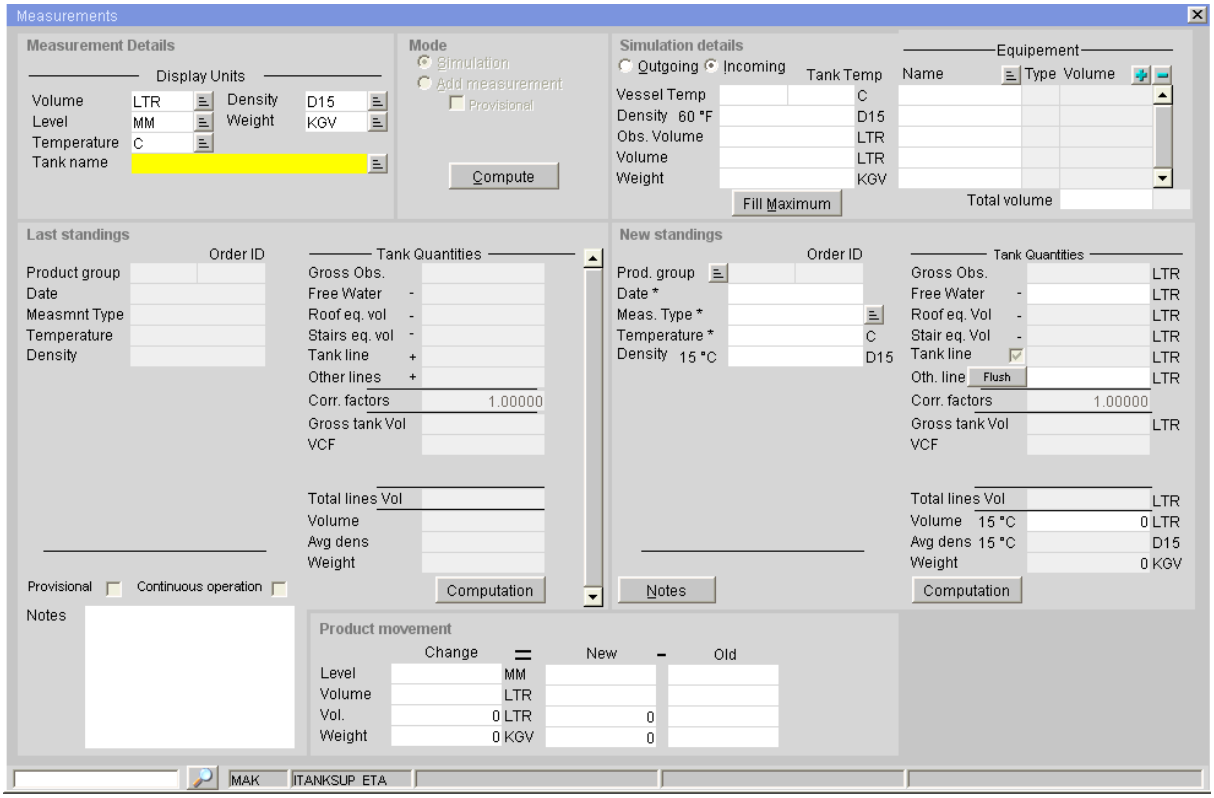
In this paragraph we will first explain the A-measurement and thereafter the B-measurement. Next we will highlight the differences between the A- and B-measurement and the reporting of losses to Customs.

In this section we also pay attention to the removal of goods by trucks and the removal of goods to third countries.

A-measurement

The quantity removed from the shore tanks is determined by measuring the shore tanks prior to loading the vessel and repeating this after loading. The discrepancy between this pre-measurement and after-measurement is the quantity removed. This measurement is also called the A-measurement. A pre-measurement is omitted if the relevant shore tank was measured shortly before removal. In that case, the after-measurement of the previous manipulation serves as the pre-measurement for the next removal. This A-measurement is taken by the Operations department and is registered in the stock administration as a tank measurement. This tank measurement can be automatically read into Tomcat.

The illustration below shows what the Tomcat screen in which the tank calculations are made looks like.

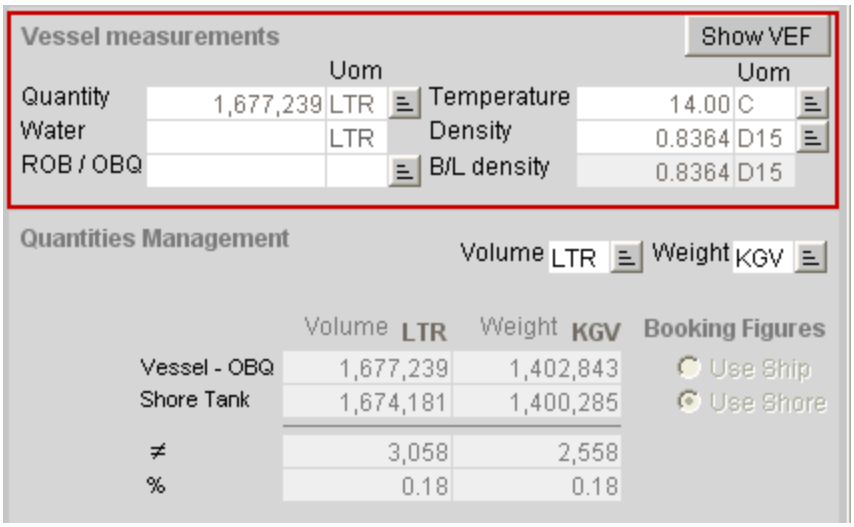


The Tomcat screen above shows the content of the tank before and after loading the vessel. The basis of the shore tank measurement is the liquid level height expressed in millimetres. By means of the tank tables (strapping tables) included in Tomcat, the current tank content in litres is calculated for this position in millimetres. Via the current temperature of the product, the specific weight and the volume correction factor (VCF), the tank content is subsequently set down in kilograms and litres at a temperature of 15°C.

B-measurement

The principal can appoint a surveyor company (an independent third party) to inspect the procedures involved in loading a vessel and removal from the bonded warehouse / excise warehouse. A principal does not always do this. If the principal has not appointed a surveyor company, the terminal will administrate the barge measurement done by the ship. If the principal has appointed a surveyor company, said company will first have to measure the volume of the vessel before loading is started in order to ascertain a possible OBQ (On Board Quantity). If necessary, this survey company is also authorised to measure the shore tank as part of its survey work before loading of the vessel is started (pre-measurement).

After loading the vessel, the survey company is called in again to measure the quantity of goods on board the vessel. The quantity found at the B-measurement will be entered by the Loading Master in Tomcat in the “Execution details – vessel measurements” screen. Thereafter Tomcat will show the percentage difference between the A- and B-measurement.



The Loading Master compares the B-measurement with the A-measurement and the quantity loaded according to the A-measurement. If the discrepancy between the A-measurement and the B-measurement exceeds above tolerance, the Loading Master and a surveyor who will be present carry out an examination.

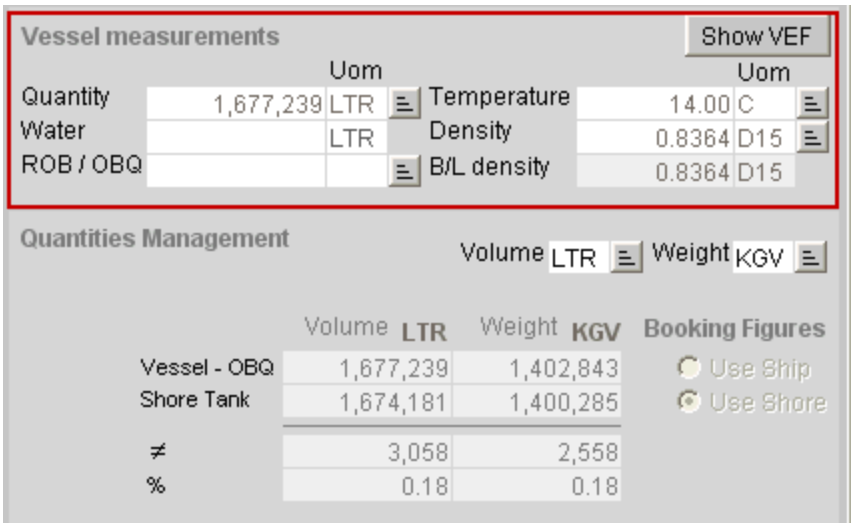
B-plus measurement

The principal can under specific conditions also use a B plus-measurement. The principal is required to appoint a surveyor and/or superintendent. The surveyor and/or superintendent checks all cargo tanks of the ship prior to loading on any pre-content. After loading the ship, the ship is measured manually by the superintendent and/or the surveyor. The superintendent performs a manual measurement in the manner described in the letter from Vitol SA dated March 18, 2014, which is attached as Appendix 7a.

The principal does not always use an inspection company. In that case VTTI Terminals II B.V. uses the figures measured by the barge captain of the ship as B-measurement.

Discrepancy between the A-measurement and the B-measurement.

The amount found on board as B measurement is entered by the Operations department in Tomcat in the "Execution details - vessel measurements" screen. Tomcat then indicates the percentage difference between the A and B measurements.



The Operations department compares the B measurement with the A measurement. Depending on the product specification, the percentages are used from the national excise law policies regarding loss standards. An investigation must then be carried out by the Operations Department and the surveyor and/or inspector.

The surveyor or superintendent could measure the ship again. The Operations department checks whether the tank calculation has been made correctly in Tomcat by doing a so called Enraf check.

If the discrepancy between the A and B measurements is less than allowed tolerance, then the difference falls within the standards and no additional research needs to be done.

Choice between the A-measurement and the B-measurement.

The starting point is that the actual loaded quantity is stated on the Customs document. This is in line with Eurotank's legal obligation to ensure that the storage and transport of goods under a suspensive system is fully under customs supervision so that the risk of irregularities, or irregularities that remain undiscovered, is as small as possible.

In practice, this means that when loading ships there are nearly always two different measurement methods available: the A and B measurements. In Tomcat there is an option to administratively settle the loading order on the basis of the A or the B measurement. The B measurement can only be chosen if there is a so-called B plus measurement, which has been carried out in the manner described in the Vitol letter of 18 March 2014 to Mr. M.R. Oudenaarden of the Oil and Gas Team of Customs Rotterdam (Appendix 7a: Link to Appendix 7A). The process described in this letter for conducting a manual measurement has been approved by Customs in a letter dated 7 October 2014 (Appendix 7b: Link to Appendix 7B).

If the B measurement qualifies as a B plus measurement and if the difference with the A measurement falls within allowed tolerance, the highest of the two measurements is chosen for the completion of the

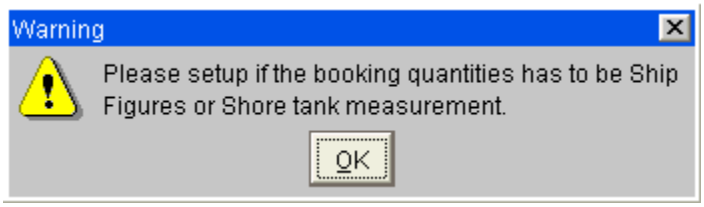
loading order in the administration. This follows from the above-described principle that the actual loaded quantity is stated on the customs document.

If the B measurement is performed as a regular B measurement, then the documents are drawn up on the basis of the A measurement.

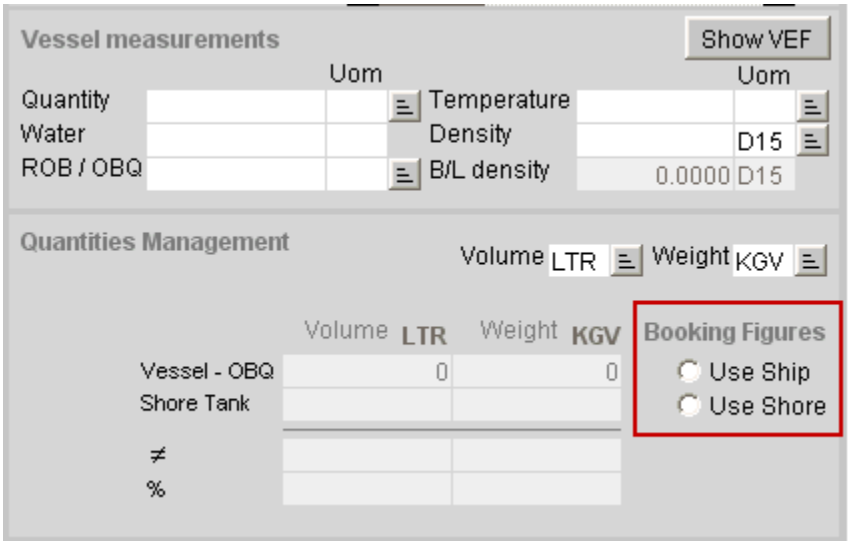
Administrative processing of the choice between the A measurement and the B measurement.

To meet the transparency requirement, the choice between the A and B measurements in Tomcat is set. In addition, the considerations underlying the choice in Diva are kept at order level. Part of the file in Diva is the measurement report of the superintendent and all further possible correspondence between Eurotank, the superintendent and the customer.

Administratively, the choice between the A and B measurements in Tomcat is processed by making a choice between the two measurements. A load order cannot be completed before a choice is made between the A or B measurement. When recording the A-measurement in the administration, Tomcat gives the following message before the measurement can actually be booked:

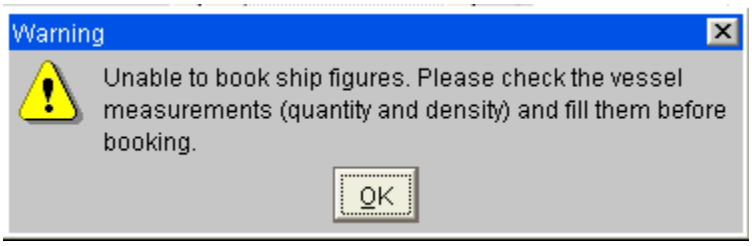


On the right-hand side in the "Execution details" screen there is the possibility to make the choice to use the figures of the A or B measurement for the further processing of this order:



When using the A measurement, one chooses "Use Shore" and with B plus measurement "Use Ship".

It is not possible to choose the B measurement when the data of the B plus measurement is not entered in Tomcat under "Vessel measurements". Tomcat will then give the following warning:



The stock mutation is based on the quantity of the final chosen measurement.

The differences that arise from choosing the B plus measurement are made transparent and reported via the GPA per load order.