



FREMANTLE
PORTS

SOLAS VGM Handbook



SOLAS Verified Gross Mass (VGM) Regulations
Effective 1 July 2016



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WESTERN AUSTRALIA PORT OPERATIONS TASK FORCE



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4261

MAX WGT
30,000 LBS
13,600 KGS

K LINE
KKFU 739119
4561

TITON
TTNU 966964
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K LINE
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CAUTION
HIGH CONTAINER

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K LINE
KKFU 778379
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CMA CGM
ECNU 962819
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K LINE
MAX G W
TARE
MAX C W
CU CAP

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APZ 454715
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K LINE
KKFU 769807
4560

APZ 425089
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K LINE
MAX WGT
TARE
MAX C W
CU CAP

Contents

Introduction	2
Effecting SOLAS worldwide	3
Implications for Shippers	6
Determining VGM	8
Submitting VGM	13
Additional Resources	15

Nothing in this handbook removes your responsibility to comply with all regulations and laws. Fremantle Ports assumes no liability for such matters.

Discrepancy between the *declared* and *actual* gross mass of a packed container can lead to a range of incidents both on the road and at sea. To assist with ensuring the safety of seafarers, as well as all those involved in the movement of containers, new regulations will come into force on July 1, 2016.

Introduction

From July 1, 2016, the International Maritime Organization (IMO) will start enforcing the *Safety of Life at Sea (SOLAS)* amendments that require a packed container to have a shipper-verified weight as a condition for loading onto a ship for export.

The “Loadsafes” Working Group, a subcommittee of the West Australian Port Operations Task Force (WAPOTF) has been working with the wider industry and the Australian Maritime Safety Authority (AMSA) to construct some guidelines / procedures that may assist both the shipper and related parties prepare for these changes.

Effecting SOLAS worldwide

1. When is the enforcement date?

The new SOLAS amendments go into effect from **1 July 2016**. From this date, carriers will be allowed to load a packed container on board their ships only after the Verified Gross Mass (VGM) has been received.

2. What does the SOLAS regulation apply to?

The regulation applies to all packed containers to which the *International Convention for Safe Containers (CSC)* applies and which are to be loaded onto a ship subject to *SOLAS Chapter VI*.

All packed export containers will legally need a VGM declaration, including all standard sea freight containers, tank containers, flat racks and bulk containers. Effectively, 99% of all global shipping volume will be subjected to this new SOLAS regulation.

3. What is the geographical scope of effect?

The regulation is legally-binding across the world. All *171 IMO member countries* have undertaken to implement these amendments in their respective jurisdictions, including those in relation to verified gross mass (VGM).

4. Will different authorities enforce SOLAS differently?

It is up to individual countries to enforce SOLAS requirements along their own guidelines.

For example, individual countries can decide their own policies on:

- Certification of weighing service providers
- Calibration of weighing scales and methods
- Allowance for VGM versus actual mass variance

In Australia the local authority will be the Australian Maritime Safety Authority (AMSA). More detail can be found at www.legislation.gov.au/Series/F2016L01018 as well as the Fremantle Ports website www.fremantleports.com.au/Operations/Landside/Pages/Truck-information.aspx (“use Loadsafe” tab).

Effecting SOLAS worldwide (continued)

“NO VGM, NO LOAD”
Only shipper-declared containers with VGM will be accepted for loading.

“NO VGM, NO GATE-IN”
Both terminals adopt a stringent policy to reject containers without VGM at gate-in or on post receipt if a PRA has been amended.

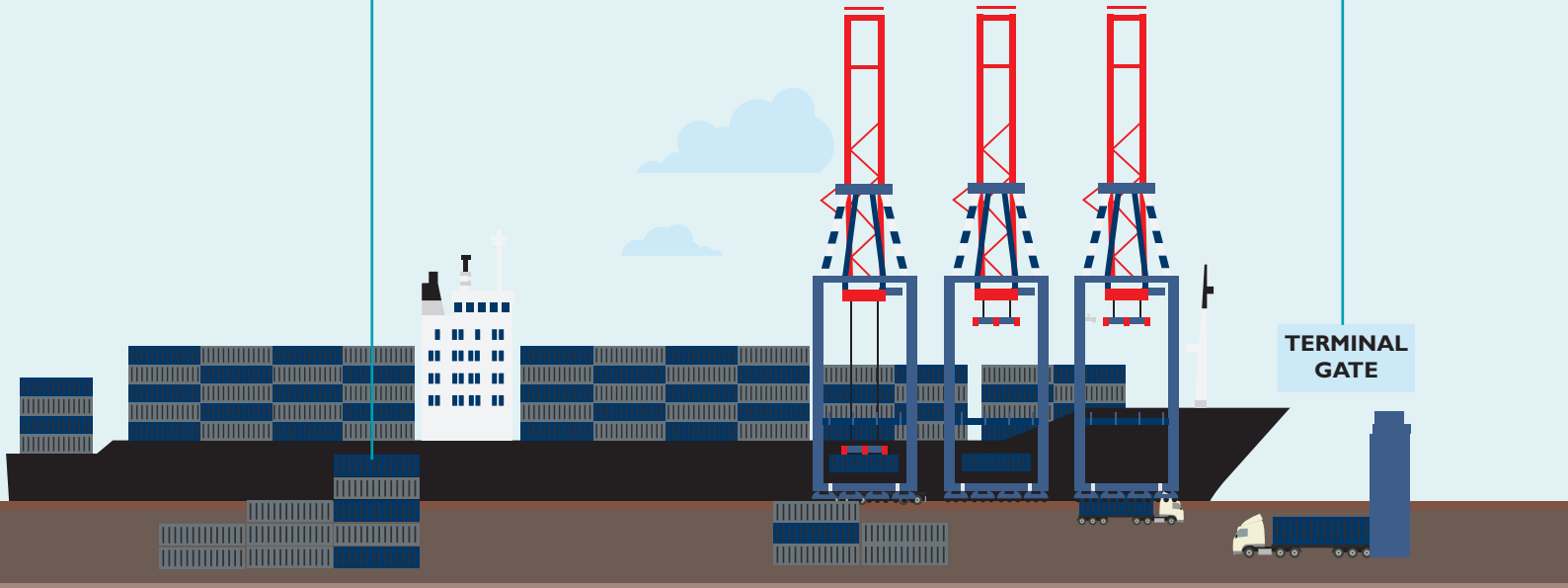


Figure 1. VGM Policies

Effecting SOLAS worldwide (continued)

5. Does the policy differ between carrier and container terminals?

Globally, carriers are not allowed to load a packed container for which VGM has not been provided by the shipper. In Australia the declaration of the VGM can be supplied on the Pre Receipt Advice (PRA).

NOTE: In Australia a PRA with a “CLEAR” status is necessary to finalise a Vehicle Booking Slot (VBS) for access to the wharf. It is important to note that selected terminals may adopt a policy where, should the PRA be amended after receipt into the terminal, the container MAY need to be removed from the terminal until after the PRA has received a “CLEAR” status.

Both terminal operators in Western Australia have indicated that the container will need to be removed if the VGM is changed after entry. This will require certain actions to be taken with the Department of Immigration and Border Protection (DIBP). Please contact DIBP for more information.

Shippers should also maintain close communication with the various lines to ensure compliance where shipping-line policy may vary.

6. How do I learn more about the different terminals’ policies?

The WAPOTF is working closely with both terminals in Fremantle. The policies are largely similar. Shippers and transport operators should, however, contact the terminals directly for their current policy.

Implications for Shippers

1. As the Responsible Party

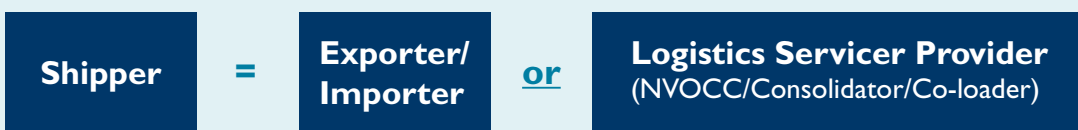
The new SOLAS amendments spell out clearly that **it is the shipper's responsibility to provide the VGM** to carriers sufficiently in advance for it to be used in the preparation of the ship stowage plan.

As a result, even in the instance where the shipper engages a third party to obtain the VGM, the shipper still remains the responsible party. In the case of a missing VGM that causes the shipper's container not to be loaded, the shipper will remain liable for any associated costs.

2. What is the definition of shipper?

The shipper is defined as a legal entity or person named on the bill of lading or sea waybill or equivalent multimodal transport document (e.g. "through bill of lading") as shipper and/or with whom (or in whose name or on whose behalf) a contract of carriage has been concluded with a shipping company (see Chapter 2 of *IMO SOLAS Guidelines*).

Hence, depending on the contractual agreement, the shipper can be either **the cargo ex/importer** or **a logistics service provider** (NVOCC/consolidator/co-loader).



3. Implication on costs

In addition to any costs associated with weighing the containers and submitting the VGM data, you will need to factor in possible costs that might arise when you fail to submit your VGM in time.

Implications for Shippers (continued)

4. What will I need to do as a shipper?

As a shipper, you will need to be mindful and ensure that you:

- Refer to the WAPOTF “Compulsory Verified Weighing of Export Containers” indicative process (under the “Loadsafe” tab at the Fremantle Ports website www.fremantleports.com.au/Operations/Landside/Pages/Truck-information.aspx)
- Evaluate your weighing options – factoring in relevant costings and procedures
- Decide if you will need to engage a weighing service provider
- Obtain your containers’VGM data
- Obtain a PRA with a “clear” status
- Arrange a Vehicle Booking System (VBS) slot
- Are aware of each terminal’s VGM requirements
- Are aware of AMSA’s guidelines, including auditing and penalty rules (if any).

Seek more information from your local shipper community where necessary.
Contact your shipping line for information particular to that line.

Figure 2. Shipper’s VGM To-Do Checklist





Determining VGM

1. What exactly is verified gross mass (VGM)?

VGM policy requires that the total weight of each packed container must be measured and declared. This total weight consists not only of the weight of all packaging and cargo items, but also the container tare and all additional loading equipment too (e.g. lashing material).

Please refer to Chapter 2.1 of the [*IMO SOLAS Guidelines*](#) for the exact definition of such.

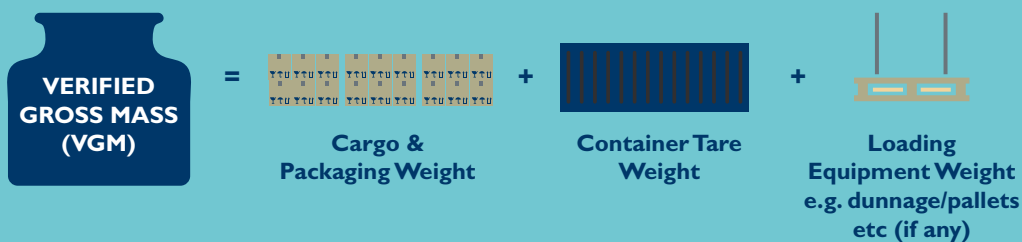


Figure 3. Definition of VGM

Determining VGM (continued)

2. How to determine VGM?

There are two methods for weighing (refer to Chapter 5 of the [IMO SOLAS Guidelines](#))

Method 1:

Weighing the whole container after it has been packed

(e.g. weighing the whole truck and containers at certified weighbridge and subtracting truck and chassis weight, or any other certified method of container weighing).



Method 2:

Weighing all the cargo and contents of the container individually, and adding those weights to the container's tare weight. Factor in additional loading equipment weight, if any (e.g. dunnage / pallets etc).



Figures 4 & 5. Two VGM Determination Methods

Determining VGM (continued)

3 Who can provide the weighing service?

The shipper can do the weighing, or engage a third party certified for such service. However, according to Chapter 2 of the [*IMO SOLAS Guidelines*](#), any weighing equipment used to weigh the contents of the container must meet the applicable accuracy standards and requirements of the country or state in which the equipment is being used.

In addition, the method used for weighing the container's content has been determined by the Australian Maritime Safety Authority (AMSA). See the [*AMSA website*](#).

4 How will I know if my weighing device is acceptable?

Any device that falls under the National Measurement Institute (NMI) legislation will have a certification seal/label. For those weighing devices that don't fall under the legislation, a number of organisations can test the scale to see whether it fits within the applicable maximum permissible allowances. NMI has a contact email address should you wish to find a servicing licensee. This can be found on the NMI website: www.measurement.gov.au/TradeMeasurement/Licensees/Pages/ServiceLicensees.aspx

5 Is any VGM variance allowed?

Check with AMSA on its [*website*](#). The weighing device must be certified and calibrated.

AMSA uses the National Measurement Institute standards. NMI adopts OIML (International Organisation of Legal Metrology) standards and modifies them for Australia. Its recommendations are available from the NMI website www.measurement.gov.au.

The following accuracy standards are approved (refer next page). They are based on the "Maximum number of increments of error permitted" and not, as in other countries, percentages of variance.

6 How do I obtain a container's tare weight?



The tare weight is available on the door-side of each container.

Figure 6. Reading Tare Weight on Container

Determining VGM (continued)

Reference OIML/NMI R Document	Accuracy Standard
NMI R51 Automatic Catchweighing Instruments (2009)	2.2 Maximum permissible errors for class X(x) instruments 2.3 Maximum permissible errors for class Y(y) instruments
OIML R51-1:2006 (E) Automatic catchweighing instruments. Part 1: Metrological and technical requirements – Tests	2.5 Maximum Permissible Errors
NMI R76 Non-automatic Weighing Instruments Part 1: Metrological and Technical Requirements – Tests October 2015	3.5.1 Values of maximum permissible errors on initial verification 3.5.2 Values of maximum permissible errors in service
OIML R76-1:2006 (E) Non-automatic weighing instruments Part 1: Metrological and technical requirements - Tests	3.5.1 Values of maximum permissible errors on initial verification 3.5.2 Values of maximum permissible errors in service
NMI R106 Automatic Rail Weighbridges (2004)	2.2.1 Weighing-in-motion (wim) 2.2.2 Static weighing 2.8.2 Weighing-in-motion
OIML R106-1:2011 (E) Automatic rail-weighbridges Part 1: Metrological and technical requirements – Tests	2.2.1 Weighing-in-motion 2.2.2 Static weighing
OIML R134: Automatic instruments for weighing road vehicles in motion and measuring axle loads Part 1: Metrological and technical requirements – Tests	2.2.1 Weighing-in-motion 2.2.2 Static weighing

Other methods may be acceptable, but must be discussed and approved by AMSA.

Determining VGM (continued)

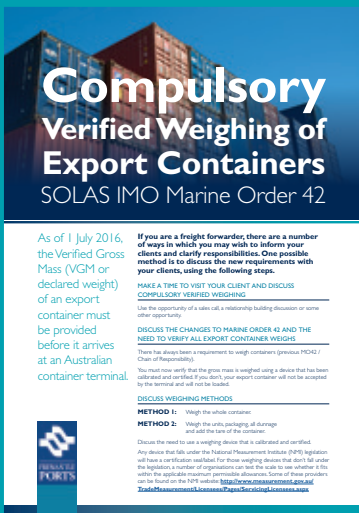
7 Is there a process I can follow to ensure my customers are doing the right thing?

There is no prescribed process however the WAPOTF has developed an indicative process in the form of a help guide to allow industry to consider some possible steps in preparing to meet the requirements.

Refer to the WAPOTF “Compulsory Verified Weighing of Export Containers” indicative process (under the “Loadsafes” tab at the Fremantle Ports website www.fremantleports.com.au/Operations/Landside/Pages/Truck-information.aspx)

In summary, you may want to consider the following:

- Make a time to visit your client and to discuss compulsory verified weighing
- Discuss the changes to Marine Order 42 and the need to verify all export container weights
- Discuss weighing methods
- Discuss the need to use a weighing device that is calibrated and certified
- Remind your client that they need to record weights
- Reassure your client that the weight provided in the PRA will be accepted as a VGM
- Obtain authority from your client for your company to declare a VGM on their behalf
- Use the new Fremantle Ports' SOLAS app



Submitting VGM

1. What is the flow of VGM submission?

Under the SOLAS requirements, the shipper named on the bill of lading is the party responsible for providing the VGM data. In Australia the VGM will be transmitted to the Shipping Line / Container Terminal via your PRA.

2. When do I need to submit VGM?

Your VGM forms part of your PRA. A PRA with a “clear” status will be required to finalise your VBS booking for the terminal. Once your booking has been finalised, including your “clear” status PRA, you have fulfilled the requirements.

3. What information is needed in VGM submission?

The example below shows a PRA as designed by I-Stop. The fields marked with an asterisk **must** be completed to finalise a VBS booking. Other fields are optional.

These suffice as meeting the verification of gross mass requirements

Verified Gross Weight Declaration - Mandatory from 1 July 2016

Weight Calculation * Method 1 Method 2 ⓘ

Verified Gross Weight * Container Verified Gross Weight in kilograms.

Date Verified * 22/01/2016

Declarant Details

Name of Declarant * The shipper is responsible for providing the verified weight. The shipper is defined as a legal entity or person named on the bill of lading or sea waybill or equivalent multimodal transport document.

Company * Company the Declarant works for.

Enter either a phone number or an email *

Phone The phone number of the declarant.

Email The email address of the declarant.

Weight Certificate Details

Name of Issuer The party who issued the weight certificate.

Street The street of the weight certificate issuer.

City The city of the weight certificate issuer.

Country The country of the weight certificate issuer.

Figure 7. Example of a PRA entry screen (courtesy I-stop)

Submitting VGM (continued)

4. How do I know if I have submitted VGM successfully?

A “clear” status on your PRA will allow access to the terminal after you have a VBS booking.

5. Will I be able to amend my VGM after submission?

Yes but please be aware of both Container Terminal Operators' policies concerning changes to VGM.

In both cases, if you change the VGM after the container has been accepted into the terminal, you will be required **to remove** the container from the terminal and resubmit your PRA with amended VGM detail. www.border.gov.au/Forms/Documents/b959.pdf

Additional Resources

Click on each link below to get redirected to the respective information source.

- 1 [IMO's SOLAS VGM page](#)
- 2 [IMO's full text on SOLAS amendments regarding VGM](#)
- 3 [IMO's associated guidelines regarding SOLAS VGM](#)
- 4 [Fremantle Ports' "Loadsafe" page](#)
- 5 [WSC's SOLAS VGM page](#)
- 6 [WSC's SOLAS VGM Joint FAQs](#)
- 7 [WSC's summary on national legislations on SOLAS VGM](#)
- 8 [AMSA website](#)
- 9 [Shipping Australia](#)
- 10 Container Shipping Lines webpages (e.g. APL, etc.)

For more details refer the Fremantle Ports website or contact your logistics provider/shipping line direct.

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CAUTION
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