

SOLAS – Verified Gross Mass

Shipper Guide

As a result of a number of major accidents being linked to inaccurate weight declarations of the shipping container, the International Maritime Organisation (IMO) in collaboration with industry representatives have adopted specific rules as part of the Safety of Life at Sea (SOLAS) Convention to ensure reliable weights of containers are provided.

SOLAS and Verified Gross Mass (VGM) - Guiding you through the regulations

SOLAS – Verified Gross Mass

VGM as part of SOLAS ensures the protection of people, assets of the carrier, the terminal and the cargo.

The new requirement states it is the responsibility of the shipper on record to provide the container's gross verified weight to the ocean carriers. All states (countries) which are members of the IMO have to adopt these VGM rules

- either in their original form or
- with additional requirements in accordance with local/national laws or rules

Enforcement and "policing" of the VGM rules remain with the local state (Government) authorities, responsible for maritime affairs (e.g. Coast Guard in the U.S., Maritime & Coastguard Agency in the U.K., etc.).

Start Date

The SOLAS amendments will enter into force on the 1st July 2016. Containers already packed before that date, for loading onto a vessel as from 1st July 2016 will also require VGM confirmation.

Who is responsible?

The shipper (being the party shown as shipper in the Bill of Lading or Sea Waybill) is responsible for providing the VGM to the carrier in reasonable time prior to vessel loading and/or full gate in at the sea port terminal.

Shipping lines and Kuehne+Nagel are not responsible for verifying this information. A shipper can authorise a third party to provide the VGM on their behalf.

The VGM will not show on the Bill of Lading. It is declared separately from the gross cargo weight entered in the Bill of Lading.

At a glance

- Verified Gross Mass = VGM
- Start date: 1st July 2016
- Responsibility for VGM transmission to the carrier: the shipper named on the Ocean Bill of Lading
- Third party authorisation: possible
- No verified weight = no loading
- VGM consists of cargo weight incl. packaging, dunnage materials and the tare weight of the container
- Kuehne+Nagel offers various processes for VGM submission

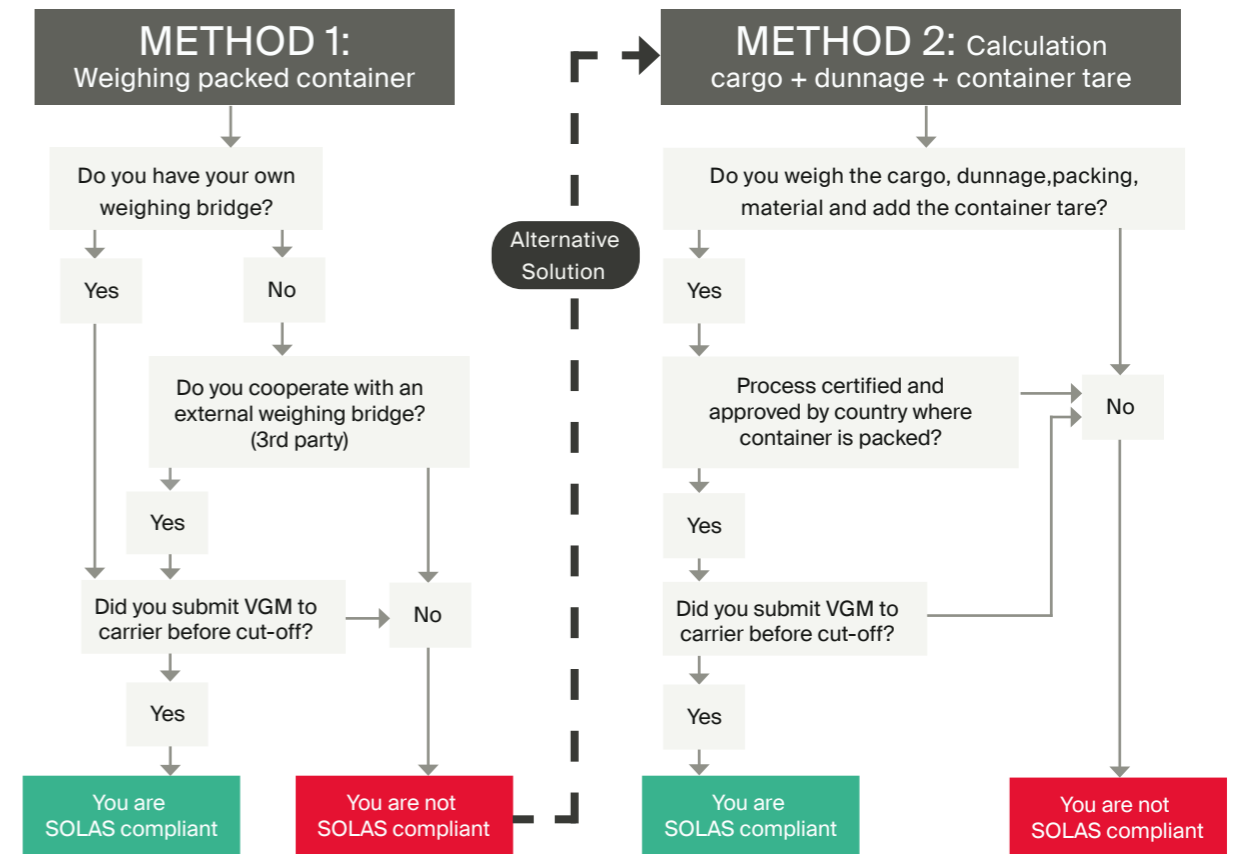
SOLAS applies to

- Packed containers which are loaded onto any freight ship in international maritime traffic
- Packed containers on a chassis or trailer to be driven on a Ro-Ro ship if not engaged in short international carriage
- All export containers
- Container types: tank container, flat-racks, container platforms and bulk container

SOLAS does not apply to

- A packed container on a chassis or trailer to be driven on a Ro-Ro ship on short international voyages
- Cargo items tendered by a shipper to the master for packing into a container already on board the ship
- Empty containers
- "Offshore containers", handled in open seas
- Any type of vehicle

Calculation Methods



There are two ways for defining the Verified Gross Mass: by **weighing** your packed container or by **calculation**.

Method 1

Upon the conclusion of packing and sealing a container, the shipper must weigh, or have arranged that a 3rd party weighs, the packed container (within the accuracy standards).

If the Verified Gross Mass of a packed container is obtained by weighing the container while it is on a road vehicle (e.g. chassis or trailer) the tare mass of the road vehicle incl. fuel etc. should be subtracted to obtain the Verified Gross Mass of the packed container.

Weighing via a weighing bridge can also be done at shipper or 3rd party's premises at a certain cost. Kuehne+Nagel can assist you.

The weighing bridge must be calibrated and certified.

Method 2

The shipper (or, by arrangement of the shipper, a 3rd party), must weigh all packages and cargo items, including the mass of pallets, dunnage and other packing and securing material to be packed in the container, and add the tare mass of the container to the sum of the single masses using a certified and approved method as required by State where container is packed.

Only the method used for weighing the container's contents under Method 2 is subject to certification and approval as determined by the competent authority of the State in which the packing and sealing of the container was completed.

The scale used for weighing has to be calibrated/certified in accordance with local/national rules.

Documentation

Documentation solutions

To simplify the VGM procedure and provide customers with the best support, Kuehne+Nagel is implementing various system enhancements and processes to ensure a seamless interaction through various communication channels and solutions available globally:

- Your **Booking Confirmation Document** will show a **QR Code** for mobile devices and a **URL** for your easy access to Kuehne+Nagel's **VGM Portal**. There you will be able to manage and submit the required information (including dates and other data required for record keeping and shipment identification) to Kuehne+Nagel.
- **Existing EDI** connections between you and Kuehne+Nagel can be modified to support the VGM required information.
- Signed **manual submission** (weighing certificates, email, spreadsheets, etc.), containing the Kuehne+Nagel shipment & reference number, container number and VGM required information

Kuehne+Nagel VGM Portal – desktop browser view

Required data elements

Without VGM, ocean carriers will be forced to turn away containers from being loaded on board vessels, which will delay your shipments.

The **required data elements** that customers will need to provide to Kuehne+Nagel are:

- VGM per container (cargo weight, loading material/pallets/skids, dunnage, securing material, tare weight of container)
- Signature (name in capital letters for EDI) of person authorized by shipper and company details
- Additional information and/or documents, if any are required by relevant state (government) authorities

Flexible data management

While it may be too early for the shipper to provide the VGM at the time of cargo booking, it may be too late when issuing shipping instructions. Therefore, it is Kuehne+Nagel's intent to manage the VGM data as flexible as possible and to support transferring this data through a newly defined EDIFACT message type, VERMAS.

Kuehne+Nagel VGM Portal – mobile browser view

In addition, Kuehne+Nagel will assist you in monitoring the VGM status through alerts to ensure timely submission of the VGM needed for your container to be loaded.

Further information

Intermodal movements and transshipments

The Verified Gross Mass of a packed container should be provided to the next party taking custody of the container ("Handshake"-Principle).

If a packed container is transported by road, rail or a vessel to which the SOLAS regulations do not apply and delivered to a port terminal facility without its Verified Gross Mass, it may not be loaded onto a ship to which the SOLAS regulations apply.

If a packed container is delivered to a port terminal facility by a ship to which the SOLAS regulations apply for transshipment onto a ship to which the SOLAS regulations also apply, each container being delivered is required by the SOLAS regulations to have had a Verified Gross Mass before loading onto the delivering ship. But all packed containers discharged in the transshipment port should therefore already have a Verified Gross Mass and further weighing in the trans shipment port facility is not required.

VGM and importers

Kuehne+Nagel is working closely with local authorities, carriers, terminals and other partners around the world to facilitate the submission of a VGM at the port of loading. As an importer we encourage you to work with our counterparts at origin to ensure a process is in place to submit the VGM to us, following the regulations issued by local government.

Important links

- **Kuehne+Nagel website:**
http://www.kn-portal.com/seafreight/solas_imo_vgm/
- **World Shipping Council:**
<http://www.worldshipping.org/industry-issues/safety/cargo-weight>
- **SOLAS VGM Industry FAQ:**
<http://www.worldshipping.org/industry-issues/safety/faqs>
- **IMO MSC VGM Guideline:**
<http://www.imo.org/en/OurWork/Safety/Cargoes/Containers/Documents/MS.C.1%20Circ.1475.pdf>

Cut-offs

As a general guidance, the VGM should be received by Kuehne+Nagel prior to the terminal gate-in. However, given the specific requirements implemented by each port and/or terminal, the cut-off for a VGM may vary and will therefore be communicated separately by our local organisations. Therefore, Kuehne+Nagel will provide the VGM cut-off for declaring a VGM at the time of Booking Confirmation.

Liability

The shipper is liable towards Kuehne+Nagel for a correct VGM. Type of damages/claims: Damages to the vessel, other containers, additional costs for weighing, fines for inaccuracy of VGM, not limited to these.

Additional costs for weighing and fines by authorities are not insured and for the account of shipper.

Definitions

Calibrated and certified equipment

Means a scale, weighing bridge, lifting equipment or any other device, capable of determining the actual Verified Gross Mass of a packed container or of packages and cargo items, pallets, dunnage and other packing and securing material, that meets the accuracy standards and requirements of the State in which the equipment is being used.

Cargo items

Has the same general meaning as the term "cargo" in the International Convention for Safe Containers, 1972, as amended (hereinafter referred to as "the CSC"), and means any goods, wares, merchandise, liquids, gases, solids and articles of every kind whatsoever carried in containers pursuant to a contract of carriage. However, ship's equipment and ship's supplies, including ship's spare parts and stores, carried in containers are not regarded as cargo.

Container

Has the same meaning as the term "container" in the CSC and means an article of transport equipment:

- of a permanent character and accordingly strong enough to be suitable for repeated use;
- specially designed to facilitate the transport of goods, by one or more modes of transport, without intermediate reloading;
- designed to be secured and/or readily handled, having corner fittings for these purposes; and
- of a size such that the area enclosed by the four outer bottom corners is either:
 - at least 14 m² (150 sq. ft.)
 - or
 - at least 7 m² (75 sq. ft.) if it is fitted with top corner fittings.

The term container includes also tank-containers, flat-racks and bulk containers etc.

Contract of carriage

A contract in which a shipping company, against the payment of freight, undertakes to carry goods from one place to another. The contract may take the form of, or be evidenced by a document such as a sea waybill, a bill of lading, or a multimodal transport document.

Gross mass

The combined mass of a container's tare mass and the masses of all packages and cargo items, including pallets, dunnage and other packing material and securing materials packed into the container (see also "VGM").

Short international voyage

Means an international voyage in the course of which a ship is not more than 200 miles from a port or place in which the passengers and crew could be placed in safety, and which does not exceed 600 miles in length between the last port of call in the country in which the voyage begins and the final port of destination according to SOLAS regulation III/2.

Offshore containers

All containers handled on open seas according to according to the guidelines for the approval of offshore containers handled in open seas (MSC/Circ.860) and the revised recommendations on harmonized interpretation and implementation of the International Convention for Safe Containers, 1972, as amended (CSC.1/Circ.138/Rev.1).

Package

One or more cargo items that are tied together, packed, wrapped, boxed or parcelled for transportation. Examples of packages include, but are not limited to, parcels, boxes, packets and cartons.

Packed container

A container, as previously defined, loaded ("stuffed" or "filled") with liquids, gases, solids, packages and cargo items, including pallets, dunnage, and other packing material and securing materials.

Packing material

Means any material used or for use with packages and cargo items to prevent damage, including, but not limited to, crates, packing blocks, drums, cases, boxes, barrels, and skids. Excluded from the definition is any material within individual sealed packages to protect the cargo item(s) inside the package.

Securing material

All dunnage, lashing and other equipment used to block, brace, and secure packed cargo items in a container.

Separate communication

Means – but not limited to – a declaration including a weight certificate produced by a weigh station utilizing calibrated and certified equipment on the route between the shipper's origin and the port terminal.

Ship

Any vessel to which SOLAS chapter VI applies. Excluded from this definition are roll-on/roll-off (Ro-Ro) ships engaged on short international voyages where the containers are carried on a chassis or trailer and are loaded and unloaded by being driven on and off such a ship.

Shipper

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 who (or in whose name or on whose behalf) a contract of carriage has been concluded with a shipping company.

Shipping document

A document used by the shipper to communicate the Verified Gross Mass of the packed container. This document can be part of the shipping instructions to the shipping company or a separate communication (e.g. a declaration including a weight certificate produced by a weigh station).

Tare mass

The mass of an empty container that does not contain any packages, cargo items, pallets, dunnage, or any other packing material or securing material.

Terminal representative

A person acting on behalf of a legal entity or person engaged in the business of providing wharfage, dock, stowage, warehouse, or other cargo handling services in connection with a ship.

Verified Gross Mass

The total gross mass of a packed container as obtained by one of the methods for obtaining gross mass of a packed container (see also "Gross Mass").

About us

Kuehne+Nagel is the global number one in sea logistics. Over 10,000 sea logistics experts worldwide ensure Kuehne+Nagel customers can access reliable sea transport on all major trading routes and 63,000 port connections. Its focus is on shipping full container loads (FCL) and less-than-container-loads (LCL), perishable and fresh cargo shipments as well as project logistics. We offer a flexible and reliable service with more than 750 weekly departures and a multitude of connections in an independent network spanning multiple shipping companies. Innovative digital information solutions such as seaexplorer ensure full visibility and customized supply chains, whatever the size of the company.

Learn more about our services at → [kuehne-nagel.com](https://www.kuehne-nagel.com)