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The application of the verified gross mass rules in Hong Kong

Verified gross mass rules

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225

Abstract

Purpose – The purpose of this paper is to examine the implementation of the verified gross mass (VGM) rules in Hong Kong.

Design/methodology/approach – The purpose of this paper is to compare the IMO Guidelines and the Guidelines produced by the Marine Department in Hong Kong.

Findings – The drafting of the Hong Kong Guidelines is not as clear and detailed as the International Maritime Organization (IMO) Guidelines.

Practical implications – Shipping companies should review their sea carriage contracts to see whether new clauses should be inserted to solve problems arising from the VGM requirement.

Originality/value – A research by direct analysis of the IMO and the Hong Kong Guidelines on the implementation of the VGM rules in the Safety of Life at Sea (SOLAS) is shown in this paper.

Keywords HK VGM guidelines, SOLAS, VGM rules

Paper type Research paper

The International Convention for the Safety of Life at Sea (SOLAS) is a treaty that requires signatory flag states to ensure that ships flagged by them comply with minimum safety standards in construction, equipment and operation. However, from time to time, marine accidents would happen because of the misdeclaration of container weight by the shipper. Because of these accidents, which caused great concerns to the International Maritime Organization (IMO), the IMO recommended that the SOLAS be amended to ensure safer working environment to seafarers.

Background of the verified gross mass requirements

On shipping documents, shippers are required to declare the weight of containers to be loaded on ships. However, such declarations of weight are usually incorrect. Such incorrect container weight is the cause or a contributing cause of many ship accidents and damage to port facilities in the handling and stowage of the containers. Following are some examples of such weight-related accidents (IMO, 2012).

In 2007, the container ship MSC Napoli had about 660 containers stowed on deck. The weights of 137 of these containers, which was overweight by 3-20 tonnes, were incorrectly declared. The total weight was 312 tonnes heavier than that declared on the cargo manifest. The misdeclared container weights were identified during the official investigation report carried out by the UK Marine Accident Investigation Branch as a factor causing the structural failure of the ship, causing it to break down off the coast of the UK. (World Shipping Council, 2014).



In 2011, the container feeder ship *Deneb* carried 168 containers. The actual weight of 16 containers (or about 10 per cent) was more than the declared weight, ranging between 1.9 times and as much as 6.7 times the declared weight. While the declared weight was 93 tonnes in total, the actual weight was 278 tonnes more than that. Because of the significant instability of the ship, it capsized at the Maersk terminal in Algeciras, Spain.

In 2011, there were three fallen containers at Darwin Port. In one accident, the container was listed as 4 tonnes, but the actual weight was 28 tonnes. Thus, it exceeded the crane's load limit and fell down from 12 m, nearly killing two workers.

Amendments to the SOLAS

By reviewing such accidents concerning wrong declaration of container weight, the Maritime Safety Committee (MSC) of the IMO met and drafted amendments to the SOLAS. Finally, Regulation 2 of Chapter VI of the SOLAS took effect from 1 July 2016. Under the new safety rules, shippers are required to provide to ocean carriers with a certificate of verified gross mass (VGM) for each loaded container to be carried on board ships. Without such a document, the carrier may refuse to carry the container onto the ship. To assist all parties involved in adhering to the new rules, the IMO published "Guidelines regarding the Verified Gross Mass of a Container carrying Cargo" (IMO Guidelines).

The scope of application of the new rules, according to Paragraph 4 of Regulation 2, is packed containers with cargoes carried on board ships, "except for containers carried on a chassis or a trailer when such containers are driven on or off a ro-ro ship engaged in short international voyages".

According to a report of the World Shipping Council made in early September 2016, the compliance rate of the VGM requirement by container lines around the world was as high as 95 per cent (Lloyd's Loading List.com, 2016).

Verified gross mass rules in Hong Kong

In Hong Kong, the Marine Department (MarDep) is the administrative authority responsible for enforcing the VGM rules. Based on the IMO Guidelines, the MarDep produced its "Guidelines with Cargo Packed in Hong Kong" (the Guidelines) in May 2016. The MarDep has the following six duties (Rule 1, the Guidelines):

- (1) to establish legislation in respect of the SOLAS requirement;
- (2) to enforce the legislation;
- (3) to register shippers operating with submitted container mass verification procedures;
- (4) to maintain a register of registered shippers;
- (5) to maintain a list of approved weighing scales; and
- (6) to carry out random audit inspection.

However, the Guidelines have not been drafted as clear as the IMO Guidelines. The following explanation is a compilation of both the HK and the IMO Guidelines.

According to Rule 2.1 of the Guidelines, the person who has the responsibility of obtaining and recording the VGM of packed container in documentary format is the shipper. The definition of shipper is not provided in the Guidelines. It is suggested that the definition of shipper in the IMO Guidelines is as follows:

Shipper means 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.

If a container is packed with cargos belonging to more than one shipper, the entity who consolidates, seals and delivers the container to the carrier shall be the person responsible for the VGM of the packed container (Rule 2.2, the Guidelines). A typical example of this rule is the freight forwarder who has consolidated the cargos of several shippers into one container. Thus, the freight forwarder is the person responsible for the VGM.

According to Rule 2.1.16 of the IMO Guidelines, VGM means the total gross mass of a packed container as obtained by Method 1 or 2 described below.

The figure of the VGM should be provided to the master or his representatives sufficiently in advance of the departure of the ship so that the VGM can be used in the ship stowage plan (Rule 2.3, the Guidelines). Because the time has not been well defined in the Guidelines, it is advisable for the carrier to have expressly agreed with the shipper on the time to provide the VGM figure.

Verification methods

There are two methods to verify the container mass (Rule 3, the Guidelines):

- *Method 1:* This method includes weighing the packed container by using the approved weighing scale. The container should have finished packing and sealed before weighing (Rule 5, IMO Guidelines). The MarDep will enlist the approved weighing scales in its webpage (Rule 7, the Guidelines).
- *Method 2:* This method includes weighing all packages and cargo items, including pallets, dunnage and other securing material, to be packed in the container and adding the tare mass of the container to the sum of the single mass using a certified method approved by the MarDep. Any shipper who adopts Method 2 to obtain the VGM is required to submit its procedure for approval by the MarDep. After such approval, the shipper will become a registered shipper (Rule 12, the Guidelines). While Hong Kong shippers can submit their applications to the MarDep, shippers outside Hong Kong are required to register only if the packing is completed in Hong Kong (Rule 12.2 and 12.3, the Guidelines).

Under Method 2, if the packing has been done by a third party, he should inform the shipper the gross mass of the packed container (Rule 5.1.2, IMO Guidelines).

Documentation and declaration

The VGM should be declared to the carrier in a shipping document (Rule 4, the Guidelines). This document can be part of the shipping instructions to the shipping company or a separate communication (Rule 6.1, IMO Guidelines). The document should be signed by the shipper’s authorized person (Rule 4, the Guidelines).

A declaration should be stated in the shipping document that the gross mass of the container was obtained in accordance with Method 1 or 2 (Rule 5, the Guidelines). The shipper should sign after the declaration.

The shipper should submit the shipping document by means of Electronic Data Interchange or Electronic Data Processing transmission or hard copy to the carrier (Rule

6.1, the Guidelines). The electronic transmission is preferred in the IMO Guidelines (Rule 6.3, IMO Guidelines).

The carrier should then transmit the VGM figure to the terminal for the purpose of formulation of the stowage plan (Rule 6.2, the Guidelines).

If an unverified packed container has been transported to Hong Kong by road, railway or in a vessel to which the SOLAS regulations do not apply, it should be verified in accordance with Method 1 or 2. For efficient cargo operation, the master or terminal may arrange direct weighing of the container at the approved weighing scale (Rule 8.1, the Guidelines).

If the container has already been verified outside Hong Kong and it is transhipped in Hong Kong, re-verification is not required (Rule 8.2, the Guidelines). According to Rule 8.1.2 of the IMO Guidelines, the delivering ship has a duty to inform the port terminal facility in the transshipment port of the VGM of each delivered packed container. Then, the master of the transshipment ship and the port terminal facility may rely on the information provided by the delivering ship.

Discrepancies in gross mass

If there is a discrepancy in the VGMs obtained during two different verifications, the latter verification should be prevailed. Thus, the VGM obtained by the weighing equipment in terminal prevails that VGM obtained before reaching the terminal (Rule 9.2, the Guidelines). Similarly, the VGM obtained by the MarDep on site by way of random check prefers the VGM obtained before or at the terminal earlier (Rule 9.3, the Guidelines).

When the gross mass of a container is more than 10 tonnes, the tolerance rate between the VGM declared by the shipper and the re-verification obtained by the MarDep, the carrier or the terminal is ± 5 per cent. When the gross mass of the container is less than 10 tonnes, the tolerance rate is ± 0.5 tonne (Rule 9.4, the Guidelines). If the VGM of the container is outside the tolerance rate, the carrier may refuse the loading of the container on the ship.

Overweighed container

No overweighed containers should be allowed on the ship. When the gross mass of a container has exceeded the maximum operating gross mass stamped on the container's safety approval plate, it is overweight (Rule 10, the Guidelines).

Unverified container

If the VGM of a container cannot be provided upon its arrival at the terminal, it should not be allowed on the ship until verification of the gross mass of the container has been obtained (Rule 11, the Guidelines).

According to Rule 13.1 of the IMO Guidelines, the master may consider the efficient onward movement of the container and obtain the VGM of the container on behalf of the shipper.

Rule 14 of the IMO Guidelines stresses that the master has the ultimate discretion in deciding whether to accept a packed container for loading onto his ship even if the VGM document is available because such document does not constitute an entitlement for loading.

Supervision and inspection

The stakeholders, including shippers, weighing scale operators, carriers and terminals, have to retain all the documents and records relating to the VGM of containers for at least one year (Rule 16, the Guidelines). The MarDep has the inspection power to check the documents and records kept by the stakeholders and also to weigh any packed containers by weighing equipment if necessary (Rule 15, the Guidelines).

Approved weighing equipment

In Hong Kong, the MarDep has already approved the weighing equipment in the Hongkong International Terminals, the Modern Terminals and the River Trade Terminal. Other approved weighing equipment operators include China Merchants Container Services Ltd., Ocean First Logistics Ltd and Ho Yat Logistics Co. Ltd (List of Approved Weighing Equipment).

Conclusion

The Guidelines have not covered all kinds of different events arising from the VGM requirement, such as the deadline for submitting the VGM document, the charges for the master to weigh any unverified containers, etc. It is time for carriers to review their sea carriage contracts, including bills of lading and charter-parties, to see whether the VGM requirement has been inserted into the contracts as a duty of the shipper and draft some clauses to deal with disputes arising from the VGM requirement. Thus, in case of any disputes in the future in relation to the breach of the VGM requirement by the shipper, the effects and consequences will be clearly defined by the express terms in the contracts.

References

IMO (2012), "Development of measures to prevent loss of containers", DSC 17/INF.5, available at: www.google.com.hk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwjEq7rTnq3PAhUMpZQKHe0vD2AQFggaMAA&url=http%3A%2F%2Fwww.worldshipping.org%2Findustry-issues%2Fsafety%2FIMO_DSC_17-INF_5_-_Container_Weight_Incident_Examples.pdf&usg=AFQjCNG18TsyMzOeZlhBiXfSAM98LHDW5g

Lloyd's Loading List.com (2016), available at: www.lloydsloadinglist.com/

World Shipping Council (2014), "History of the IMO effort to improve container safety", available at: www.google.com.hk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0ahUKEwjEq7rTnq3PAhUMpZQKHe0vD2AQFggiMAE&url=http%3A%2F%2Fwww.worldshipping.org%2FHistory_of_IMO_Effort_to_Improve_Container_Safety_May_2014.pdf&usg=AFQjCNFdqsoySr6hCoMOVTZiPPeR2exwQ

Further reading

IMO (1974), "International convention for the safety of life at sea (SOLAS)", available at: [www.imo.org/en/About/conventions/listofconventions/pages/international-convention-for-the-safety-of-life-at-sea-\(solas\)-1974.aspx](http://www.imo.org/en/About/conventions/listofconventions/pages/international-convention-for-the-safety-of-life-at-sea-(solas)-1974.aspx)

IMO (2014a), "Guidelines regarding the verified gross mass of a container carrying cargo", Resolution MSC.1/Circ. 1475, available at: www.imo.org/en/OurWork/Safety/Cargoes/Containers/Pages/Verification-of-the-gross-mass.aspx

IMO (2014b), "Text of the SOLAS amendments", Resolution MSC.380(94), available at: www.imo.org/en/OurWork/Safety/Cargoes/Containers/Pages/Verification-of-the-gross-mass.aspx

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1,3

Marine Department (2016), "Guidelines on the verification of gross mass of a container with cargo packed in Hong Kong", available at: www.google.com.hk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=7&ved=0ahUKEwiksuHBwqzPAhXKK48KHam1D_YQFgguMA&url=http%3A%2F%2Fwww.mardep.gov.hk%2Fen%2Fpub_services%2Focean%2Fpdf%2Fmiss_vgm_guidelines.pdf&usg=AFQjCNErnPwlaUwThLVCSLBmVZfyiDkYdw&sig2=O7s0GD-WAiHqD-Nw67qAg

230

Marine Department, "Frequently asked questions on requirement on the verified gross mass of a container carrying cargo under SOLAS Chapter VI, Regulation 2", available at: www.mardep.gov.hk/en/faq/faq_miss_vgm.html

Marine Department, "List of approved weighing equipment for container mass verification", available at: www.google.com.hk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwiU7__J06zPAhUKp48KHRbKA_gQFggdMAA&url=http%3A%2F%2Fwww.mardep.gov.hk%2Fen%2Fpub_services%2Focean%2Fpdf%2Fmiss_vgm_ws.pdf&usg=AFQjCNHCQCMpVPcjdQL4d7W1PmobB6xTg&sig2=P0HyOYyLP6L3MYzBZfaopg

Merchant Shipping (Safety) (Carriage of Cargoes and Oil Fuel) Regulation (Cap 369AV) (2016).

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