Industry Guidance for the implementation of SOLAS Chapter VI, Regulation 2 and the associated IMO Guidelines regarding the verified gross mass of a container carrying cargo

Introduction

The proposed amendment to SOLAS, Chapter VI, Regulation 2 and the associated IMO Guidelines regarding the verified gross mass of a container carrying cargo, was adopted at the 94th MSC session in November 2014 for entry into force on 1 July 2016.

This amendment requires mandatory verification of the gross mass of a container prior to loading on vessels. Although some exemptions are included (for roll-on/roll-off vessels amongst others), the vast majority of containers loaded for export will fall under this new regulation.

The regulation provides for 2 methods to verify the gross weight of a container, namely:

1. Weighing the packed container using calibrated and certified equipment; or
2. Weighing all packages and cargo items, including pallets, dunnage and other securing material to be packed in the container and adding the tare weight of the container to the sum of the single weights, using a certified method approved by the competent authority of the State in which packing of the container was completed.

This guidance sets out uniform industry guidance for implementing method 2 of this regulation.

If method 1 (weighing of the entire container) is used, the location where this is done can be freely chosen by the shipper. This should also be possible at or near the port of loading. If this information is given in time to the carrier, this should be considered as the verified weight.
**Procedure for calculation of the verified gross weight of a packed container (method 2)**

**Introduction**
The following process methods for establishing a verifiable container weight shall be deemed acceptable to fulfill the requirements for verification:

- use of ERP data, which are traceable and audit compliant/based;
- physically weighing goods on approved/calibrated equipment, in accordance with manufacturers recommended practices or appropriate EU/UN standards;
- equivalent/homogeneous goods with known weight per pallet (or other transport unit) in line with bullet one.

**Verification of the calculation method by the competent authorities**
The verification of the calculation method set out below will need to be undertaken in conjunction with the relevant Competent Authority.

Where a shipper operates in accordance with an audited QMS (Quality Management System) this should be sufficient as the basis for Competent Authority approval. Additional requirements as set out by Competent Authorities could be added to the QMS, but the aim should be to use existing audit based schemes acceptable to the Competent Authority. As well as use of an ERP-system, those shippers with documented weighing procedures which meet the Competent Authority criteria (such as spot checks), should be regarded as acceptable for Competent Authority approval.

**For calculation of the gross weight of the loaded container the following steps should be performed:**

**Step 1 – Weight of product**
The weight of the product to be shipped in the container is obtained from the production process, by metering through calibrated filling-devices or by weighing the product or by adding the weight of all individual components.

**Step 2 – Weight of packaging**
The weight of the packaging is either obtained from the manufacturer of the packaging material or based on shipper’s data, verified and captured in the MRP (Material Resource Planning)/ERP-system.

**Step 3 – Weight of pallets, securing materials and dunnage**
The weight of pallets, securing materials and dunnage is either obtained from the manufacturer or based on shipper’s data, preferably verified and captured in the MRP/ERP-system.

**Step 4 – Tare weight of the empty container**
The carrier should provide the correct tare weight of the empty container timely for the shipper to be able to include this in the gross weight calculation of a container. In absence of this information, the shipper shall use the tare weight indicated on the container or the specific information provided by the carrier as set out in annex 1.

**Step 5 – Gross weight of the loaded container**
The weights obtained in steps 1 through 4 above are added to obtain the gross weight of the loaded container.
Accuracy of the method for calculation of the verified gross weight of a packed container

In a calculation method, the different weights that are added to establish the sum of the gross weight are subject to variation. For example, the weight of wooden pallets, dunnage and blocking bars depends on the humidity. All weighing devices used to determine the weight of the individual components and some minor differences in the tare of the empty container as well as cargo packages contribute to these deviations.

To accommodate the potential deviations in this method, the verified gross weight of a packed container should be accepted with a margin of ± 5% of the total gross weight.

Transmitting the information to the carrier

The shipper shall transmit the verified gross weight of the packed container to the carrier in a timely manner and signed by a person duly authorized by the shipper to the carrier, at latest on the day of closing of the documents. The carrier shall have the obligation to use this information, which can be different from the provisional information passed to the carrier when making a booking request.

If the verified gross mass weight is presented to the carrier by means of EDP or EDI transmission techniques, the signature(s) may be electronic signature(s) or may be replaced by the name(s) (in capitals) of the person(s) authorized to sign.

This information should be transmitted to the carrier by a method established in common agreement between the shipper and carrier in a timely manner to be used by the carrier and terminal operator to finalize the stowage plan. The shipper may delegate transmission of the verified gross mass weight of the packed container via EDI or EDP to a person authorized by the shipper to sign the shipping document (such as a freight forwarder or consolidator).

Disclaimer: This document is intended for information only and sets out guidance to implement the IMO guidelines regarding the verified gross mass of a container carrying cargo. The information contained in this guideline is provided in good faith and, while it is accurate as far as the authors are aware, no representations or warranties are made with regard to its completeness. It is not intended to be comprehensive concerning all the detailed aspects of the implementation of IMO MSC.1/Circ.1475 regarding the verified gross mass of a container carrying cargo. No responsibility will be assumed by authors in relation to the information contained in this guideline.
Annex 1– Tare weight of a container
Each carrier has information tables

APL
China Shipping
CMA-CGM
Cosco
Evergreen
Hamburg-Sud
Hanjijn Shipping
Hapag Lloyd
K-Line
Maersk
MOL
MSC
NYK
OOCL
UASC