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Verified container weight – nothing new here!

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Since late 2014, attention has been focussed on the weight of a container, and plenty of literature is being disseminated on this issue. The main reason for this interest has been IMO's adoption of so-called new SOLAS requirements that, as a condition for vessel loading, the weight of a packed export container be *verified* and that verified weight be provided by the shipper to the master of vessel in advance.

At first glance one would consider that such a requirement would be obvious, and why has it taken this long to be introduced.

In reality, **since 1998 Marine Order 42 has required an Australian shipper to ensure that the gross mass of a container is in accordance with the gross mass declared** on the shipping documents. This has been enshrined in the Order and an extract of the Order below (Figure 1) reflects a shipper's obligations.

So, are Australian shippers complying with the existing requirements? What weighing processes are they utilising? Are weight declarations on shipping documentation accurate?

Indications from shipping sources within industry suggest that weights declared across shipping documentation vary and substantial inaccuracies exist.

What triggered this change by the IMO?

Following the *MSC Napoli* incident in 2007, to highlight the importance of container safety generally, the World

Shipping Council and the International Chamber of Shipping published a guide, *"Safe Transport of Containers by Sea: Guidelines on Best Practices"*, which acknowledged that while the primary responsibility for the safe transport of containers by sea rests with containership operators, there are other parties in the supply chain which contribute to the safe movement of

containers. There are those employed by shipping lines involved with the booking and assignment of cargoes and the subsequent arrangements for stowage planning, and there are the freight forwarders, ports and terminal operators and - **particularly importantly, the shippers, from whom the cargo originates.**

Extract of Marine Order 42

8 Information for master

8.1 Requirement for information

8.1.1 Subject to subsection 8.2, before commencement of loading of cargo at a port in Australia, **the shipper of that cargo must provide to the master or the master's representative appropriate information on the cargo sufficiently in advance of loading to enable the precautions which may be necessary for proper stowage and safe carriage of the cargo to be put into effect.**

8.1.2 The information in subsection 8.1.1 must be confirmed in writing and by appropriate shipping documents prior to loading the cargo on the vessel. Note a suitable form for providing this information to the master or the master's representative is the "Shippers Declaration" Form, available from the AMSA website at www.amsa.gov.au

8.1.3 The cargo information is to include:

- (a) a general description of the cargo;
- (b) the gross mass of the cargo or of the cargo units;
- (c) any relevant special properties of the cargo; and
- (d) the information specified in sub-chapter 1.9 of the CSS Code.

8.2 Verification of mass before loading

Prior to loading cargo units on board a vessel, the shipper must ensure that the gross mass of such units is in accordance with the gross mass declared on the shipping documents.

Figure 1

Packing, labelling and weighing are critical, and if undertaken incorrectly have catastrophic effects on all transport modes. Ships are subject to varying forces and stresses when on the high seas. Torsional stresses play a vital role, particularly on container ships where the cargo is non-homogeneous. Incorrect weight distribution due to mis-declared weights could result in destructive torsional stresses and prove detrimental to the structural integrity of the vessel.

In 2011, through the continued efforts of the WSC and the ICS a formal proposal for a regulation specifying weighing of packed containers as a condition of loading was submitted to the IMO. In June 2012, with the support of Denmark, The Netherlands and the United States a further proposal to amend the SOLAS was made.

So what's new?

The SOLAS amendments were finally adopted in November 2014 and the resulting IMO Guidelines (MSC.1/Circular 1475) *inter alia* set out the following main principles:

- The responsibility for obtaining and documenting the *verified* gross mass of a packed container lies with the shipper;
- A packed container should not be loaded onto a ship to which the SOLAS regulations apply unless the master or his representative and the terminal representative have obtained, in advance of vessel loading, the *verified* actual gross mass of the container; and
- The shipping document declaring the verified gross mass of the container should be signed by the shipper or a person duly authorised by the shipper and can be an electronic signature or the name of the authorised person.

In addition, the guidelines prescribe two methods by which a shipper may obtain the verified gross mass of a packed container. Put simplistically:

- one is by weighing the whole container (Method 1) with its contents; and
- the other is, weighing *all* contents (including pallets, dunnage and other packing and securing material) separately, and adding the tare mass of the container (Method 2).

Method 2 is subject to the certification and approval of the competent authority within the country, which is AMSA in Australia.

The SOLAS amendments clearly place the onus of obtaining and documenting



the weight on the shipper. Once the verified weight (using one of the two methods) has been obtained the shipper is required to communicate this information in a shipping document.

There is nothing new for Australian shippers who have been required to declare gross weights of shipped containers in shipping documentation.

The only difference now is that the SOLAS amendments require shippers to follow one of two methods for obtaining these weights, and shippers will be required to validate the method utilised to the regulator.

Impact of SOLAS amendments

From 1 July 2016, as per the SOLAS amendments, a container cannot be loaded onto a ship unless a **verified** actual gross mass of the container is provided by the shipper. The shipper is responsible for ensuring that the verified gross mass is communicated in the shipping documents **sufficiently in advance** to be used by the ship's master or his representative and the terminal representative in preparation of the ship's stowage plan.

The IMO guidelines acknowledge that the effectiveness of these requirements depends on the timely (or not so timely) provision of the verified weight. Delays could occur at the ship-shore interface, as loading of containers will be denied if incorrect declarations are found to have been made and any associated cost arising from the non-loading, storage, demurrage or eventual return of the container to the tendering shipper will be subject to contractual

arrangements between the commercial parties.

Again, **this is not new** as MO42 has required Australian shippers to provide a ship's master with the verified gross mass of a loaded container sufficiently in advance.

Developments in Australia

Mindful of existing regulatory requirements and recognising that the SOLAS amendments now prescribe two methods for container weight verification, key shipping industry stakeholders, including the regulator - AMSA, met to discuss the operational implications and implementation.

Facilitated by Shipping Australia Limited's Technical Steering Group, the way forward, including the cultural and behavioural changes that would be required within the maritime supply chain, was discussed and included the following:

1. Shipping documentation – existing and proposed changes
2. Notification time frames
3. Adherence and conformance to requirements
4. Education and awareness

Utilisation of existing shipping documentation, such as the electronic *Pre-Receipt Advice* system and the *Shippers Letter of Instruction* are seen as the appropriate vehicles to ensure that the above mentioned prescribed methods were adequately reflected. Stakeholders using similar systems, including paper-based systems, would have to amend them accordingly to meet the requirements.

Sample weight declaration

Cargo Gross Weight:	16883	Kgs	Seal 51791
Container (Tare):	3120	Kgs	Numbers: 0
Verified Gross Weight of Container (see Note A)	20003	Kgs	DPI Seal No.:
Method used for verification of Gross Weight of Container: Method 1 (Include field) Method 2 (Include field (see note B))			
ECN:	ACKYC39YY	CRN:	
Shipper's Ref - Origin:	006SY0199442 - -		
Marks & Nos.:	Break Bulk Cargo	Qty of	
Description of Cargo: MEAT PRODUCTS NOS- FROZEN	Tonnes Measure	Packages	1
Remarks:			
We the shippers certify that the above information, including the verified gross weight of the container to be true and correct in all respects.			
Name of Shipper making declaration (in capitals) : (include field for Name)			
Packers Signature:	Date Packed:		
Packing Co. Name/Location:			
Transport Company:			
Date:	Comments:		
Terminal Receiving Clerk's Signature:			
Received in apparent good order and condition to the terms and conditions of the Ocean Carriers Bill of Lading.			
Notes:			
A) Verified Gross Weight of the Container: Means the weight of the container determined using one of the methods at (B) below. It is the requirement for a shipper to verify and declare the gross weight of a container as per Marine Order 42 (see note C) and the International Maritime Organisation's MSC Circular 1475 (see D).			
B) Method 1: Weighing the packed container using calibrated and certified weighing equipment. Method 2: Weighing all packages and cargo items, including the mass of 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 masses.			
C) Marine Order 42 (Cargo Stowage and Securing)- cl 8.2 Verification of mass before loading - Prior to loading cargo units on board a vessel, the shipper must ensure that the gross mass of such units is in accordance with the gross mass declared on the shipping documents.			
D) IMO's MSC 1/Circ.1475 - Guidelines Regarding the Verified Gross Mass of a Container Carrying Cargo			

Figure 2

There has been general agreement that existing advance notification and cut-off time frames for terminal bookings by shippers for export containers would be applied, and any alteration to a container weight declaration after these times could affect the loading of the container. Discrepancies identified would be subject to commercial and contractual arrangements between the parties and as such are not a regulatory issue.

Representatives from Freight Forwarders have raised concerns in relation to the impacts of the responsibility being potentially transferred from exporters to forwarders who could be classed as shippers. The Australian Peak Shipper Association has highlighted the importance of consistent terminology for defining a "shipper", along with clarity in the mandatory requirements.

AMSA has accepted that the forthcoming amendments to Marine Orders 42 & 44 (which underpin the Navigation Act 1912) and associated Marine Notice, would reflect the SOLAS requirements.

Relevant tolerances, consistent with applicable Australian trade measurement legislation, which include the *National Measurement Act 1960* and associated *National Trade Measurement Regulations 2009*, will need to be incorporated into AMSA's regulatory guidance.

A regulatory audit regime to monitor compliance is envisaged as part of AMSA's current Port State Control regime.

Education and awareness is seen as vital in ensuring a smooth implementation process and appropriate instructive material, consistent with AMSA's soon to be published regulatory material, will be promulgated to relevant stakeholders by SAL.

Implementation and possible changes to shipping documentation

Shippers and possibly freight forwarders may argue that they cannot be held responsible if the shipping documentation is not sufficiently self-explanatory and fails to prompt the

inclusion of sufficient information to ensure compliance with regulatory requirements.

Widely accepted and utilised amongst shippers and freight forwarders are shipping documents such as the electronic Pre-Receipt Advice (PRA) system and the Shippers Letter of Instruction. These are utilised to make declarations to satisfy a range of regulatory requirements, including the current requirements as per Marine Order 42, in terms of the gross weight.

With the forthcoming SOLAS and consequential AMSA Marine Order amendments, the above mentioned shipping documentation will need to reflect that gross weight declared by shippers is the verified weight obtained using one of the two methods prescribed.

To assist shippers in this regard, SAL has undertaken consultation with a range of stakeholders including AMSA, and modified existing shipping documentation (PRA) to appropriately reflect the SOLAS amendments (See Figure 2). Similar modifications can be made to the Shipper Letter of Instruction or any other shipping documentation utilised.

From a shipping lines and container terminal perspective, before a container booking can be processed for loading onto a ship, advance notification (from shippers) on the above mentioned shipping documentation, must include the following:

1. **Verified gross mass of the container;**
2. **The method used to obtain the gross mass of the container; and**
3. **The name of the shipper or the person authorised by the shipper to make the declaration.**

Australia, to some extent, has had a regulation requiring the weight declarations of export containers since 1998 however, adherence and compliance of Australian shippers has never been tested. Now that the IMO is formally introducing another step in the verification process (by prescribing two permissible methods) the onus on all shippers worldwide, as well as those involved in the packing of containers, is to stop and think twice before they make a weight declaration.

There have been many examples where miss-declarations of container weights have led to accidents or disasters. With increasing container vessel size, compliance in verifying the container weight, coupled with a sound regulatory auditing regime will prevent "misdeclared container weight" appearing as a contributing factor in future container related incidents. ▲