![Intercomp — advanced weighing technology . . . by any measure]

RAPIDLY MEET SOLAS CONTAINER WEIGHT REQUIREMENTS

Weigh-In-Motion Techniques for Verified Gross Mass via Method 1 Container Weighing

Abstract:
Though shippers have the responsibility for supplying verified gross mass of containers, the Terminal Operators and ship masters are ultimately required to ensure cargo meets the approaching amended IMO/SOLAS (International Maritime Organization)/(Safety Of Life At Sea) requirements. By gathering verified container weights with Weigh-In-Motion technology at the gate, rapid processing of vehicle traffic and recording of verified gross masses to satisfy SOLAS amendments via Method 1 is possible. Intercomp has sensors, scales, and systems that can be installed in new or existing lanes, and integrated into gate or terminal operating software. These enable verified gross masses to be collected while maintaining or even improving traffic flow to the terminal.

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Background:

With the amendment to IMO/SOLAS Chapter VI verified gross mass requirements going into effect July 1st, 2016, Shippers, Freight Forwarders, and Terminal Operators alike are looking for guidance on the regulations and how to best meet the container weight requirements.

Two methods are offered:
- Method 1 – Weigh the packed container using calibrated and certified weighing equipment (e.g. load cell sensing technologies)
- Method 2 – Weigh all packages and items, including pallets, dunnage, and other material and add to the tare mass of the container using a certified method.

Responsibility versus Enforceability

Though it is clear the Shippers are responsible for providing the verified gross mass, in many cases they are unprepared or unable to provide *verified* gross masses using a certified method. However, officials at USCG and shipping trade organizations (WSC, FIATA) point out Shippers have been supplying gross mass of goods on bills of lading and internationally accepted shipping documents for decades. If shippers state the declared mass is now the verified gross mass, the responsibility in theory would be met.

Most importantly, it is ultimately up to the Terminal Operator and master of the ship (under SOLAS Chapter II) to *verify* the gross mass. Through the process of enforcement, cargo possessing non-verified container weights need to be offloaded and held in the yard until the verified container gross mass is known. This directly impacts operational costs and efficiency of Terminal Operators and ship masters.

Benefit

By processing verified gross masses of containers at entry points, Terminals Operators and ship masters would operate having all containers for export within the terminal possessing verified gross masses. Second, this focuses implementation for gathering container weights at only two points; at the gate for exports, and STS cranes for imports if necessary. Third, verifying container weights via certified methods can be provided for a nominal fee to simplify implementation of the IMO amendments for all parties.

Solution:

Organizations including the Global Shippers Forum and National Industrial Transportation League supported SOLAS amendments as they "can be met by driving a container truck onto a scale and subtracting the weight of chassis and cab" to satisfy Method 1. A one-time entering of the tare weight of the vehicle allows for calculation of the verified gross mass of the container whenever the vehicle on file delivers a container to the terminal, with tare weight of the vehicle entered within pre-registration processes already done at many ports.

With Weigh-In-Motion (WIM) technology allowing for rapid processing of vehicles and cargo at the gate, Intercomp Company proposes either LS-WIM axle scales or strip sensors installed in lanes within automated gate systems to gather verified gross masses. They operate well within accuracy guidelines suggested by agencies such as the Maritime & Coastguard Agency (UK). Intercomp scales can be installed as quickly as 8 hours per lane, and integrated into current gate and terminal OS. These WIM systems can be calibrated and certified on an ongoing basis, thereby meeting SOLAS requirements.