

## New Zealand SOLAS Fact Sheet

The VGM can be determined by either:

- **Method One** - weighing the packed container, using calibrated and certified weighing equipment.
- **Method Two** - weighing all the individual contents of the container, including any packing material and dunnage, and adding it to the tare weight of the container.

For **Method One**, calibrated and certified equipment is weighing equipment approved in accordance with the Weights and Measures Act and Regulations (known as 'trade approved'). The equipment must have a scale interval of no more than 50 kg and have a current certificate of accuracy.

The Ministry of Business, Innovation and Employment (MBIE) Trading Standards Group approves and certifies weighing equipment in New Zealand, including weighbridges; and it maintains a database of approved weighing equipment.

Calibrated and certified equipment is a trade approved weighing instrument (an instrument approved in accordance with the Weights and Measures Act 1987, and Weights and Measures Regulations 1999). More information on the Act and regulations can be found on the Trading Standards website.

Maritime New Zealand requires that the maximum error on containers weighing above 10,000 kg is +/- 150 kg after the initial Verification test. The initial test Verification would require to meet the proposed Verification tolerance which would be +/- 75 kg over 10,000 kg. Table 9 below outlines the scientific accuracy requirements for 'trade approved' equipment in accordance with the Weights and Measures Regulation 1999.

**Table 9**  
**Weighing instruments**

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Class of weighing instrument	Load (e)	Error (in excess or deficiency)	
		On verification (e)	On inspection (e)
Class I	0 to 50 000	0.5	1
	Over 50 000 up to 200 000	1.0	2
	Over 200 000	1.5	3
Class II	0 to 5 000	0.5	1
	Over 5 000 up to 20 000	1.0	2
	Over 20 000	1.5	3
Class III	0 to 500	0.5	1
	Over 500 up to 2 000	1.0	2
	Over 2 000	1.5	3
Class IIII	0 to 50	0.5	1
	Over 50 up to 200	1.0	2
	Over 200	1.5	3

e = verification scale interval

### Notes to table 9

- (1) For the purposes of table 9, the weighing instrument is assumed to have been adjusted to zero, plus or minus 0.25 of a scale interval, at no load.
- (2) Where a weighing instrument has digital indication or digital printing, the maximum permissible errors shown in table 9 do not include the positive or negative error resulting from rounding up or down to the nearest scale interval.

**Method Two** gives shippers some flexibility in how they calculate the VGM: Such as, for example, using predetermined weights of standard items, or use of established volume to weight conversions. Such procedures should be based on methods of known accuracy, supported by an appropriate quality control, Enterprise Resource Planning (ERP) or similar system, to ensure a consistent process and verifiable weights. Such procedures must provide an accurate and reliable VGM (comparable to that achieved with Method One).

Maritime NZ will not be providing any formal approval of such procedures, but will provide guidance on the types of processes that would be considered acceptable. Not all cargoes lend themselves to use of Method Two –so, in some cases, weighing the loaded container will be the only practicable option.

Trade approved equipment used to determine a VGM must comply with legal tolerances and must have a current certificate of accuracy (see Weights and Measures Act and Regulations). Weighing instruments approved as Class III or IIII must have a scale interval no greater than 50kg.

## References

1) Maritime NZ Commercial Page – Container weighing Q&A

<http://www.maritimenz.govt.nz/Commercial/Shipping-safety/cargo/container-weight-qas.asp>

2) New Zealand Legislation – Weights and Measure Regulation 1999

[http://www.legislation.govt.nz/regulation/public/1999/0373/latest/DLM301975.html?search=sw\\_096be8ed80e3854c\\_Table+9\\_25\\_se&p=1#DLM2846480](http://www.legislation.govt.nz/regulation/public/1999/0373/latest/DLM301975.html?search=sw_096be8ed80e3854c_Table+9_25_se&p=1#DLM2846480)