



Australian Government

Australian Maritime Safety Authority

INSTRUMENT OF APPROVAL

No. 5393

APPROVED ACCURACY STANDARDS FOR WEIGHING EQUIPMENT FOR THE DETERMINATION OF VERIFIED GROSS MASS (VGM)

Marine Order 42 (Carriage, stowage and securing of cargoes and containers) 2016

I, Alexander Gordon Thomas SCHULTZ-ALTMANN, as a delegate of the Australian Maritime Safety Authority under:

Section 10(3)(b)(ii) of
Marine Order 42 (Carriage, stowage and securing of cargoes and containers) 2016.

Approve the list of standards in schedule 1. Each standard in the approved list is the standard set out in the document listed for the standard in column 1 of Schedule 1.

This approval commences on **01 July 2016** and remains valid until **30 July 2026**.



Official Stamp

A.G.T. Schultz-Altmann
Manager Ship Inspection and Registration

File No: 2013/2294

Date: 24 June 2016

Note: This instrument of approval may be amended or revoked at any time — see s33(3) of the *Acts Interpretation Act 1901*. If standards are to be removed from the list of standards transitional arrangements will be put in place.

**Schedule 1 to
Approval No 5393**

The list of Accuracy Standards for Weighing Equipment approved under Section 10(3)(b)(ii) of *Marine Order 42 (Carriage, stowage and securing of cargoes and containers) 2016*

OIML/NMI** R Reference Document	Accuracy Standard (section/s in the R Reference Document)	Hyperlink to access R Reference Documents (free to download)	Examples of kinds of weighing equipment to which the accuracy standard applies
<p>National Measurement Institute (NMI) R 51 Automatic catchweighing instruments First edition, second revision — August 2009</p>	<p>2.2 - Maximum permissible errors for class X(x) instruments 2.3 - Maximum permissible errors for class Y(y) instruments</p>	<p>http://www.measurement.gov.au/Publications/PARrequirements/Documents/NMI%20R%2051.pdf</p>	<p>'On-board' automatic weighing instruments mounted on or incorporated in a vehicle, intended for weighing whilst the vehicle is stationary, but which weigh automatically</p>
<p>International Organisation of Legal Metrology (OIML) R 51-1:2006 (E) Automatic catchweighing instruments. Part 1: Metrological and technical requirements – Tests Edition 2006 (E)</p>	<p>2.5 - Maximum Permissible Errors</p>	<p>https://www.oiml.org/en/files/pdf_r/r051-p-e06.pdf</p> <ul style="list-style-type: none"> Select document title R051-1-e06.pdf and open file 	<p>Automatic weighing instruments ('catchweighers') for weighing items prior to their being loaded into a container. On-board' automatic weighing instruments mounted on or incorporated in a vehicle</p>
<p>National Measurement Institute (NMI) R 76 Non-automatic weighing instruments Part 1: Metrological and Technical Requirements – Tests Fourth edition — October 2015 (OIML R 76-1:2006(E), MOD)</p>	<p>3.5.1 - Values of maximum permissible errors on initial verification 3.5.2 - Values of maximum permissible errors in service</p>	<p>http://www.measurement.gov.au/Publications/PARrequirements/Documents/NMI%20R%2076-1%202015.pdf</p>	<p>Static, Non-automatic weighing instruments</p>
<p>International Organisation of Legal Metrology (OIML) R 76-1:2006 (E) Non-automatic weighing instruments Part 1: Metrological and technical requirements – Tests Edition 2006 (E)</p>	<p>3.5.1 - Values of maximum permissible errors on initial verification 3.5.2 - Values of maximum permissible errors in service</p>	<p>https://www.oiml.org/en/files/pdf_r/r076-p-e06.pdf</p> <ul style="list-style-type: none"> Select document title R076-1-e06.pdf and open file 	<p>Non-automatic weighing instruments mounted on or incorporated in a vehicle</p>

OIML/NMI** R Reference Document	Accuracy Standard (section/s in the R Reference Document)	Hyperlink to access R Reference Documents (free to download)	Examples of kinds of weighing equipment to which the accuracy standard applies
National Measurement Institute (NMI) R 106 Automatic rail weighbridges Third edition, first revision — July 2004 (renamed NMI R 106)	2.2.1 - Weighing-in-motion (wim) 2.2.2 - Static weighing 2.8.2 - Weighing-in-motion	http://www.measurement.gov.au/Publications/PARRequirements/Documents/NMI%20R%20106.pdf	Train weighing in motion (Automatic Rail Weighbridge) systems.
International Organisation of Legal Metrology (OIML) R 106-1:2011 (E) Automatic rail weighbridges Part 1: Metrological and technical requirements — Tests Edition 2011(E)	2.2.1 - Weighing-in-motion 2.2.2 - Static weighing	https://www.oiml.org/en/files/pdf_r/r106-p-e11.pdf <ul style="list-style-type: none"> Select document R106-1-e11.pdf and open file 	
International Organisation of Legal Metrology (OIML) R 134-1:2006 (E) Automatic instruments for weighing road vehicles in motion and measuring axle loads Part 1: Metrological and technical requirements — Tests Edition 2006(E)	2.2.1 - Weighing-in-motion 2.2.2 - Static weighing	http://www.oiml.org/en/files/pdf_r/r134-p-e06.pdf <ul style="list-style-type: none"> Select document R134-1-e06.pdf and open file 	Road vehicle weighing in motion systems.

**OIML: International Organisation of Legal Metrology. OIML International Recommendations are available free to download from the OIML website www.oiml.org/

- OIML R documents page direct link is: http://www.oiml.org/en/publications/recommendations/publication_view?p_type=1&p_status=1

**NMI: National Measurement Institute. NMI adopts OIML standards and modifies them for Australia. NMI Recommendations are available free to download from the NMI website www.measurement.gov.au/

- NMI R documents page direct link is <http://www.measurement.gov.au/Publications/PARRequirements/Pages/default.aspx>