



## APLMF Survey of the test procedure for NAWI with digital indication.

Please complete this survey to indicate which tests your economy carries out when verifying a non-automatic weighing instrument. ✓ to indicate test is required, X to indicate test not required.

Send your completed survey back to the APLMF Secretariat by:

Economy Name: \_\_\_\_\_

Name of person completing the survey: \_\_\_\_\_

Organisation responsible for verification within your economy: \_\_\_\_\_

Test Name	Test Description	Essential Test	Desirable Test
<b>VISUAL INSPECTION</b>	<ul style="list-style-type: none"> <li>• Visually inspect the instrument for compliance with the certificate of approval</li> <li>• Where applicable, check that the instrument is level.</li> <li>• Check for compliance with any relevant regulations/environmental factors/mode of use.</li> </ul>		
<b>REPEATABILITY</b>	<ul style="list-style-type: none"> <li>• Determine the applied load (Approx. 2/3 capacity or just below 2nd MPE change point for instruments with only 2 MPE change points).</li> <li>• Zero the instrument.</li> <li>• Apply load and set the indication to centre 'e' (Add 0.5e, bring indication to just above next changeover point using change point masses of 0.1e, remove 0.5e).</li> <li>• Remove all load, reset zero, then re-apply load (including change point masses, twice more ensuring instrument returns to zero between each weighing.</li> <li>• Where all indications are the same instrument passes.</li> <li>• Where any indications differ check to see if the instrument is within the MPE</li> </ul>		
<b>ECCENTRICITY</b>	<ul style="list-style-type: none"> <li>• Determine the applied load (1/3 capacity except for instruments with more than 4 points of support, hopper weighers, instruments with minimal off-centre loading, and instruments used for rolling loads).</li> <li>• Determine the individual surface areas of the load receptor where the loads are to be applied.</li> <li>• For each surface area, zero instrument, apply the load and determine if the indication is within the MPE.</li> </ul>		
<b>ZERO SETTING</b> Only performed at initial verification, when system changes affect these functions (Non-automatic and semi-automatic only)	<ul style="list-style-type: none"> <li>• Apply a load within the zero-setting range and bring the indication to just below the next changeover point using change point masses of 0.1e.</li> <li>• Re-set the indication to zero using the zero-setting device.</li> <li>• Apply 10e to the load receptor.</li> <li>• Apply 0.25e and the indication shall remain the same.</li> <li>• Apply an additional 0.5e and the indication shall change up 1e.</li> </ul>		
<b>ZERO TRACKING</b>	<ul style="list-style-type: none"> <li>• Re-set the indication to zero using the zero-setting device.</li> <li>• Apply 1e to the load receptor.</li> </ul>		



<p>Only performed at initial verification, when system changes affect these functions (Non-automatic and semi-automatic only)</p>			
<p><b>WEIGHING PERFORMANCE</b></p>	<ul style="list-style-type: none"> <li>• Zero the instrument</li> <li>• Apply at least 5 increasing loads at approximately equal steps, including minimum capacity, all MPE change points, any scale interval change points (minus <math>5e</math> if weighing instrument has + error) and maximum capacity (minus <math>5e</math> if over-range blanking occurs).</li> <li>• Check over-range blanking.</li> <li>• Remove load in a minimum of 3 steps from maximum to minimum capacity, in approximately equal steps.</li> <li>• Check instrument has returned to zero.</li> </ul>		
<p><b>DISCRIMINATION</b></p>	<ul style="list-style-type: none"> <li>• At any load (usually the same load as repeatability) bring the indication to just over the change point. The addition of a further <math>1.4e</math> shall cause an increase in the indication by 1 verification scale interval.</li> <li>• A supplementary test is required if the instrument has an initial zero-setting range greater than 20%</li> </ul>		
<p><b>ACCURACY OF TARE SETTING</b></p> <p>Only performed at initial verification, when system changes affect these functions (Non-automatic and semi-automatic only)</p>	<ul style="list-style-type: none"> <li>• Load the instrument using a weight that exceeds the marked tare capacity to ensure the tare facility is not functional at this load.</li> <li>• Apply a load within the tare setting range and bring the indication to just below the next changeover point using change point masses of <math>0.1e</math>.</li> <li>• Re-set the indication to zero using the tare-setting device.</li> <li>• Apply <math>10e</math> to the load receptor.</li> <li>• Apply <math>0.25e</math> and the indication shall remain the same.</li> <li>• Apply an additional <math>0.5e</math> and the indication shall change up <math>1e</math>.</li> <li>• Remove the additional <math>0.25e</math>, <math>0.5e</math> and <math>10e</math> leaving the change point masses with the load.</li> <li>• Add a load equal to full remaining capacity and determine if the indication is within MPE for remaining applied load.</li> </ul>		
<p><b>PRICE-COMPUTATION</b></p> <p>Only performed at initial verification, when system changes affect these functions (Non-automatic and semi-automatic only)</p>	<ul style="list-style-type: none"> <li>• Check at least 5 price computations over a range of different loads.</li> </ul>		
<p><b>Others please add if required</b></p>	<ul style="list-style-type: none"> <li>•</li> </ul>		



# Legal Metrology

ACCURATE MEASUREMENT, GOOD BUSINESS, FAIR TRADE AND SAFETY