

POLICY		 national regulator for compulsory specifications	
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1. Scope

Legal Metrology requirement on the influence of gravity on the accuracy of non-automatic weighing instruments (NAWI).

2. Reference documents

SANS 1649
Trade Metrology Act

3. Background

Certain non-automatic weighing instruments (NAWI) have the capability of inserting a gravity factor/value, which compensate for the accuracy of the instrument at different altitudes and latitudes. This means that an instrument with this capability, adjusted in Pretoria, with the “g-factor/value” for Durban inserted, and then be used in Durban, without being out of the maximum permissible tolerance.

Previous research in South Africa has found that there are differences in accuracy on SANS1649, Table 2 instruments adjusted, for example, in Pretoria and then used at sea level (Durban), that are caused by the influence of the change in gravity.

In South Africa there are no gravity zones established for the regulation of NAWI’s and no gravity zone stickers are required to be placed on instruments.

4. Policy

The accredited verification facility, manufacturer or the user/owner shall ensure that every instrument, with the facility of entering a “g-factor/value” or an instrument without the facility of entering a “g-factor/value”, are adjusted to within the maximum permissible tolerances at the place of use.

It shall be noted in the pattern description whether an instrument has the capability of entering a “g-factor/value” or not.