



CECIP European Weighing Industry



A brief guide for identification of non-compliant weighing instruments

Introduction

Fair trade, credible social interactions as well as human health rely strongly on correct mass determination. To protect these fundamental principles within the EU, weighing instruments have to comply with relevant EU legislation and must meet all valid performance, reliability and safety requirements when they are intended for use in legal applications, such as:

- › commercial transactions
- › calculation of a toll, tariff, tax, bonus, penalty, remuneration, indemnity or similar type of payment;
- › application of laws or regulations or for an expert opinion given in court proceedings;
- › practice of medicine for weighing patients for the purposes of monitoring, diagnosis and medical treatment
- › making up medicines on prescription in a pharmacy and determination of mass in analyses carried out in medical and pharmaceutical laboratories
- › calculating prices on the basis of mass for the purposes of direct sales to the public and the making-up of prepackages

Weighing instruments that do not fulfil the defined requirements are non-compliant. They are not allowed to be placed on the market and put into service.

In the past decade, CECIP has become increasingly concerned over the number of weighing instruments that appear prima facie to be non-compliant. To investigate this belief, CECIP took a sample of weighing instruments freely available in the EU market but manufactured in non-EEA countries, and tested them against relevant weights and measure requirements. The study showed 95% of the tested instruments marked for use in legal applications failed regulatory requirements.

The presence of unsafe or non-compliant products on the EU market results in an unlevel playing field in favour of unscrupulous economic operators who benefit from non-enforcement of the

legal requirements and creates unfair competition. This threatens the competitiveness of the European weighing instrument industry and the jobs which it provides.

The import, sale and use of non-compliant weighing instruments has a severe impact and remains a major problem to the general public as errors caused by unreliable weighing results can result in incorrect medical dosages, mischarging and assists with fraud.

WELMEC, the European Cooperation in Legal Metrology, has scored the risk to the public interest of misleading weights to be high. These guidelines are intended to supplement existing WELMEC guidance on market surveillance. They are designed to support the implementation of efficient and effective market surveillance and focus on basic processes and tests.

Although these guidelines are written to reflect requirements of non-automatic weighing instruments (NAWI), the concept and processes are applicable appropriately to all other types of weighing instruments too.

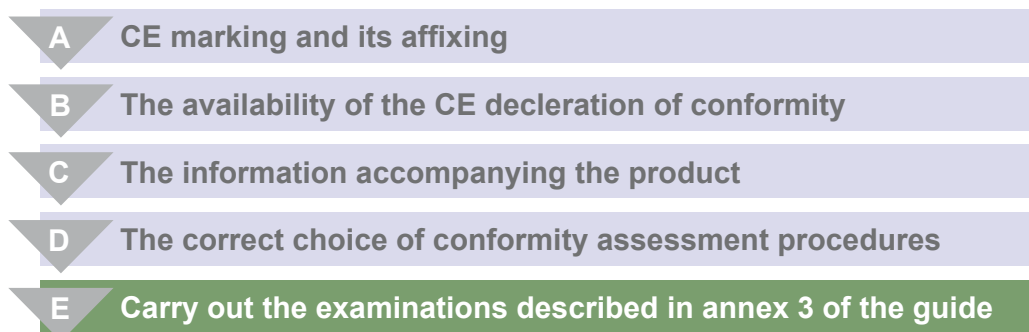
Appeal

CECIP, as the recognized organization representing and promoting the European weighing industry and related businesses, calls upon all responsible authorities and stakeholders to strengthen their efforts to rid the EU of non-compliant weighing instruments by:

- › Intensifying surveillance to detect underperforming machines
- › Focusing on conformity checks of metrological qualities
- › Tightening enforcement actions to end infringement

Target oriented Inspection

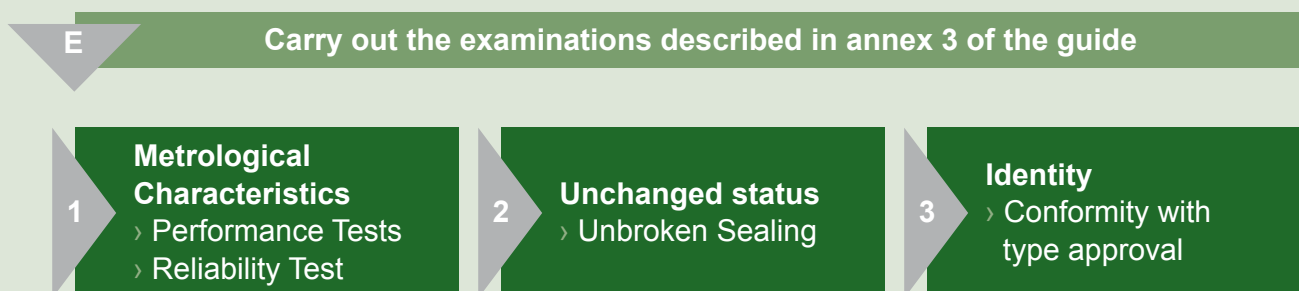
WELMEC has published market surveillance guidance which proposes a risk based approach to the planning of surveillance and contains a work flow for carrying this out.



By following steps A to D above, it is possible to confirm the declared status of the product.

However, the purpose of EU Directives is to create a harmonised market where all participants abide by the same rules, the 'level playing field'. Thus it is very important that instruments should be checked for more than just the declaration of conformity; they must also be checked to see if they actually do conform to the 'production meets type' requirement.

CECIP proposal to focus on during inspection



Task Toolbox

EU regulation requires that the design and construction of weighing instruments shall be such that the instruments will perform within metrological specifications when properly used. As a consequence, the corresponding tests should be a major part of market surveillance.

A failure to pass these metrological requirements is an indication for proceeding with further investigations of the manufacturer, the authorised representative or the importer.

CECIP's study showed that in 80% of cases, the non-compliance of a particular product could have been detectable by only a few tests which could have been carried out on site.

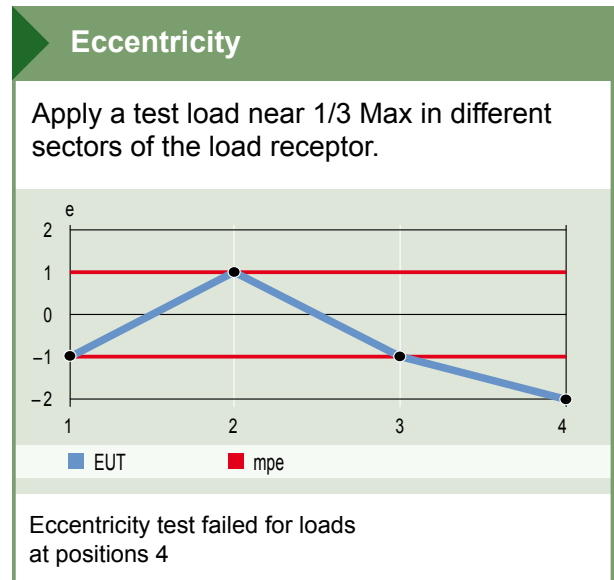
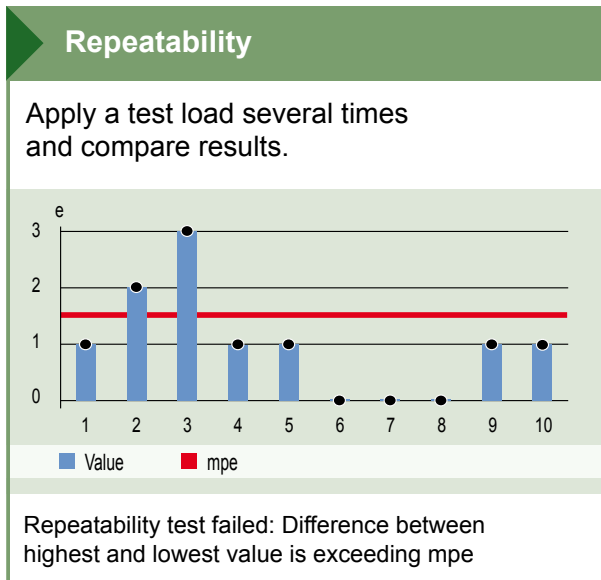
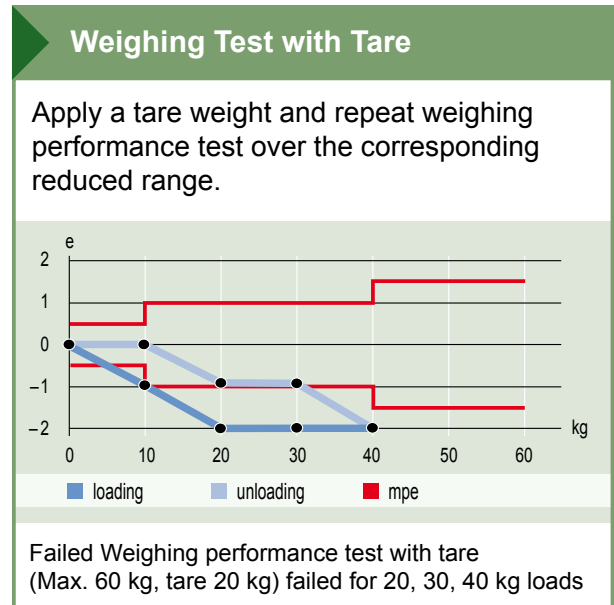
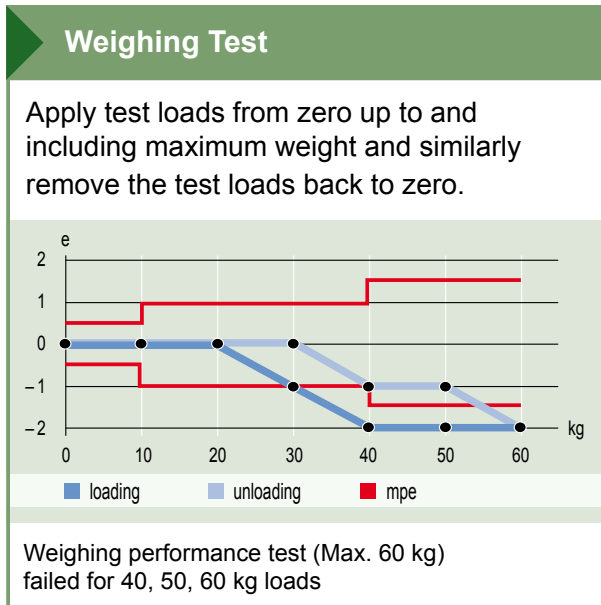


CECIP proposal for Tools

CECIP strongly suggests the equipping of market surveillance authorities with appropriate weights. This will enable them to perform the critical performance tests, as well as the majority of the reliability tests, on site. These tests are described in the following pages.

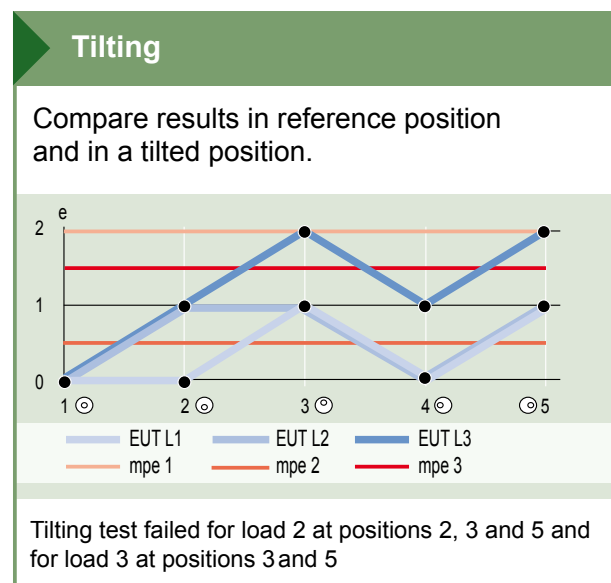
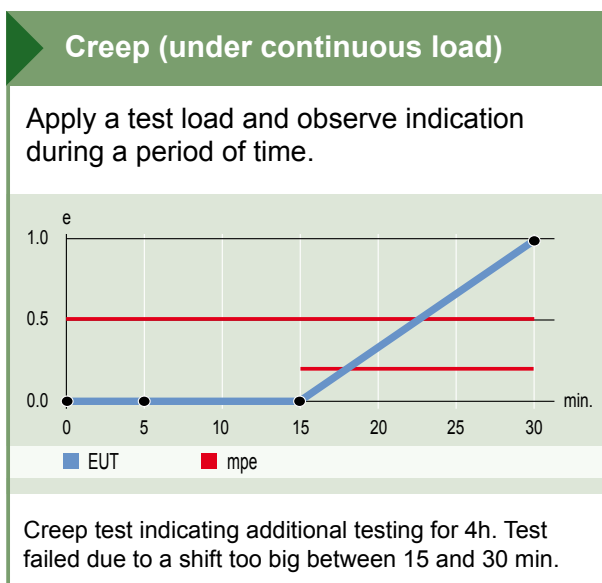
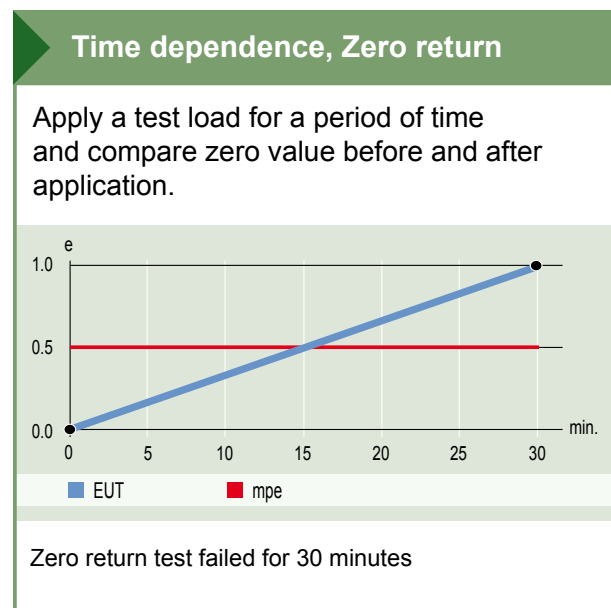
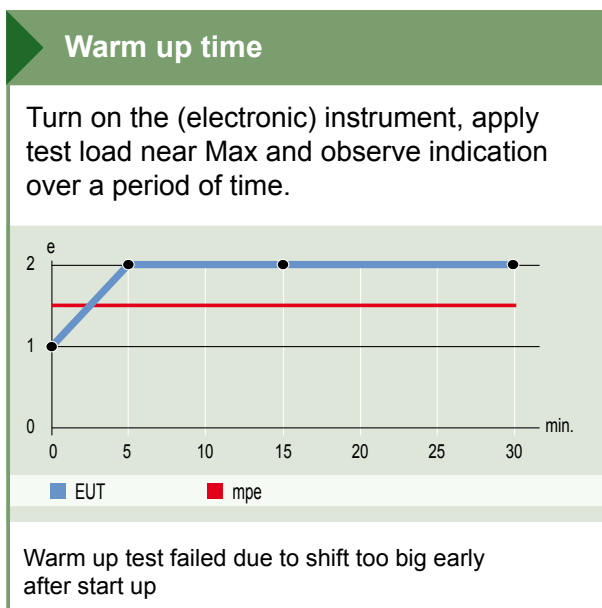
Performance

The CECIP study showed that a massive percentage of non-compliance related to specific performance requirements defined as maximum permissible errors (mpe) for accuracy and validity. Failing the corresponding requirements leads to errors:



Reliability

Environmental factors such as temperature, time, mechanical stress, tilting, electromagnetic fields and others may compromise the correct determination of mass. Immunity to such influences is of major importance to warrant reliable results. The CECIP study showed major deficiencies with respect to reliability parameters:



EUT = E under Test · L = load

CECIP
Comité Européen des Constructeurs
d'Instruments de Pesage

Diamant Building
Bd. A. Reyers 80
BE-1030 Brussels
Belgium

Tel: +32 2 706 8228
Fax: +32 2 706 8210
info@cecip.eu
www.cecip.eu

August 2011