SPCR 306

Assessment of non-automatic weighing instruments in accordance with directive 2014/31/EU (NAWI)
Foreword

A manufacturer can apply the CE-mark on non-automatic weighing instruments after performing necessary activities as described in Directive 2014/31/EU.

Certification of products and quality systems at RISE is conducted in accordance with SS-EN ISO/IEC 17065 and SS-EN ISO/IEC 17021 respectively. The tests that are carried out as a basis for certification are conducted in accordance with SS-EN ISO/IEC 17025. Product verifications are conducted in accordance with SS-EN ISO/IEC 17020.


Evaluation and testing is based on the requirements in EN 45501:2015 and relevant WELMEC guides, or when EN 45501:2015 is not applicable, on the essential requirements in annex I of the Directive.

The rules can be revised as necessary to suit new and revised harmonised standards/normative documents. Revision may also be necessary if the Directive changes or as a consequence of experience gained from the application of the system, within the framework of the Directive.

This version of the rules replaces the previous version dated 2019-06-26.

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RISE Research Institutes of Sweden AB
Certification – Notified body no. 0402

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1 Scope

The procedures in this document are based completely on what is stated in Directive 2014/31/EU annex II.

The figure below shows the different methods in diagram form for CE marking of a non-automatic weighing instrument. RISE services includes assessment according to modules B, D and F (grey shaded fields) See explanations below.

Module B: EU-type examination of specimens of products, in accordance with section 2 of this document (annex II, section 1 of the Directive), fulfils the technical requirements (however, does not apply to weighing instruments which do not use electronics and do not have spring-based load cells)

Module D: Conformity to type based on quality assurance of the production in accordance with section 3 of this document (annex II, section 2 of the Directive)

Module F: Conformity to type based on product verification in accordance with section 4 of this document (annex II, section 4 of the Directive)

Module G: Conformity based on unit verification in accordance with section 5 of this document (annex II, section 6 of the Directive. Not offered by RISE)

As a basis for the CE marking, B+D or B+F or only G is required, based on the manufacturer’s choice. (For weighing instruments which do not use electronics and do not have a spring-based load cell, it is not necessary to apply module B. Here module D1 or F1 are applied. These services are not offered by RISE)
2 EU-type examination (Module B)

2.1 General
This section describes the EU-type examination (certification) of non-automatic weighing instruments, which is based on Directive 2014/31/EU, annex II, section 1.2, and involves examining that the product meets the applicable requirements of the Directive.
EU-type examination can be performed in one of the following ways:
- Inspection (testing) of a sample which is representative of the production
- Assessment of the technical design by means of review of the technical documentation as well as inspection (testing) of one or several critical parts of a sample. The sample shall be representative of the production
- Assessment of the technical design through review of the technical documentation. (No testing takes place in this case).

RISE decides which manner is appropriate for the current product using Welmec guide 8.3. See also section 2.3.3 below. Other conditions are listed in section 5.

2.2 Required characteristics

2.2.1 Weighing instruments that comply with EN 45501:2015
Type examination is performed according to EN 45501:2015, annex A. For electronic weighing instruments type examination is also including SS-EN 45501:2015 annexes B and C.

Metrological requirements are specified in Chapter 3 of the standard. Chapter 4 specifies technical requirements, and requirements for electronic weighing instruments are specified in Chapter 5.

Weighing instruments manufactured according to harmonised standards are presumed to satisfy the relevant requirements in the Directive.

During testing and evaluation, the RISE method 2031 is used, which is based on the standard and contains requirements for documentation, checklists, etc.

2.2.2 Other weighing instruments
An evaluation plan is prepared for the weighing instruments in question. The plan shall, as far as possible, be based on the relevant parts of SS-EN 45501:2015. The evaluation of the parts that do not conform to the standard is to be based on the standard, RISE method 2031, official guidelines from Welmec or a documented method from application in previous similar cases. The requirements of the programme shall be at the same level as the standard.

Feedback is sought from the manufacturer before the evaluation begins. Feedback can also be obtained from Welmec WG2, especially following major deviations.

The parts that deviate from SS-EN 45501:2015 shall be stated during the evaluation and notified to the manufacturer, unless the deviation is not pre-announced to RISE by the manufacturer.

The established programme, in terms of general principles for the type case, is documented as a method that is then used to supplement the standard when applied to similar cases.
2.3 Assessment

2.3.1 Application
Applications for EU-type examinations (certification) shall be in writing and must be accompanied by:

- The manufacturer’s name and address and, if the application is submitted by an authorised representative, his/her name and address as well. If the applicant differs from the manufacturer, a power of attorney from the manufacturer is required.
- A written declaration that the application has not been submitted to another notified body.
- Technical data (see below).
- When applicable, the weighing instrument/instruments which is/are representative shall be placed at RISE disposal for review.
- Documents which illustrate that the technical design is appropriate. The document shall cover or refer to all the documents which have been used, particularly in cases where harmonised standards are not complied with. If necessary, the documentation shall also comprise of reports from testing which the manufacturer has conducted or allowed another party to conduct. (see also below 2.2.3).

A special application form is available on RISE website.

2.3.1.1 Technical data
Technical data shall describe, among other things, the design, manufacture and working method of the weighing instrument. This means that the appropriate sections shall contain:

- a general description of the weighing instrument
- design and manufacturing drawings and charts of components, sub-assemblies, circuits, etc.
- descriptions and explanations necessary for understanding the above
- a list of the harmonised standards applied, in full or in part, and descriptions of the solutions adopted to meet the essential requirements of the Directive’s annex 1 when the harmonised standard has not been applied
- results of calculations and inspections
- test reports
- risk analysis

A detailed list of the necessary documentation is attached to the application form.

All documents including drawings, product descriptions, assembly instructions, user manuals etc. shall be given a name or number and date as well as date of last revision.

2.3.2 Review of application
When reviewing the application, RISE checks that the application is complete and that the application can be handled within RISE notification. The review may mean that RISE cannot accept the assignment, which is then communicated to the manufacturer with an explanation.

If the application is accepted, the manufacturer is notified by means of a confirmation. An evaluation plan is prepared, if it does not already exist. When a harmonised standard is followed, this largely represents the evaluation plan. If a subcontractor must be engaged, this is communicated to the manufacturer. The manufacturer is entitled to object to the selected subcontractor.

If this is not done together with the application, the manufacturer is encouraged to send test samples to the extent that the evaluation plan requires this.
2.3.3 Evaluation
During the evaluation process, depending on the method which is chosen (see 2.1) it is either checked that:

- The product has been manufactured in accordance with the technical data, and that it meets the requirements that the standard or specification requires. The evaluation process includes tests and examination that are carried out to the extent that the requirements specification and/or evaluation plan specifies. In some cases, previous test results can be used for the evaluation. The requirements for these tests include that they shall have been carried out by an accredited independent testing laboratory. The evaluation also includes a review of marking and information to the user etc.

or

- That the technical documentation can show that the design fulfils the requirements.

In cases where the product and/or documentation shows deficiencies, i.e. does not meet the requirements, the evaluation may be cancelled. The manufacturer will be informed, and will get the possibility to add supplementary data and documentation. If the product itself shows deficiencies, the manufacturer will be able to modify the product. If a complete retest is necessary depends on the type of modification and will be judged from case to case.

The results of the evaluation are summarised in an evaluation report which is presented to the manufacturer. The report is confidential and may not, in full or part, be disseminated without the manufacturer's consent. If the results of the evaluation show that the product and documentation meet the requirements of the specification, the process proceeds to review and then decision.

2.3.4 Review and decision
The evaluation work is reviewed, and following successful results, the process proceeds to the decision phase. When a decision on certification has been taken, an EU-type examination certificate is issued to the manufacturer. The certificate can be used by the manufacturer as a part of the documentation required to issue a declaration of conformity and to CE mark the product.

2.4 EU-type examination certificate

2.4.1 Validity
EU-type examination certificates for non-automatic weighing instruments are normally issued with a validity period of ten years from the date of issue. The validity period may then be extended for a maximum of ten years at a time. Shorter validity periods may be applied, for example, if a for the area new technology has been applied. The certificate may then be issued with a validity period of two years. This also applies if the manufacturer wants to change a certified product and then apply one for the area new technology. That a shorter validity period will be applied is notified to the manufacturer before the certification process starts or when the certificate is revised. Certificates issued with a validity period of two years in accordance with the above, may be extended by three years at a time. In the event of revision of a certificate, the original validity period is retained, except in cases described in 2.5, when the validity period may be shortened.

The validity time of the certificate can be shortened if it, during the validity of the certificate, shall be evident that the requirements of the weighing instrument is no longer
fulfilled, caused by the technical development. The holder of the certificate will then be informed and have the possibility the update the measuring instrument.

2.4.2 Extension of validity period for the certificate issued.
Applications for extension shall be made in writing, at least 6 months before the end of the validity period. For the application, an assessment is made of the measures required for the extension. If no changes are made to the regulations, specifications, etc. the certificate can be extended without any further action, provided, of course, that the product is unchanged relative to the original certification or the latest revision. The applicant must certify that no changes have been made. A current set of the technical documentation shall be attached (see 2.2.1.1).
If changes are planned for the product, the application shall be supplemented with details about this. This may result in that additional assessments and/or tests need to be performed.
In this case, the manufacturer must be informed thereof and may then also be given a price quotation for this. If you also introduce a new technology for the area, the validity period may be shortened (see also 2.3 and 2.5 Changes to certified products).

2.5 Changes to certified products
Note that no changes may be made to the certified product, without this being assessed and approved by RISE. The manufacturer must therefore notify RISE of any planned changes to the certified product. Along with this notification, a description of the changes along with the addition of the technical data is attached. RISE will then assess what measures need to be made in order for the certificate to remain in force after such changes have been made. The assessment may result in that additional tests need to be performed. In this case, the manufacturer must be notified thereof and may then also be given a price quotation for this. The changes may also impact the validity period of the certificate, for example, if new technology is applied, see below 2.3. If the result of the change means that the certificate is still valid, the certificate is revised with the new data.

2.6 Placing on the market and CE marking
In order to place a product to the market, the manufacturer must have a valid EU-type examination certificate (does not apply to weighing instruments which do not use electronics and do not have a spring-based load cell, see clause 1.3). The manufacturer must also have a notified body approve their management system for quality control of produced weighing instruments pursuant to section 2, module D of the Directive’s annex II, or have a notified body verify each individual weighing instrument pursuant to section 4, module F of the Directive’s annex II. The manufacturer chooses the approach to be used and which notified body will carry out the task. The CE marking is to be supplemented with the identification number of the notified body which performs this task. See sections 3 and 4 for the different options.
3  Conformity to type based on quality assurance of the production process (Module D)

3.1  General
According to Directive 2014/31/EU, applicants are given two options to choose from for examination of type-approved/certified non-automatic weighing instruments with the aim of approving them for placing on the market. One option is the quality assurance of production, that the manufacturer is responsible for, and which is followed up through surveillance, which RISE is responsible for. Once the quality system is assessed, a report is issued with a judgement and a recommended decision. Using this as a basis, the decision is taken to issue a certificate. See also document Terms for review and assessment of management systems as notified body, SP INFO 2014:35 for a more detailed description of the process. Other conditions are listed in section 5.

3.2  Application
The application for assessment (certification) of the quality system shall be in writing and be accompanied by:
- the manufacturers name and address, and if the application is lodged by an authorised representative, his/her name and address as well.
- A written declaration that the application has not been submitted to another notified body.
- All information of significance for the planned category of weighing instruments
- Quality manual or equivalent documentation for the quality system
- The technical documentation for the approved type/types and a copy of the EU-type examination certificate or certificates

The application must also state if the quality system covers all or parts of the company, or all or parts of the production. In addition it must be stated if manufacturing takes place at any other company.

The manufacturer shall undertake to:
- Maintain the approved quality system to ensure its continuing suitability and effectiveness.
- Inform RISE about all changes which are planned in the quality system.

3.3  Quality system requirements
The requirements of the quality system are specified in annex II, section 2.3 of the Directive. The quality system shall ensure that the weighing instruments comply with the type-approved one and satisfy the applicable requirements of the Directive. The system shall be documented in accordance with point 3.4 below.

3.4  Documentation requirements
The documentation shall describe:
- quality objectives and the organisational structure, responsibilities and power of the management with regard to product quality
- manufacturing processes, methods and techniques for quality control and quality assurance as well as the systematic actions that will be taken
• the examinations and tests that will be carried out before, during and after manufacture, including frequency
• quality documents, for example, audit reports, test results, calibration results, documentation of the qualifications of the staff, etc.
• the methods of monitoring that the set quality objectives are achieved and that the quality system works effectively

All relevant information such as quality documents and design documents must be kept available for RISE.

3.5 Review and assessment of quality systems, etc.
The review and assessment are conducted according to the document Terms for review and assessment of management systems as notified body, SP INFO 2014:35. For approved results, RISE issues a certificate which verifies that the quality system fulfils the requirements in accordance with module D for the specified weighing instruments. The validity period for the certificate is 5 years, and can be extended by 5 years at a time.

3.6 Surveillance of quality system
RISE will conduct audits at regular intervals, normally once a year, and submit audit reports. RISE may visit the manufacturer without notice and/or conduct/allow the conduct of testing. RISE reports results in the audit report and/or testing report.

3.7 Marking
See 5.2.
4 Conformity to type based on product verification (Module F)

4.1 General
According to Directive 2014/31/EU, manufacturers are given two options to choose from for assessment of type-approved/certified non-automatic weighing instruments with the aim of approving them for placing on the market. One of these options is product verification. This procedure means that the manufacturer takes all the necessary measures to ensure that manufactured weighing instruments or combination of weighing instruments and peripheral equipment comply with the requirements and that RISE determines that manufactured type-approved weighing instruments/combinations are consistent with what is stated in the certificate (EU-type examination certificate/test certificate).

4.2 Application/Order

4.2.1 Application
The application shall be submitted on the designated form, which can be obtained from RISE, and shall contain:
- The name and address of the applicant
- Make of weighing instruments, model designation
- Copy of EU-type examination certificate. Note that the certificate must be valid at the time of the verification.
- Test certificates for any peripheral equipment and software if applicable. (*)
- Declaration of Conformity for weighing instruments and the combination in applicable cases. (*)
- A “Compatibility of modules” calculation/Welmec 2 point 10/ if there is a statement in the cited certificate which states as in Welmec 2.4 A.5 (which begins: “Any load cells may be used for the instruments....”) in this case a test certificate is needed for all constituent modules
- If necessary, a power of attorney from the representative or owner of the EU-type examination certificate

(*) This applies for the verification of combinations of weighing instruments and peripheral equipment.
The application may cover verification of several objects if the documentation is the same.

4.2.2 Orders
When RISE has received an application and approved it an order form is sent to the applicant. The order form includes, among other things, links to the project numbers. The order is then used as call off for the verifications.

4.3 Examination
RISE examines each weighing instrument/combination to be certified (CE-marked). The examination includes review of the conformity between the accompanying documents to the certificate (EU-type examination certificate) and weighing instrument/peripheral equipment, and testing in accordance with section 2, to the required extent.
The examination is normally conducted at the manufacturer or at another site. For the examination to be carried out at another site than the site where the weighing instrument is used, transfer of the weighing instrument to this site must not assume that
interventions need be made to the weighing instrument that might affect its properties. Other reservations for examination at another site are stated in annex 2, section 5 of the Directive.

4.4 Certificate of Conformity
For approved results, RISE issues a Certificate of Conformity for the current weighing instrument or combination.

4.5 Marking
See section 5.2.
5 General conditions

5.1 General
For section 3, more information is available in RISE Terms for review and assessment of management systems as notified body SP INFO 2014:35.

5.2 Marking
CE marking of non-automatic weighing instruments takes place on the manufacturer’s responsibility, and shall also contain supplementary metrology marking. In those cases where RISE has performed examination which is described in any of the modules D and F RISE ID number as notified body (0402) shall be placed adjoining the CE mark. Only the products that comply with the requirements in the Directive may be marked. Misuse of RISE ID number can lead to legal action.

5.3 Certificate
The validity of the certificate is based on continuous compliance with the conditions. Certificates are not transferable. Copies of certificates and associated documents may only be reproduced in their entirety, unless otherwise agreed with RISE.

5.4 Responsibility
The certificate holder is responsible:
- to fulfil all requirements connected to the certification including notified changes in certification rules or conditions,
- to not provide any misleading information about the extent or conditions of the certification which can harm the confidence for the certification or RISE
- that CE-marked products comply with the applicable requirements in one or more directives, with corresponding national provisions and the requirements specified in the certificate

RISE is responsible for:
- ensuring that all processing is carried out with the necessary care and in accordance with the procedures of RISE quality system
- the certification rules
- to inform about changes in the certification rules and conditions.

RISE has no responsibility for certified products.

5.5 Withdrawal of certificate
RISE, either definitely or permanently, can withdraw a certificate if:
- the product no longer meets the set requirements
- errors in the certificate come to light
- demands for continual examination are not met
- the internal examination shows serious shortcomings
- shortcomings in the internal examination are not remedied in the time prescribed
- there are failed results in examination testing in the regulatory examination
- the product is not suitable for its purpose or can cause injury or problems
- changes are made to legislation, regulations or similar.
- the competent authorities or coordinating body for a notified body recommends RISE to do so
- the holder has used the certificate or in connection with products that do not meet the requirements or are not covered by the certificate
• fees are not paid within the prescribed deadline, the certificate holder is subject to bankruptcy, has gone into liquidation or has transferred operations
• breach of the conditions for the certificate.

If a certificate is withdrawn, the holder shall cancel all reference to the certificate and RISE name and id.no. 0402 in his EU declaration of conformity and marking. The holder may neither refer to the certificate or RISE in advertisements or other publications for the product in question.

5.6 Changes to products, quality systems, organisation
Changes to certified products, see 2.4.
In terms of quality systems in accordance with module D, changes to the quality system shall be notified to RISE. Even major organisational changes or other factors which may impact the certificate shall be notified.

5.7 Information obligation, confidentiality and access
As a notified body, RISE is in some cases obliged to reveal information on certificates to other notified bodies and competent authorities. RISE informs Swedac about issued certificates as well as refusals, restrictions, suspensions and withdrawals of certificates.

RISE keeps a register of certificate holders, certificates, certified products and certified quality systems, manufacturing sites, validity period for certificates etc. This information may be published, for example, on RISE websites. RISE may provide copies of or publish the certificates. RISE is also entitled to publicise decisions on the withdrawal of certificates and the misuse of certificates or marking. Other information is classified.

The manufacturer, or its representative, shall ensure that RISE, the control body that RISE has approved, or observers (e.g. from the accreditation body) have access to premises and documents that are needed to perform the duties described in the sections 2-5.

5.8 Revised rules
RISE reserves the right to modify these rules in order to harmonise them with standards, changes to the Directive or rules for Notified Bodies, or as a result of experience of application of the system.

5.9 Fees
Fees are set according to agreement and shall be paid by the applicant of certificate or certificate holder. Costs for work resulting from deviations in the continuous examination shall be paid by the certificate holder. The fees for another examination shall only be paid by the certificate holder if the examination results show that the requirements of the certification regulations are not fulfilled.

Application and registration fees are normally not reimbursed when an assignment is cancelled or a certificate cannot be issued. In the case of assignments that are not estimated to be completed within a month of the acceptance date, RISE has the right to issue regular (monthly) invoices for costs to date.

5.10 Appeals
Appeals against RISE decisions shall be made in writing. Decisions on measures necessary as a result of appeals are taken by the RISE Certification board.