

## **RG02 ANNEX A**

### **EXAM CONDUCTING**

#### **A.1 INTRODUCTION**

This Annex A to the Regulation for the certification of personnel assigned to non-destructive testing of the TEC Eurolab Certification Body is an extract of the PG32 internal system management procedure in the latest revision available. The Certification Body informs the candidate about the operational procedures for conducting the exam.

More details are available to the candidate within the PG32 that can be requested at any time with all rights of confidentiality to the TEC Eurolab exam center.

#### **A.2 COMPOSITION AND ORGANIZATION OF THE EXAMINATION CENTER**

**Technical Manager of the RTCE Exam Center** - The TEC Eurolab Certification Body delegates the responsibility of the Exam Center and the consequent management of the same to the figure of the RTCE, a professional figure certified in accordance with UNI EN ISO 9712 in the main methods managed by the Exam Center itself and of considerable experience, which appoints the examination commission for each individual session. RTCE appoints all the examiners.

**Examination Commission** - The examiners can be internal or external to the Certification Body. The examination commission is brought to the attention of the candidate who is requested for approval before the exam begins.

For each exam session, RTCE designates the examiners in compliance with the following requirements: A) The examiners must be chosen from the list of personnel belonging to the Exam Center. B) At least one examiner must be certified at level 3 in the method under examination. C) No examiner may have trained the candidate for this examination for a previous period of two (2) years, nor may he/she be employed in the same company as the candidate. D) One of the examiners must assume the function of President of Commission.

In the presence of candidates employed by the Exam Center, independence and impartiality are maintained through adoption of the same evaluation and confidentiality rules in use for external candidates, through the use of at least one non-dependent examiner certified at level 3 according to the applicable standard and in the method concerned and an independent monitoring, conducted by another level 3 certified according to the standard and in the method concerned, of the entire process that led to the certification of the candidates involved (external decision-making body).

The examination commission can be formed by a single examiner and, for level 3, by only two examiners.

Other persons cannot participate in the meetings of the examination commission, unless officially invited by the President of the commission itself. In any case, the guests may not in any way interfere with the conduct of the exams or participate in the evaluation of the candidates, in compliance with the provisions of the examination commission, to which external or internal members of level 2 or level 3 can be added only upon invitation by RTCE with control and assistance functions during the theoretical and practical examination.

**UTQ Technical and Quality Office** - UTQ is a support body for RTCE and the examination commission which carries out technical office, quality assurance and secretarial activities. Before starting the certification process, it interfaces with the candidate to collect all the information necessary for access to certification. Inform the candidate of any information requested on the conduct of the exams.

**Exam questionnaires** - RTCE in collaboration with level 3 certified staff belonging to the Exam Center prepares and approves the questionnaires used during the exam.

The exam questionnaires for the written test consist of multiple-choice quizzes with a single correct answer relating to the topics under examination.

The questionnaires are divided both by method and by level; they are different for each candidate admitted to the exam session. The choice of quizzes is made, according to the method and the level, randomly with a dedicated software program.

In order to ensure confidentiality, archiving, recording and management of questionnaires is governed by the requirements of the TEC Eurolab internal quality procedure for documentation management.

**Exam samples** - The Exam Center has approved samples representative of all industrial sectors, with known real defects of construction and/or operation or artificially obtained, and always in both cases with different degrees of difficulty of detection.

They are uniquely identified and accompanied by a unique descriptive card. They are archived according to the requirements of the applicable internal management procedures of the body.

**Exam procedures** - The Exam Center has a database of procedures for each single certifiable method. Their archiving, recording and management, in order to ensure confidentiality, is governed by the requirements of the TEC Eurolab internal quality procedure for documentation management.

**Exam rooms and location + Exam dates** - The rooms in which the exams are carried out are, unless otherwise communicated, the classrooms and the premises of the TEC Eurolab Laboratory located in Via Grieco 91 - 41011 Campogalliano (MO).

All the premises are in compliance with the current safety provisions. The staff has access to the laboratory premises only if equipped with the required Personal Protective Equipment, such as safety shoes. Any other PPE necessary for access to the Laboratory premises will be communicated to the candidate during the admission phase to the certification process.

Any other premises deemed suitable by RTCE can be used to conduct the exams.

The dates and place of the examination sessions are communicated to the candidate at least five (5) days before the scheduled date.

For levels 3, a communication of the period of the exam is published on the internal website [www.tec-eurolab.com](http://www.tec-eurolab.com) three (3) months in advance of the scheduled examination period. UTQ will be responsible for informing applicants for certification about the exact date of the certification activity.

**Regulations** - The Exam Center makes the main applicable standards in paper format available during the examination for the release of the certification for consultation only.

**Equipment** - The Exam Center has instruments and equipment for each method. These are necessary for carrying out the practical exam tests.

Instruments and equipment are not for the exclusive use of the Exam Center but are shared with the non-destructive testing department of the TEC Eurolab laboratory; the instrumentation is regularly calibrated, maintained and managed in accordance with the applicable management procedure of the company quality system. The instrumentation and equipment are equipped with a user manual.

The candidate will be able to use his own instrumentation as long as it is in regular operation and accompanied by a regular EC Declaration of Conformity, as well as regularly calibrated and maintained; it will be the responsibility of the President of the examination commission, through level 3 personnel competent in the examination method envisaged, to verify the efficiency of the instruments used by the candidate through the application of national or international standards.

The instrumentation used by the candidate will be an integral part of the certification process.

In the case of examinations at companies that foresee the use of irremovable company instruments, RTCE will mandate the President of the examination commission, through the level 3 personnel competent in the examination method envisaged, to ascertain the efficiency of the instruments, through the certifications or the checks required by company specifications; these checks will be an integral part of the certification process and must be recorded.

### A.3 METHOD OF ADMISSION TO THE EXAMS

The applicant for certification must provide TEC Eurolab with all the documentation required in the RG02 regulation, available on the company website [www.tec-eurolab.com](http://www.tec-eurolab.com). It is preferable to send the application and the documentation referred to in the application in electronic format via @mail (alternatively by fax or ordinary mail). The acknowledgment and subsequent review of the request for admission to the exams is delegated to the RTCE or its delegate.

Any admission and invitation to the exam is communicated to the applicant by UTQ. In the event of a negative result, the application will be rejected giving reasons to the applicant. UTQ will be responsible for transmitting the candidate's documentation to the examination commission.

Note 1) - The documentation certifying visual suitability of the candidate must be delivered no later than the date of the exam. In the event that the documents were not present on the date of the exam, the candidate will not be able to attend it.

Note 2) - The documentation certifying continuity of work of the candidate must be delivered no later than the date of the exam. In the case of no experience, the candidate may be admitted to the exam but the certification will be issued by the Certification Body only with experience gained and proven.

Note 3) - The foreign candidate is required, upon applying, to sign a declaration of adequate knowledge and understanding of the Italian language. Otherwise, the candidate must promptly notify the Body, which will evaluate the use of exam material in English, as well as the possible use of an examiner with adequate knowledge of the candidate's language.

### A.4 PREPARATION OF THE EXAM

The examination commission proceeds with selection of the multiple choice written questions (quizzes), of the samples for the practical tests (if required), and of the topics for drafting of one or more procedures (for candidates for certification at level 3).

**Level 1 or 2 Exam** - The Level 1 or Level 2 Certification Candidate Test includes a general exam, a specific exam, and a practical exam.

**Level 1 or 2 Exam: general exam** - The general exam is based on the solution of multiple choice questions in a minimum of one minute per question and a maximum of 2 per question. The minimum number of questions is contained in the Prospectus "Minimum number of questions required - General examination".

**Level 1 or 2 Exam: specific exam** - The specific exam is based on the solution of multiple-choice questions, in a maximum time of 3 minutes per question. The minimum number of questions is 20 for all methods, including questions that require calculations, non-destructive testing procedures, and questions about codes, regulations, and specifications. If the specific exam refers to two or more sectors, the minimum number of questions must be 30, spread over both sectors.

**Level 1 or 2 Exam: practical exam** - The practical exam involves the application of the non-destructive method to be certified to samples characterized and selected from the specific reserved list of the Exam Center. The examination must include verbalization of the results and interpretation of the indications found. In the case of candidates for level 1 certification, they must apply the technique proposed by the examiner; for level 2 certification candidates, they themselves must select the technique deemed most suitable.

The number of tests, depending on the level, method and sector, is indicated in the tables "Minimum number and type of samples for level 1 and 2 exams" and referred to in Annex A.9. The maximum time allowed for carrying out the level 1 practical exam is 2 hours. The maximum time allowed for the level 2 practical exam is 3 hours.

It is specified that the practical exam for level 2 candidates also includes written drafting of an operational instruction on an exam sample which must then be checked by the candidate. A maximum time of 2 hours is allowed for drafting of the operating instructions.

**Exams for limited applications** - Exams are provided for the limited applications listed in the "Limited Applications" prospectus for which the rules set out in the "Minimum Number of Questions And Samples For The Qualification Exam" are applicable.

**Exams for particular applications** - Exams are foreseen for the particular applications listed in the "Special Applications" table. It is established that for access to exams for particular applications, the candidate must already be in possession of level 2 in the industrial metal manufacturing sector for the ultrasonic control method.

With regard to the exams for particular applications, the "minimum number of questions and samples for the qualification exam" prospectus applies, with the following specifications: A) the 20 questions of the general exam will be multiple choice related to the technique in object; B) the 10 specific questions will be multiple choice divided into representation and recording of results, and company regulations and procedures on the specific application of the techniques.

As regards the application of the UT/PA method, the practical examination will be conducted on at least 2 representative samples of the sector of interest.

As regards the application of the UT/T method, the examination will be conducted on at least 2 welded joints with identification and sizing of any defects and with recording and documentation of the results and evaluation of the same according to company acceptability criteria and/or in reference to specific procedures or standards.

**Level 3 exam** - The exam test for level 3 certification candidates includes a basic exam and a method exam.

**Level 3 exam: basic exam** - The basic exam includes the multiple choice quiz solution divided into three successive parts called: Part A) relating to materials science and technology; Part B) relating to the certification schemes reported in the reference standards and in the regulations of the Certification and of the TEC Eurolab Examination Center; Part C) knowledge at level 2 in at least 4 methods chosen by the candidate including at least one volumetric method (UT or RT).

The "Minimum Number of Questions for the Level 3 Basic Exam" table shows the number of questions required for each part.

The maximum times within which to complete the test relating to the basic exam are 90 minutes for parts A + B and 120 minutes for part C.

**Level 3 exam: method exam** - The method exam is divided into three parts of which the first two concern the solution of a minimum number of multiple choice questions, while the third part requires the drafting of one or more procedures according to the sectors of interest.

The "Minimum Number of Questions for the Level 3 Method Exam" table specifies the minimum number of questions required. During the exams, candidates can consult only regulations, codes or specifications applicable to the method being examined.

The maximum times within which to complete the test relating to the method examination are 90 minutes for parts D, 60 minutes for part E and 240 minutes for part F.

### A.5 METHOD OF CONDUCTING THE EXAMINATION

The candidate must present himself on the date, time and place established and communicated by UTQ with a valid identity document. It will be the responsibility of the examination commission to check the identity of the candidate.

Consultation of the standards, codes and/or technical specifications made available by the examination commission to the candidate is allowed only to level 3 candidates for part B of the basic questions and for part F (drafting of the procedure) of the method exam, to level 2 candidates for the specific exam and for the drafting of the operating instructions for level 1 personnel, and to level 1 candidates for the specific exam.

The use of any educational support in any form (paper or electronic) is not allowed. The use of scientific calculators and the sensitometric curves of the films is allowed. The examination tests are carried out in the presence of at least one member of the examination commission with the use of the appropriate paper and/or digital exam forms.

For the exams carried out in paper format, the questionnaires (quizzes) and the forms are delivered to the candidate by the examination commission in a sealed envelope; the commission will report to the candidates the time available and the maximum delivery time of the documents. Once the maximum time allowed has elapsed, the Commission will collect the documents not yet delivered. For exams carried out digitally, the candidate will be given a personal password with which he/she will be able to access the certification exam. The use of the digital mode will be activated following a tutorial in which the methods of use will be shown.

During the "certification application" phase, the candidate can choose the type of exam he/she will want to use (paper format/digital format).

Candidates are prohibited from disclosing exam material; candidates undertake to comply with the confidentiality requirements by signing a specific declaration when applying for certification.

#### **A.6 EVALUATION OF THE EXAM**

The evaluation of the exams is conducted by the examination commission as described below.

**Evaluation for levels 1 and 2** - As regards the assessment of the practical exam, it must be conducted according to the weights provided for in the table "Weights for the assessment of the practical exam for Levels 1 and 2". The exam is considered passed if the candidate has achieved:

A) A minimum score of 70% in each of the three parts (general-specific-practical); B) For the practical exam, the score will be calculated as follows: an exam sample chosen by the examiner will be subject to the procedure with a maximum score of 15/100 to which the score relating to the practical examination conducted on the sample with a maximum score of 85/100 will be added.

The remaining samples to be checked will be evaluated by expressing the vote up to a maximum value of 85% which will be corrected by multiplying it by 100/85.

Where a limited or particular application is required, the operating instruction can be chosen independently by the samples with an evaluation expressed in hundredths.

The commission must compile for each candidate and for each method, using the appropriate form, a final evaluation report documenting the results of the exam and reporting the candidate's suitability or non-suitability judgment.

The report must be signed by the President of the Examination Commission.

**Evaluation for level 3** - The assessment of the basic exam and the method exam must be carried out separately. The exam is to be considered passed if both aforementioned parts of the exam are individually passed.

**Evaluation for level 3: basic exam** - Passing the basic exam involves passing each individual part (A, B, C) with a minimum assessment of 70%.

**Evaluation for level 3: method exam** - Passing the method exam involves passing each single part (D, E, F) with a minimum score of 70%.

The evaluation of the written procedure must be conducted with the criteria and the weights provided in the table "Weights for the evaluation of the practical exam for Levels 1 and 2".

**Exam report** - At the end of the exam, the reports for the individual parts of the exam and the overall judgment are compiled, in order to document the performance, evaluation and results of the exam undertaken.

RTCE, through UTQ, will communicate the results of the exam to candidates via @mail or fax.

#### **A.7 COMMUNICATION OF RESULTS AND TRANSMISSION OF DOCUMENTATION**

All the originals of the documentation concerning the qualification exam are filed under confidentiality conditions at the headquarters of the TEC Eurolab Certification Body and all the documentation concerning the candidate is filed in the relative file.

The requirements for the management of system documentation set out in the applicable internal management procedure of the body apply.

Candidates, upon request, can be informed immediately after the evaluation of the results of the qualification exam while the certificate and license will be issued only after the certification has been approved by the relevant body (Decision Making Committee).

#### **A.8 FAILURE TO PASS THE EXAM**

The candidate who fails the exam due to ethically incorrect behavior must wait at least twelve (12) months before being able to repeat the exam.

The candidate who fails to obtain the minimum score required for certification can repeat any of the parts of the exam only once (for levels 1 and 2, the general, specific or practical exams; for level 3, the exam or the method exam and, within the method exam, the set of questionnaires or the procedure).

The repetition of the exam must take place no earlier than one (1) month and no later than twelve (12) months from the date of the first exam taken. In any case, the basic level 3 exam remains valid provided that the first method exam is passed within 5 years.

The rejected candidate is required to repeat the entire exam, as established for new candidates.

The candidate can at any time contact the Certification Body for clarification on the entire certification process.

#### **A.9 RECALLED STATEMENTS**

For a better reading of this document, all the prospectuses referred to in this document are shown in Annex RG02 Annex A.9.