CERTIFICATION PROCEDURES
ISSUE 1, REVISION 1

Y14.5.2 SUBCOMMITTEE ON CERTIFICATION

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1 INTRODUCTION

This document covers the procedures for the ASME Y14.5.2 certification program for the purpose of assuring that persons who are certified by ASME meet the requirements of the Y14.5.2 Standard.
2 AUTHORITY, RESPONSIBILITY, AND PERSONNEL

2.1 AUTHORITY FOR IMPLEMENTATION OF PROGRAM

The authority and responsibility of those in charge of the certification program shall be as established in 2.2 through 2.5. They shall have the organizational freedom and administrative and technical expertise necessary to implement the program.

2.2 RESPONSIBILITIES OF BOARD ON CONFORMITY ASSESSMENT

The ASME Board on Conformity Assessment has overall responsibility for the ASME's Conformity Assessment activities, including the approval of policies and procedures, and ensuring that the administration of the Y14.5.2 certification program is in accordance with these policies and procedures.

2.3 RESPONSIBILITIES OF ASME STAFF

ASME staff is responsible for all phases of the administration of the certification program except where otherwise specified in these procedures.

2.4 RESPONSIBILITIES OF Y14.5.2 SUBCOMMITTEE

The Y14.5.2 Subcommittee responsibilities include

   (a) development of revisions and interpretations of the Y14.5.2 Standard;
   (b) development and maintenance of the examination question bank;
   (c) providing for due process (appeals).

2.5 SUBCONTRACTING

ASME may subcontract services to other organizations provided that the capability of the subcontractor to meet the applicable portions of these procedures has been ascertained, and the activities of the subcontractor are evaluated annually by ASME to assure continued compliance. Subcontractors shall have demonstrated competence in the area for which they were hired.
3 REVISIONS TO THESE PROCEDURES

3.1 APPROVAL

Revisions to these procedures are subject to the approval of the Y14 Standards Committee and the Board on Conformity Assessment in accordance with their respective operating procedures.

3.2 IMPLEMENTATION

Revisions to these procedures that are necessitated by revisions to the Y14.5 and Y14.5.2 Standards shall be implemented within six months of the date of issuance of the revisions to the Standards, if such delay is acceptable with the provisions of the Standards. If not, there shall be no appreciable delay.
The Y14.5.2 certification program is subject to the ASME internal audit process.
5 CERTIFICATION PROCEDURE; TECHNOLOGIST AND SENIOR LEVELS

5.1 APPLICATION PROCEDURE

5.1.1 Application Process. ASME staff shall make available applications for certification in accordance with the Y14.5.2 Standard.

5.1.2 Verification of Qualifications. At its discretion, ASME may require an Applicant to provide verification of the information provided on the application.

5.2 EXAMINATION PROCEDURE

5.2.1 Development of Examinations. The initial item banks are developed using the following guidelines:

(a) The Y14.5.2 Subcommittee on Certification develops examination questions and answers.
(b) The Subcommittee may request other individuals to submit material for exam questions and answers. Such individuals may include, but are not limited to professionals involved in geometric dimensioning and tolerancing, persons elected or appointed to regulatory positions in a relevant field, or educators.
(c) All question developers shall be provided with the information from the Y14.5.2 Standard necessary for them to develop questions on the proper subject matter and at the proper educational level, including the following:
   (1) qualifications for Technologist Level certification
   (2) qualifications for Senior Level certification
   (3) certification examination topics (Appendices A & B of the Y14.5.2 Standard)
   Question developers will be required to provide references and/or justification for the questions and answers.
(d) The Y14.5.2 Subcommittee on Certification or Subgroups will review all of the questions for content and group them according to the requirements of 3.1 & 3.2 of the Y14.5.2 Standard.
(e) ASME staff will arrange to have a qualified individual or organization review the final wording of examination questions jointly with the Y14.5.2 Subcommittee on Certification.
(f) The content validity of the bank of questions is established. A description of the procedure for establishing content validity is shown in Appendix A.
(g) ASME will then arrange to have exams produced using items from the accepted bank of questions.
5.2.2 **Updating Examinations.** Examination questions and answers shall be monitored periodically by the Y14.5.2 Subcommittee on Certification and updated as necessary.

5.2.3 **Control of Questions and Examinations.** Access to questions, answers and examinations shall be controlled as follows:

(a) All persons with access to the questions, answers, and examinations shall sign a statement agreeing to keep all information confidential.
(b) The Y14.5.2 Subcommittee on Certification shall establish procedures for limiting the access of the material submitted for use in the development of questions and answers. The material covered by this are the questions, answers, and references and/or justifications.
(c) Once questions have been put into their final form, they shall not be accessible to anyone except as follows:
   (1) the test developer (ASME staff or subcontractor);
   (2) members of the ASME staff, limited insofar as possible;
   (3) members of the Y14.5.2 Subcommittee on Certification, for the purpose of conducting their duties.
   (4) One ASME staff and one member of the Subcommittee may preview each examination for accuracy.

5.2.4 **Grading of Examinations.** Examinations shall be graded under the control of ASME staff or through a subcontractor as indicated in 2.5.

5.2.5 **Pass/Fail Criteria** The pass/fail criteria shall be as established in the Y14.5.2 Standard.

5.2.6 **Notification of Results.** Within sixty days of the examination, ASME shall send the results to each Applicant. The results shall include the percentage of correct answers in each category, the percentage of correct answers overall, and a statement as to whether or not the Applicant has passed. This information shall not be made available to any other person, except at the written request of the Applicant.

5.3 **ISSUANCE OF CERTIFICATES**

An Applicant meeting the qualifications noted in 2.2 of the Y14.5.2 Standard will be issued the appropriate Certificate. The Certificate will identify the specific edition of Y14.5 on which the certification is based. The Certificates will have an expiration date of three years from the date of issuance.
5.4 RENEWAL OF CERTIFICATION

5.4.1 Renewal Notice. Approximately six months prior to the expiration of a Certificate, ASME shall send the Certificate Holder a reminder of the expiration date, together with information on renewing the Certificate.

5.4.2 Application Process. ASME staff shall make available applications for the renewal of certification. A verifiable record shall be provided to ASME such as a letter from the employer, a client, or other evidence of participation.

5.4.3 Notification of Renewal of Certification. ASME shall notify Certificate Holders of the renewal of their certification within thirty days of the receipt of the proper information.

5.4.4 Verification of Information. At its discretion, ASME may require an Applicant to provide verification of the information provided on the application.

5.5 EXPIRATION OF CERTIFICATION

Expired Certificates shall not be renewed. ASME may extend the expiration date of a Certificate by no more than two months in the event timely notice of the original expiration date was not given by the ASME to the Certificate Holder.

5.6 REVOCATION OF CERTIFICATION

Upon the receipt of written information indicating that a person obtained a Certificate by falsifying or providing inaccurate information, ASME shall notify the Certificate Holder that a review of their certification is being conducted. The person shall be informed of the reasons for the review and given the opportunity to challenge the information that prompted the review. If the review results in revocation of certification, the person may appeal in accordance with Section 8.

5.7 LOST AND STOLEN CERTIFICATES

Lost or stolen Certificates shall be replaced upon notification to ASME. A fee may be charged.
6 RECORD KEEPING

6.1 CONTENTS OF RECORDS

Records shall be retained to verify that current Certificate Holders meet the requirements of the Y14.5.2 Standard and that due process was provided to all Applicants.

6.2 RECORD KEEPING RETENTION PERIOD

Records shall be retained in accordance with ASME Codes and Standards policies and staff procedures. ASME maintains records.
7 CONFIDENTIALITY AND CONFLICT OF INTEREST

7.1 CONFIDENTIALITY

All documents related to the contents of examinations shall be treated as confidential and shall not be distributed to or discussed with any person who is not authorized to have access to their content. All discussions related to the contents of examination, including those during site specific examinations shall also be treated as strictly confidential.

7.2 CONFLICT OF INTEREST

7.2.1 All persons with a direct involvement in the program, including ASME staff, members of the Y14.5.2 Subcommittee on Certification, and persons involved in the development of examinations shall sign a statement affirming their agreement to follow the Code of Ethics of Engineers and the ASME Policy on Conflict of Interest. A copy of the signed and dated statement shall be kept on file.

7.2.2 Any person having a potential conflict of interest related to any activity of the program shall refrain from participating in making decisions related to that conflict.
8 DUE PROCESS

8.1 CHALLENGES

Applicants who do not pass an examination shall be informed of their right to challenge the results. Challenges to the validity of particular examination test questions will be considered on their technical merits by the Subcommittee on Certification.

Note: If an Applicant for Certification (by written examination) submits a request for due process, the Applicant will be advised of the due process mechanism available. If the Applicant requests review of whether the examination has been graded correctly, the Applicant will be sent a letter either advising of any corrections to the score, or advising that the original grading was correct. If correct, an example of the form letter is shown in Appendix B. If the original grading was incorrect, the Applicant will be sent an appropriate letter advising of whether this has resulted in a passing grade, and the appropriate options.

When an Applicant challenges the content to the examination, the Subcommittee may review the questions that were answered incorrectly to verify their content. In order to prevent frivolous requests, this mechanism will only be available for individuals that have failed by 5% or less.

8.2 APPEALS

8.2.1 Any action or inaction taken by ASME relating to the issuance or withholding of certification may be appealed. Appeals shall first be directed to the Y14.5.2 Subcommittee on Certification. Appeals which cannot be resolved at this level shall be referred to the Board on Conformity Assessment and then, if necessary, to the Board on Hearings and Appeals.

8.2.2 Appeals, which involve the revocation or withholding of Certification, must be made within thirty days of the written notice of such action. If the appeal involves the revocation of certification, such action shall be held in abeyance until the appeal before the Subcommittee on Certification has been held, and may be held in abeyance until all levels of appeal have been exhausted.

Note: Challenges to the validity of particular examination test questions will first be considered on their technical merits by the Subcommittee on Certification.

8.3 APPEAL HEARINGS

Hearings conducted by the Y14.5.2 Subcommittee on Certification shall be conducted in accordance with the following procedure:
8.3.1 Scheduling of Hearings

(a) The Subcommittee, after determining that a hearing is in order, shall arrange to hear the appeal at its earliest practicable scheduled meeting after the date of request for appeal or, at the discretion of the Chair, on a date mutually agreeable to all parties.

(b) The appellant, the subcommittee members, and others concerned shall be notified of the hearing at least thirty days in advance of the date set for hearing the appeal.

8.3.2 Attendance at Hearings

(a) A quorum for the hearing shall consist of not less than two-thirds of the membership eligible to vote.

(b) The hearing shall be closed to all persons except members and alternates of the Committee, members of the ASME staff, Audit Teams from the Board on Conformity Assessment, ASME Counsel, and representatives of the appellant.

8.3.3 Conduct of Hearing

(a) Prior to the start of the hearing, the Chair shall advise the members and alternates of the conflict of interest provisions in effect during the hearing and request all members and alternates who may be aware of a potential conflict of interest in regard to themselves in relation to the matter at hand, to identify themselves to the Secretary. Members and alternates, who are disqualified from voting due to potential conflict of interest, may participate in the discussion.

(b) All persons present shall introduce themselves, indicating only the areas of interest and not their employers.

(c) The Chair will explain the pertinent procedures of the Subcommittee and will set forth the reasons for the hearing. The Chair will indicate the right of appellants to explain or clarify their positions with respect to the matter under consideration and to question any member of the Subcommittee. The Chair shall also advise that members of the Subcommittee will be permitted to question the appellant to obtain clarification of items under discussion.

(d) Following completion of the hearing, the Chair shall advise the appellant that the Subcommittee will reconvene for further discussion and to arrive at a decision in the matter and that the appellant will be advised as to the decision as soon as practical by means of an official communication from ASME. At this time, the Chair will verbally advise the appellant of the right to request a reconsideration of an adverse decision or to appeal to the next highest level.

(e) On reconvening, and prior to voting, the Chair will ask all visitors and those members and alternates identified in 8.3.3(a) to leave the meeting.
(f) For a motion to pass, at least two-thirds of the membership eligible to vote must
be in the affirmative. If the two-thirds affirmative requirement is not obtained the
Chair may do one of the following to obtain resolution of the motion:
(1) Resume discussion with the object of developing a new action which will
satisfy the negative vote(s); or
(2) Appoint a task group charged with the responsibility to review the negative
vote(s) and submit a recommended course of action to the Subcommittee.

8.3.4 Notification of Results. When there is voted action, the staff shall prepare and send a letter
to the appellant setting forth the Subcommittee's decision. If the decision is adverse to the
appellant, the letter shall be sent by Certified Mail, return receipt requested, or equivalent
communication, and include an explanation of those items on which the Subcommittee based
its decision and shall enumerate those steps and actions necessary to retain or reapply for
certification. The letter shall also include information regarding the right to request
reconsideration by the Committee of an adverse decision or to appeal that decision to the
next highest Subcommittee within five working days of receipt of ASME's letter setting forth
the results of the Subcommittee's action.

8.4 CONDUCT OF BOARD HEARINGS

Hearings before the Board on Conformity Assessment and the Board on Hearings and
appeals shall be conducted in accordance with their procedures.
APPENDIX A  ITEM REVIEW PROCEDURE (FOR INITIAL QUESTION BANK)

Members of the Y14.5.2 Subcommittee on Certification and an external, independent sample of subject matter experts will be asked to perform three functions for segments of the test bank. These are:

(a) content validation;
(b) assignment of difficulty levels to items; and
(c) editorial comment on the accuracy and clarity of individual items. These procedures are described below.

1  Test Content Validation Procedures

Federal test fairness regulations require that any test be shown to be a valid indicator of a person's knowledge or potential performance. Based upon these requirements, the Y14 test must be shown to be valid through the process of content validation. In this case, content validity refers to the extent that the test is a relevant and representative sample of the knowledge an individual should possess to be certified as a geometric dimensioning and tolerancing professional. (I.e., The knowledge outlined in the Y14.5.2 Standard; Article 3 and Appendices A & B.)

To assure the test's content validity, the Committee members will review appropriate segments of the Technologist and Senior Level sections and certify that in their opinions, the segments are representative and relevant measures of a candidate's knowledge in each area. Likewise, an independent sample of subject matter experts will perform the same task. This process, known as cross validation, is essential to the legal defensibility of the tests.

2  Difficulty Level Assignments

Since no pre-test of the items on either test is feasible, it is necessary to utilize subject matter experts to assign potential difficulty levels to items so as to allow for a range of item difficulty throughout each test. This process will involve having both the Subcommittee and independent experts independently review each item and assign a difficulty level from one (very easy) to seven (very difficult). The median difficulty level of each item assigned by the two groups will be compared, and any discrepancies will be resolved by the Committee. Final item difficulty levels will be empirically established after the tests have been administered to a sufficient number of test candidates. At that time, items can be revised based upon actual item statistics.
3 Editorial Clarity and Item Accuracy

Subject matter expert will be asked to write any comments they may have about the items they review. These comments will then be reviewed by the appropriate Committee members and revisions made as deemed appropriate.
Subject: Your request for reconsideration of examination results

Reference: Examination for GDTP Certification taken on (date)

Dear Applicant:

We are in receipt of your letter dated _____________, requesting the reconsideration of your examination score.

We wish to advise you that we have reviewed your test papers and have verified that they had been graded correctly. Your test scores remain:

(Summary)

With your overall score unchanged at ___%. You should also be aware that the exam was developed by experts. Each question that is included in the exam has been validated and evaluated.

If you wish to pursue reconsideration of your test results, please consider the following options:

**Option 1:** You may appeal directly to the Subcommittee on Certification. In this case it is required that you provide the reasons upon which your appeal is based. You may present your arguments at a hearing before the Subcommittee.

**Option 2:** If you are challenging specific test questions, the following procedure is available: Provided your test score was within 5% of the score required for passing you may request the Subcommittee to review the items that you answered incorrectly. You should realize that this will consume a substantial amount of Subcommittee time and will not be completed until the next scheduled Subcommittee meeting. You will be advised if that review resulted in any change to your test score.

Please notify me within ten business days of your receipt of this letter if you are selecting option 1, option 2, or withdrawing your request for reconsideration. If we do not hear from you we will assume you have withdrawn your request.

Yours truly,

Secretary,
Y14.5.2 Subcommittee on Certification