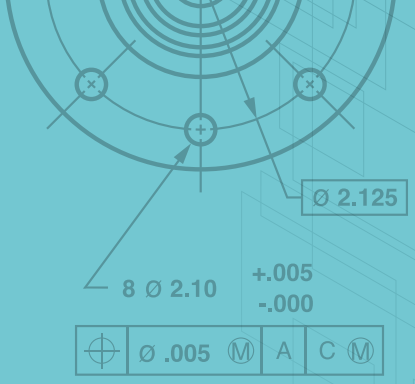
GO.ASME.ORG/GDTP




# ASME Geometric Dimensioning and Tolerancing Professional Certification

## Applicant Information Handbook

*The American Society of Mechanical Engineers®*
*ASME®*

ASME
SETTING THE STANDARD

# STATEMENT OF POLICY ON THE USE OF ASME GDTP SYMBOLS AND AUTHORIZATION IN ADVERTISING

ASME has established procedures to certify professionals who meet qualifications in accordance with the requirements of the ASMEY14.5.2–2017. It is the aim of the Society to provide recognition of those that are so authorized. Those that meet the qualifications of ASMEY14.5.2–2017 GDTP, are issued a certificate. An individual holding a GDTP certificate may state this credential in business cards, correspondence, and advertising literature. It is the aim of the Society to maintain the standing of the ASME Technologist and Senior Symbols for the benefit of those who meet the qualifications. Based on these objectives, the following policy has been established on the usage in advertising of facsimiles of the symbols. The American Society of Mechanical Engineers does not “approve,” “certify,” “rate,” or “endorse” any item, construction, or activity that is manufactured, designed, or performed by an individual who holds a GDTP certificate. An organization with representatives holding GDTP certificates, and therefore authorized to use the respective symbol, must state in advertising literature that “the (instructor, editor, or author) is GDTP certified by ASME in accordance with the qualifications of ASMEY14.5.2–2017 in the (Senior or Technologist) level”. The ASME GDTP Senior or Technologist Symbol shall be used only in media which distinctly designates that there is/are certified individual(s) within an organization. It is strictly prohibited to use the ASME GDTP Senior or Technologist symbol in media, where there is no individual, or individuals certified in GDTP by ASME. It is also strictly prohibited to present oneself, or an organization as employees, or an employee, of ASME. The ASME logo, which is the cloverleaf with the letters ASME within, shall not be used by any organization other than ASME.

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# GDTP CERTIFICATION

## WHAT IS ASME GDTP?

### GDTP CERTIFICATION – OVERVIEW

The American Society of Mechanical Engineers (ASME), in recognition of the needs and benefits associated with standard qualifications for professionals using Geometric Dimensioning and Tolerancing and the ASME Y14.5 Standard, established the Geometric Dimensioning and Tolerancing Professional (GDTP) Certification Program. This program provides the means to recognize proficiency in the understanding and application of the geometric dimensioning and tolerancing principles expressed in ASME Y14.5M-1994 and ASME Y14.5-2009. Those principles form an essential element of the language of engineering.

There are two levels of certification. The first level, Technologist GDTP, provides a measure of an individual's ability to understand drawings that have been prepared using the language of Geometric Dimensioning and Tolerancing, as defined in the Y14.5 Standard. The second level, Senior GDTP, provides the additional objective measure of an individual's ability to select and apply geometric controls to drawings.

A GDTP might typically be employed as, but not limited to: design engineer; production or manufacturing engineer; process engineer; quality engineer; tool or gage engineer; engineering manager; user, programmer, or developer of CAD, CAM, CAE software, etc.; drafter, checker; engineering consultant; educator; inspector; contract engineer; project engineer; and technical specialist.

Certification will be based upon the 1994 revision or the 2009 revision of the ASME Y14.5 Dimensioning and Tolerancing Standard, its appendices and the application of its principles and practices.

## WHY GET ASME GDTP CERTIFIED?

### GDTP CERTIFICATION – BENEFITS

#### CORPORATIONS/ENGINEERING MANAGEMENT

- Verify the GD&T abilities of your design, manufacturing and inspection team.
- Reinforce uniform engineering drawing and documentation interpretation in your company, from design to manufacturing to inspection.
- Improve drawing and documentation interpretation and communication among your staff, your suppliers, and your customers.
- Cut manufacturing and inspection costs through proper application of tolerancing schemes.

#### DESIGN, DRAFTING, INSPECTION, QUALITY, CAD/CAM, AND ENGINEERING PROFESSIONALS

- Many design, drafting, inspection, quality and engineering related positions require knowledge of GD&T and the ASME Y14.5 standard. ASME GDTP Certification is the ONLY way to prove your knowledge and move yourself ahead of the rest of the pack.
- Enhance your credentials and get the respect from your peers that you deserve.
- Confirm your knowledge so you can work more confidently in an advisory capacity.
- Prove that you deserve that promotion.

# CERTIFICATION LEVELS

## TECHNOLOGIST LEVEL

Certification indicates that the individual has demonstrated competencies in the understanding of the symbols, modifiers, and relationships of Geometric Dimensioning and Tolerancing (GD&T) as applied to engineering drawings and related documentation. In order to be certified as a Technologist GDTP, applicants must successfully pass the Technologist GDTP Examination. There is no experience requirement.

## SENIOR LEVEL

Certification indicates that the individual has demonstrated competencies in:

(a) Understanding the meaning of the symbols, modifiers, and relationships of GD&T as applied to engineering drawings and related documentation.

(b) Making the proper selection with consideration for the function and relationship of part features and of geometric controls, to document the product design intent.

(c) Performing calculations associated with GD&T to determine geometric requirements.

(d) Applying the appropriate geometric control symbols, modifiers, and datum references to the engineering drawings and related documentation.

(e) Applying the principles of GD&T to the operations of manufacturing, quality control, and verification processes associated with engineering drawings and related documentation.

(f) Applying the principles of GD&T to the establishment of functional gaging activities.

The qualifications for the Senior Level GDTP certification are two-fold: applicants must have five years of documented experience in the field of GD&T in the recognized use of the system in both application and understanding; and secondly, successfully pass the Senior GDTP Examination.

It is not required to be a certified GDTP Technologist to qualify for Senior Level certification. ASME membership is not an exam requirement.

# TEST REQUIREMENTS (Y14.5M-1994 EXAMINATION)

## Y14.5M-1994 TECHNOLOGIST LEVEL EXAMINATION

The Y14.5M-1994 Technologist Level examination is a maximum of four hours in duration consisting of 150 questions. The examination is structured as a closed book, multiple choice, written examination, evaluating the applicant's knowledge of GD&T principles and practices in accordance with ASME Y14.5M-1994 Standard.

The topics and approximate distribution of questions is as follows:

(a) 10% on Scope, Definitions, and General Dimensioning

(b) 10% on General Tolerancing and Related Principles.; Knowledge of former practices included in Appendix D of Y14.5M-1994

(c) 5% on Symbology.

(d) 15% on Datum Referencing

(e) 30% on Tolerances of Location

(f) 30% on Tolerances of Form, Profile, Orientation, and Runout

A candidate must achieve at least a 75% grade overall and at least 50% in each of the above categories.

### BODY OF KNOWLEDGE

The body of knowledge corresponding to these topics is shown in Appendix A of the Y14.5.2-2017 Standard.

## Y14.5M-1994 SENIOR LEVEL EXAMINATION

The Y14.5M-1994 Senior Level examination is a maximum of six hours in duration consisting of 150 questions. The examination is structured as a closed book, multiple choice, written examination.

The Senior Level examination will emphasize knowledge, selection and application of the dimensioning and tolerancing principles, concepts and practices.

The topics and approximate distribution of questions will be as follows:

(a) 10% on topics from the Technologist's Level examination

(b) 20% on Datum Selection

(c) 40% on General Tolerancing and Related Principles, Tolerance Calculation and Appendices

(d) 15% on Application of Modifiers in Feature Control Frames

(e) 15% on Composite Positional Tolerancing

A candidate must achieve at least an 80% grade overall and at least 50% in each of the above categories.

### BODY OF KNOWLEDGE

The body of knowledge corresponding to these topics is shown in Appendix B of the Y14.5.2-2017 Standard.

# TEST REQUIREMENTS (Y14.5-2009 EXAMINATION)

## Y14.5-2009 TECHNOLOGIST LEVEL EXAMINATION

The Y14.5-2009 Technologist Level examination is a maximum of four hours in duration consisting of 150 questions. The examination is structured as a closed book, multiple choice, written examination, evaluating the applicant's knowledge of GD&T principles and practices in accordance with ASME Y14.5-2009 Standard.

The topics and approximate distribution of questions is as follows:

(a) 10% on Scope
(b) 10% on General Tolerancing
(c) 5% on Symbology
(d) 20% on Datum Referencing
(e) 5% on Form
(f) 5% on Orientation
(g) 25% on Location
(h) 15% on Profile
(i) 5% on Runout

A candidate must achieve at least a 78% grade overall and at least 50% in each of the above categories.

### BODY OF KNOWLEDGE

The body of knowledge corresponding to these topics is shown in Appendix C of the Y14.5.2-2017 Standard.

## Y14.5-2009 SENIOR LEVEL EXAMINATION

The Y14.5-2009 Senior Level examination is a maximum of six hours in duration consisting of 150 questions. The examination is structured as a closed book, multiple choice, written examination.

The Senior Level examination will emphasize knowledge, selection and application of the dimensioning and tolerancing principles, concepts and practices.

The topics and approximate distribution of questions will be as follows:

(a) 10% on Scope, General Dimensioning, and Symbology
(b) 30% on Datum Referencing
(c) 5% on Form
(d) 5% on Orientation
(e) 25% on Location
(f) 20% on Profile
(g) 5% on Runout

A candidate must achieve at least a 78% grade overall and at least 50% in each of the above categories.

### BODY OF KNOWLEDGE

The body of knowledge corresponding to these topics is shown in Appendix D of the Y14.5.2-2017 Standard.

# CERTIFICATION PROCESS

## APPLICATION PROCESS

### 1. Submit Payment

The payment for the examination must be submitted prior to submitting an application. Payment by credit card may be submitted on ASME.org or via phone. Please follow the instructions below to pay by phone.

ASME Customer Care, 8:30 a.m.-5:00 p.m. EDT:
1.800.843.2763 (U.S./Canada)
1.646.616.3100 (outside U.S./Canada)

Please be prepared to provide your:
Contact information (name, title, organization, mailing address, email, phone)
Credit card information

Preferred GDTP certification:
Technologist vs. Senior
Y14.5-2009 vs. Y14.5-1994

You will receive a payment confirmation email shortly after submitting the fee. If you are not paying by credit card, please click here for more payment options.

### 2. Submit Application

Within 24 hours of making your GDTP purchase, you will receive a confirmation by email. This email will contain instructions for accessing ASME-PC Connect, ASME's online system to submit your application. Please refer to the ASME-PC Connect GDTP User's Guide for in-depth guidance on submitting an online application. Please note that there is a one year time limit to complete and submit an application. Failure to do so within the year will entitle the applicant to a partial refund upon request.

All information supplied on this application is subject to verification. Certification may be revoked by ASME for reasons of falsifying or providing inaccurate information during the certification process.

### 3. Schedule Exam

Once your application has been accepted, you will receive an email with instructions on how to schedule your exam at a conveniently located Prometric Testing Center. There is a time limit of 180 days to schedule the exam. Failure to do so will result in forfeiture of all funds. Candidates may request and pay for an additional 180 days if there is no scheduled appointment with Prometric and it is requested prior the 180th day. Should a candidate not adhere to the rules outlined in their acceptance letter with respect to cancelling/rescheduling an appointment at a Prometric Test Center, they will be assessed a 'reinstatement fee' at the current rate. This will provide a new eligibility cycle on the date the reinstatement fee was processed.

## EXAMINATION RESULTS

Notification of the results of the examination, including the percentage of correct answers within each part, will be mailed to the applicant within 30 days after the exam. Grades will not be given over the telephone.

In the event that you do not pass the examination, you may take the exam two times in a period of six months.

## CERTIFICATION

An applicant who passes the GDTP exam will be issued a certificate. The certificate will identify the specific revision of the Y14.5 Standard on which the certification is based and the level of certification. The certificates will have an expiration date of three years from the date of issuance. Certificate holders are listed on the ASME-PC Connect website.

Please note that successfully passing the 2009 examination does not confer certification to the ASME Y14.5M-1994 Standard and successfully passing the 1994 examination does not confer certification to the ASME Y14.5-2009 Standard.

## RECERTIFICATION

Certification may be attained without examination upon verification of involvement with GD&T for at least 24 months. ASME will notify certificate holders at least 6 months prior to their expiration date listed on their certificate that they may renew. They will be instructed to log into ASME-PC Connect, pay the rectification fee and subsequently document and have verified their GD&T experience.

FOR MORE INFORMATION VISIT GO.ASME.ORG/GDTP

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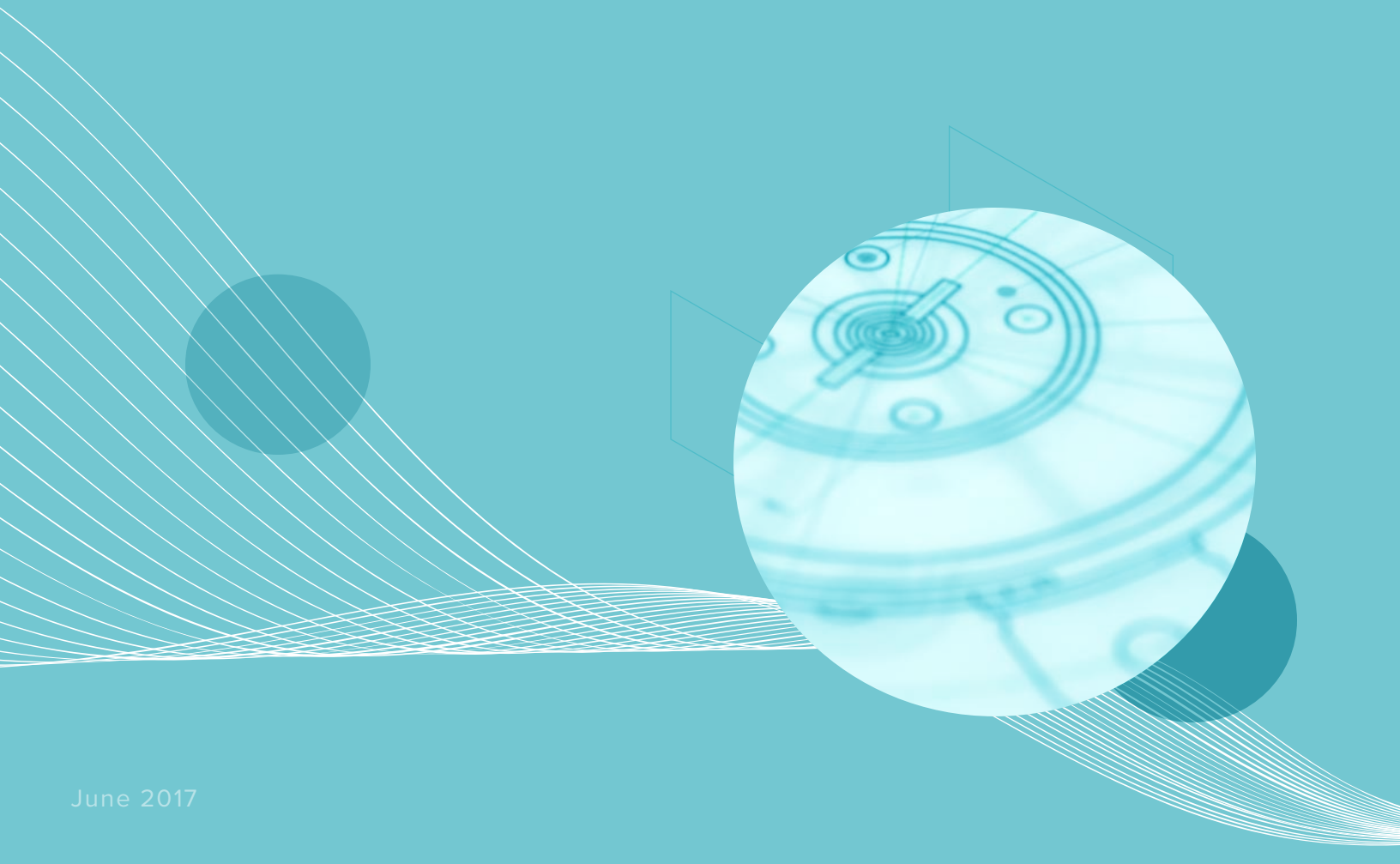
**For more information on:**
**ASME GDTP (Y14.5)**
visit: go.asme.org/gdtp

**ASME Study Guide for Certification of Geometric Dimensioning and Tolerancing Professionals**
visit: ebooks.asmedigitalcollection.asme.org/content.aspx?bookid=218&sectionid=38774677



June 2017