



INSPECTION • TESTING • CERTIFICATION

ISO 9001:2008 Certified

CANDIDATE INFORMATION BULLETIN for CERTIFICATION EXAMINATIONS

✓ Medical Gas Installer



II. MEDICAL GAS INSTALLER/BRAZER

SCOPE OF WORK: MEDICAL GAS INSTALLER

A Medical Gas Installer certification candidate is a qualified individual who can demonstrate competence within their scope and will be proficient in and experienced in the installation of medical gas and vacuum systems covered by the ASSE Series 6000 Standard. Installers include anyone who works on or installs piping or components, including brazers. A qualified Medical Gas Installer may perform these tasks alone, or through the supervision of other individuals.

In addition to knowledge of product installation, a Medical Gas Installer is required to have a general knowledge of the applicable laws, codes, rules, listing agencies, and regulations from the federal, state, and local levels pertaining to medical gas and vacuum systems as well as knowledge of product performance, system and system component testing, documenting and recording, and medical gas terminology.

Medical gas systems and equipment covered in the ASSE Series 6000 Standard include health care facilities within the scope of NFPA 99, Health Care Facilities Code. Medical gas piping systems include vacuum piping.

EXAMINATION QUALIFICATION REQUIREMENTS

The candidate shall meet all the requirements of ASSE Standard 6010, Section 10-3.2. The candidate shall have a minimum of four (4) years of documented practical experience in the field of installation of plumbing or mechanical systems. Certification shall include the successful completion of a minimum 32-hour training course conducted by a Medical Gas Systems Instructor certified to ASSE Standard 6050, and passing grades on (1) a multiple-choice examination covering ASSE Standard 6010 and applicable sections of NFPA 99 and (2) a proctored practical (brazing) examination.

This certification is administered in accordance with the American Society of Sanitary Engineers (ASSE) Series 6000. Copies of this standard may be obtained by contacting ASSE at (708) 995-3019, or at www.asse-plumbing.org.

ABOUT THE EXAMINATION

The medical gas installer/brazer certification examination consists of two portions. PART 1 is a proctored, closed book multiple-choice examination with one hundred (100) questions. PART 2 is a practical examination which involves brazing two coupons.

PART 1 – Multiple Choice Examination

The multiple-choice portion contains 100 questions. Candidates must correctly answer seventy-seven percent 77% of the questions to achieve a passing grade. The multiple-choice portion is based on information contained in the ASSE 6010 and NFPA 99. The questions are designed so that the average candidate will be able to complete the examination within one and one half hours. A content outline is provided below as an aid in preparing for this examination.

Examination Name: Medical Gas Installer/Brazer Certification Examination

Official Examination References:

1. ASSE Standard Series 6000
2. NFPA 99, Health Care Facilities Code, 2012 Edition

Description: Closed book examination consisting of 100 multiple-choice questions

Passing grade: 77% (77 correct)

Total time allowed: one and one half (1 ½) hours

Percent of Examination	Domain Area
16%	Product performance knowledge
26%	Product installation knowledge
18%	Testing System and System Components
14%	Conducting, documenting and recording inspections and tests
26%	General medical gas knowledge

An NITC-approved proctor administers the multiple-choice examination. Candidates are notified of a pass or fail result in writing by NITC, the training agency, or by the association that requested the examination.

Candidates failing to achieve a passing score on the multiple-choice and/or practical portion will be eligible for re-examination as soon as the next examination is scheduled by NITC. Candidates may retake their examination at the NITC offices or at a PSI testing center. Re-examination fees are listed in the [TABLE OF FEES in Section I: GENERAL INFORMATION](#).

PART 2 – BRAZING

The brazing portion of the examination requires candidates to successfully pass a practical examination, brazing joints in accordance with the NFPA 99 and American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section IX, Welding, Brazing, and Fusing Qualifications Standard. The candidate will braze two joints of a horizontal coupling and two up-flow joints of a vertical coupling. The copper tube shall be 1 ½” NPS (Type “L”) and the coupling shall be 1 ½” standard “stop” coupling, following the procedures outlined in the NITC BTS 15 Brazer Performance Test Package. The braze coupons are examined by American Welding Society (AWS) certified welding inspectors (CWI’s) according to the ASME Section IX, Welding, Brazing and Fusing Qualifications Standard.

Brazing examinations must take place in an environment suitable for brazing production and acceptable for accommodating the requirements associated with brazing testing conditions. A Contractor or Manufacturer representative must witness the brazing and sign the required documentation. Candidates failing to achieve a passing score on PART 2 will be eligible for re-testing at the discretion of Contractor or Manufacturer representative. Please visit the National ITC Corporation website to review the Step by Step Instructions for the Medical Gas Braze

Both the multiple-choice and brazing portions of this examination and their continuities must be registered through NITC to maintain a valid certification.

RECERTIFICATION OF THIS CREDENTIAL

Medical Gas Installer/Brazer Certifications are valid for three (3) years from issuance, as long as the following individual requirement is maintained:

Installers shall maintain continuity of brazing per ASME Boiler and Pressure Vessel Code, Section IX performance qualifications (QB322).

Important note about recertification:

Certification holders are responsible for keeping their certification current. NITC must be notified of any change in address. Changes may be made online, by telephone, or by mail.

Once the requirement for continuity of brazing is met as outlined above, recertification can be accomplished by successfully passing a proctored multiple-choice open book examination. The recertification examination contains forty questions based on the most current edition of NFPA 99. Candidates must answer a minimum of thirty-two (32) of the questions (80%) correctly on the examination to achieve a passing grade. Two (2) hours are allowed for the examination.

The recertification examination may be taken computer-based at any PSI testing location. Additional Information on locations and how to register is provided in a recertification letter sent out by NITC approximately three months prior to expiration of the certification.

Paper-based recertification examinations are available for scheduled groups. Information on how to schedule a group for a proctored examination is contained in this Candidate Bulletin in Section I: "[GENERAL INFORMATION](#)" under the heading "[Examination Scheduling for Groups](#)."

After examination results are returned to NITC it may take up to 30 days to receive a new card by mail. Contact NITC after 30 days have passed if the new card has not arrived.

Certified individuals who have not recertified within thirty days after the expiration date must begin over by paying the appropriate fee and taking the initial certification examination.

Fees are listed in the [TABLE OF FEES in Section I: GENERAL INFORMATION](#).