THE MANUFACTURER’S GUIDE ON HOW TO OBTAIN ACCREDITATION TO THE ASME BOILER AND PRESSURE VESSEL CODE:

SECTIONS:
I (POWER BOILERS)
B31.1 (POWER PIPING)
IV (HEATING BOILERS)
VIII – DIVISIONS 1, 2, & 3 (PRESSURE VESSELS)
X (FIBERGLASS REINFORCED PRESSURE VESSELS)
XII (TRANSPORT TANKS)

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INTRODUCTION

The Hartford Steam Boiler Inspection and Insurance Company of Connecticut (HSB CT) is an ASME Accredited Authorized Inspection Agency as identified in the ASME Code. In addition, HSBCT can provide assistance in the preparation and implementation of the necessary program required by the AMSE Code for presentation, acceptance and issuance of the required Certificate of Authorization and ASME Code Symbol Stamps.

HSB CT was founded in 1866 and is today the oldest and largest ASME Boiler and Pressure Vessel Code Authorized Inspection Agency (AIA) in the world. HSB CT was instrumental in the development of the first ASME Code for steam boilers in the early twentieth century and remains committed to providing high quality, professional services for all of its customers.

HSB CT has qualified people actively involved in the various ASME Technical and Administrative committees. We stand ready to assist you in preparing and sending inquiries to ASME, and assuring a timely reply.

In addition to the ASME qualifications, HSB CT provides services for every major global Boiler and Pressure Vessel Code, and is qualified as a Notified Body under the European Community’s Pressure Equipment Directive (PED) 97/23/EC. HSB CT is also an accredited ISO 9000 registration body.

The subsequent pages in this reference guide provide a brief description of a typical course of action that may be followed in obtaining an ASME Certificate(s) of Authorization. The processes described applies to non-nuclear pressure vessels, boilers or piping constructed in accordance with the ASME Code Sections I (Power Boilers), B31.1 (Power Piping), IV (Heating Boilers), VIII (Pressure Vessels), X (Fiberglass Reinforced Pressure Vessels) and XII (Construction and Continued Service of Transport Tanks).
PROCEDURE FOR APPLICATION OF ASME CERTIFICATE OF AUTHORIZATION

1. OBTAINING APPLICATION FROM ASME

The applicant must submit a letter to the American Society of Mechanical Engineers (ASME) and request application for the specific Certificate(s) desired.

Address:  ASME International
Three Park Avenue
New York, NY  10016-5990
(P) 800-843-2763
(Email) infocentral@asme.org
Attention:  Manager of Accreditation

OR, you can download the application from the ASME web site by using the following link. Just copy and paste the link below into your web browser or if you have the electronic version of this guide you can depress the [CTRL] key + click your mouse button and you will be taken immediately to the application page.

http://www.asme.org/Codes/CertifAccred/Certification/Application_Forms_2.cfm

2. ORDERING THE CODES AND STANDARDS

The ASME Code Sections required will vary dependent on the scope of activities, and the individual Certificates of Authorization applied for.

It will generally be necessary to obtain a copy of the ASME Code Sections II (Parts A, B, C, & D), V, IX (Reference Codes), and the appropriate Sections (Construction Codes) covering the scope of requested Certificate(s) of Authorization. The Construction Code Sections appropriate to the various Certificates of Authorization include:
While Code Cases are not mandatory, they can be very helpful and may be ordered at the same time.

**COST:** Due to the variability of the ASME Code Sections required for each facility, it is impossible to put an exact figure on this item. However, most facilities can anticipate spending in the range of **$2,600 to $3,900 USD's.**

### 3. CONTRACT WITH AN AUTHORIZED INSPECTION AGENCY

Complete a service contract with **HSBCT** to provide Authorized Inspection services during Code fabrication.

**COST:** The **HSBCT's** standard contracts do not require an initiation or contract preparation fee, nor do we presently require an annual retainer or minimum usage charge. (It should be noted that other AIA’s might.)

In general, our standard contract is a “pay as you go” approach, with fees based on the time necessary for the Authorized Inspector to properly perform their duties. Generally, we use hourly, half-day, or full-day rates, portal-to-portal, but also consider your need for a part-time or full-time Authorized Inspector. Our pricing is based upon your needs for production and scheduling, and the time necessary for the Authorized Inspector to complete their duties. If you are interested in the specific rates, please contact our regional office for a copy of our current rate sheet.

### 4. QUALITY CONTROL PROGRAM PREPARATION

It will be necessary to prepare a documented Quality Control Manual covering the scope of subjects as identified in the ASME Code. All principle documents must be available in English, and in the Language used by plant personnel. The preparation of the Quality Control Manual (System) is generally carried out by personnel within the organization familiar with the requirements of the appropriate ASME Code Sections.
This may be a subcontracted activity, and this is also a professional service that **HSBCT** can provide. The price for these services is negotiated and based on the size and complexity of the organization and system to be developed. Please contact appropriate regional office for estimated pricing.

**Note:** The ASME publishes a Guide for Reviews/BPV Checklist which can be obtained at the asme.org website via. the link noted on page 2 of this guide. This document will provide additional detailed requirements for the content of an ASME Quality Control Manual.

5. **PREPARATION OF WELDING DOCUMENTS**

The necessary welding procedure specification(s) (WPS), welder(s) and welding operator(s) records required to meet the specific requirements of the ASME Code(s) of Construction to be used, and Section IX must be prepared. The type and number of these documents will vary greatly by facility.

The professionals at **HSBCT** can also provide on-site assistance in this area, though we always recommend that you consult with a welding metallurgist for confirmation of proper material compatibility and application.

**Note:** The ASME Codes provide some provisions for the use of standard AWS (American Welding Society) Welding Procedures, but the individual Codes must be consulted for proper application.

6. **PREPARING NON-DESTRUCTIVE EXAMINATION DOCUMENTS**

The qualification of NDE personnel and the necessary NDE procedures required to meet the specific ASME Code(s) of Construction to be used and section V must be prepared, or obtained.

Often this is a subcontracted activity carried out by various companies that generally specialize in conducting NDE according to ASME and other Codes. It may be desirable to have in-house capabilities for some of the more basic disciplines (Dye Penetrant & Visual Examination), and we can also provide on-site assistance in this area.

7. **IMPLEMENTATION OF YOUR Quality Control PROGRAM**

It is essential that you fully implement the Quality Control Manual and Program requirements into your fabrication practices.
Your company’s Initial and continued success relies upon accurate and consistent implementation of the detailed requirements.

8. SUBMITTING THE ASME APPLICATION

When satisfied that the program is well on its way to being fully implemented, and you have received your signed copy of The HSBCT Inspection Contract, you should:

a) Forward the completed ASME application forms to ASME with the appropriate applicable fees (See below for fees related to certificates and stamps).

   I. $2,445.00 USD for each three year Certificate of Authorization.

   II. $815.00 USD Cast Iron (H) and UM.

   III. $245.00 USD for the three-year rental of each stamp.

Upon receipt of the properly completed application and fees, the ASME will notify the appropriate entity that your organization has applied for Certificate(s) of Authorization, and request that they conduct a review of your facility. In most instances this is the National Board of Boiler and Pressure Vessel Inspectors, whom will assign an ASME Designated Team Leader to conduct your review. There are certain jurisdictions that conduct the review audits themselves, as well as jurisdictions whereas an ASME employed Team Leader would be required to conduct the review.

National Board will provide you with documents to complete to arrange for the Joint Review Audit. The required deposit for a review audit by the National Board of Boiler and Pressure Vessel Inspectors is currently $3,000 USD’s.

NOTE: Following the review, any excess money will be returned, or if additional funds are required, you will be billed appropriately. The dollar amounts shown above are according to our most recent information. The amounts are subject to change without notice. Because of the variability in fees charged by the various jurisdictions that conduct the reviews themselves, your local Hartford Steam Boiler representative should be contacted to provide details as to which entity will actually conduct your review, and to provide an accurate cost estimate.
b) If you wish to attempt to expedite the process, you can forward a letter to the National Board of Boiler and Pressure Vessel Inspectors advising that you: (This is not necessary if the legal jurisdiction will be the ASME Designate.)

I. Have submitted an application to ASME for the issuance of a Certificate of Authorization,

II. Have a contract with HSBCT for inspection services,

III. Request a Joint Review for an evaluation of your Quality Control System and its implementation in your facility.

Address: The National Board of Boiler and Pressure Vessel Inspectors
1055 Crupper Avenue
Columbus, Ohio, 43229
Phone: 614-888-8320

The required deposit of $3,000 USD's, currently, should accompany this letter as no date will be scheduled without receipt of this deposit, and a letter from the ASME to the National Board confirming that ASME has the application, and has verified that your company has a contract with an Authorized Inspection Agency.

9. FABRICATION OF DEMONSTRATION VESSEL

You must prepare and fabricate a “demonstration item” in accordance with all applicable Code requirements. The purpose is to demonstrate implementation of your written Quality Control System during the Joint Review.

This “demonstration item” (vessel, boiler component, piping assembly):

a) is required to be at least partially constructed, and ideally will demonstrate the three key elements of welded fabrication (fit-up/tack(s), root pass(es), and final weld(s)).

b) must be inspected by the Authorized Inspector prior to the Joint Review, including a visit to review fabrication drawings, calculations, material procurement documentation, welding and any required NDE and heat treating procedures prior to the start of fabrication.
10. THE AUDIT BEFORE THE JOINT REVIEW

Often called a ‘Pre-Joint Review’, it is recommended that you request a ‘Pre-Joint Review’ of this implementation to be performed by **HSBCT** at least 30 days before the scheduled Joint Review. This will allow for sufficient time to resolve any deficiencies that may be discovered during the Pre-Joint Review.

**NOTE:** For new applicants, a Pre-Joint Review is mandatory. This is to assure the greatest chance of a successful Joint Review for all parties involved.

11. THE JOINT REVIEW

At the Joint Review, an ASME Designee, generally a representative of the National Board of Boiler and Pressure Vessel Inspectors or the legal Jurisdiction, and a representative(s) of your Authorized Inspection Agency will visit your fabrication location for a full review of your Q.C. Program and witness the demonstration of the Q.C. System.

The Q.C. Program will be evaluated for compliance with the Code, and the demonstration vessel and implementation will be evaluated for Code compliance as well as compliance with the documented Q.C. Program. Generally, the time frame for the Joint Review does not exceed two (2) days, with the first day consisting of an evaluation of the Q.C. Program (Q.C. Manual Review – typically performed off site) and the second day an evaluation of the facility's implementation capabilities (evaluation of the “demonstration item”).

Upon completion of the Joint Review, a report will be filed with the ASME recommending, to issue or not to issue, the Certificate of Authorization and Symbol Stamp(s) according to the results of the review. If the recommendation is favorable, it is normal for the Certificate of Authorization and Symbol Stamp(s) to be issued. The review team also has the option of recommending that a thirty (30) day follow-up activity be completed by the Authorized Inspection Agency.

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12. CODE BOOKS AND DIRECTORY OF ORGANIZATIONS

To obtain ASME Code books and other reference Code books and documents, order from:

ASME Publications:  
ASME Order Department  
22 Law Drive  
Box 2300  
Fairfield, NJ 07007-2300  
Phone: 1-800-THE-ASME (843-2763),  
Fax 973-882-1717,  
Email - infocentral@asme.org  
Website: asme.org

National Board Publications:  
The National Board of Boiler and Pressure Vessel Inspectors  
1055 Crupper Avenue  
Columbus, Ohio, 43229  
Phone: 614-888-8320  
Email: getinfo@nationalboard.org  
Website: nationalboard.org

SNT Publications:  
American Society for Nondestructive Testing  
4153 Arlingate Plaza/Caller No. 28518  
Columbus, Ohio, 43228-0518  
Phone: 614-274-6003  
Website: asnt.org

API Publications:  
American Petroleum Institute  
1220 L Street, Northwest  
Washington, D.C. 20005  
Phone: 202-682-8000  
Website: api.org

Jurisdictional Synopsis of Laws (Document: NB-370)  
Now available from the National Board of Boiler and Pressure Vessel Inspectors  
1055 Crupper Avenue  
Columbus, Ohio, 43229  
Phone: 614-888-8320  
Email: getinfo@nationalboard.org  
Website: nationalboard.org

NOTES:
The Hartford Steam Boiler Inspection & Insurance Company of Connecticut has prepared this document purely as a guide. If you have more specific questions please contact the appropriate regional office, or the appropriate organization.

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