



Training Venue



To continue our very successful ASME Code Weeks in Istanbul **Code & ACIS** in Turkey and **CIS GmbH** as part of the Authorized Inspection Agency **TÜV Thüringen e.V.** in Germany will conduct

ASME Code Week Istanbul 2020

covering the following topics:

- ASME Code – General Introduction
- ASME Code and PED
- ASME Code Section I – Power Boilers
- ASME Code Section III and NQA-1 – Nuclear Code
- ASME B31.1 and B31.3 – Power and Process Piping
- ASME Code Section VIII-1 – Pressure Vessels
- ASME Code Section VIII, Division 1 – Design Workshop
Calculation of Pressure Vessels
- ASME Code Section VIII-2, Alternative Rules
- Material Requirements of the ASME Code
- ASME Code Section V – Nondestructive Examination
- ASME Code Section IX – *Welding*

The **ASME Code Week Istanbul 2020** will take place from 8th-12th June 2020 at

Dedeman Bostanci Hotel & Convention Center

Degirmenyolu Caddesi No:39/B 34840 Bostanci,
Istanbul – Turkey

+90 216 469 66 00 – bostanci@dedeman.com

The seminar language is English

www.cis-inspector.com

Services

CIS GmbH offers One-Stop Shopping for all your ASME Code Needs

Consulting and preparatory activities for the ASME certification audit

- Review and streamlining of your Quality Manual
- Review of your welding documentation (WPS/WPQ/WOPQ/PQR)
- Guide to prepare work procedures
- Qualifying of NDE procedures and personnel (SNT-TC-1A)
- Participation in your ASME Joint Review and Nuclear Survey

Authorized Inspection Agency Activities for

- Section I, Power Boilers
- Section III Division 1 & 3, Nuclear Components
- Section IV, Heating Boilers
- Section VIII, Division 1, 2 & 3, Pressure Vessels
- Section X, Fiber Reinforced Plastic Pressure Vessels
- ASME B31.1 - Power Piping
- ASME Code Section XII - Transport Tanks
- ASME Code in combination with PED
- Canada, New Zealand, Singapore, Malaysia

ASME Code Seminars & Workshops

- In-company seminars, tailor-made for your projects

Design Examinations and Reviews

- ASME Code design examinations for pressure vessels, power boilers, piping, fittings, etc.
- Design examinations in line with various international Codes & Standards (AS1210, BS5500, AD2000, EN13445, etc.)

Immediate expert assistance and support with

- ASME certification process
- ASME Code application to meet the requirements of PED 2014/68/EU
- Inspection of pressure retaining components by ASME Authorized (Nuclear) Inspectors
- Qualification of work procedures and personnel
- Written Practice according to SNT-TC-1A
- Product registration according to CSA B51 (Canadian Registration Number, CRN)
- Design calculations issues
- Steel structures according to American Welding Society D1.1



www.cis-inspector.com

Registration

For online registration go to:

www.cis-inspector.com/istanbul

For e-mail or fax registration please contact one of the registration centers below:

Turkey E-Mail: saliheraktan@codeteknikkontrol.com
Germany Fax: +49 201 74 72 75-29
 E-Mail: service@cis-inspector.com

company	
name	
street	
ZIP, city	
country	
phone	FAX
E-Mail	
signature	

1	8 June 2020	ASME Code – General Introduction
2	8 June 2020	ASME Code Section VIII - Division 1
3	8 June 2020	Material Requirements of the ASME Code
4	9 June 2020	ASME Code and PED Requirements
5	9 June 2020	ASME Code Section VIII – Division 2
6	9-10 June 2020	ASME Code Section I – Power Boilers
7	10 June 2020	ASME B31.3 and B31.1 – Piping
8	10-12 June 2020	Design Workshop Pressure Vessels
9	11 June 2020	ASME Code Section IX - Welding
10	11-12 June 2020	ASME Code Section III – Nuclear Code
11	12 June 2020	ASME Code Section V – NDE

You will receive a € 50 discount for the second and any further booked seminar!

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ASME Code Week Istanbul 2020

June 8th-12th

www.cis-inspector.com



ASME Code Week Istanbul 2020

Having just started to work with the new **ASME Code Edition 2019**, you might be facing some tricky questions. The practical application of the Code often reveals some pitfalls and obstacles with regard to your projects.

To assist you with finding solutions and avoiding problems you can choose from a wide variety of seminars covering the most important Code topics.

All our course instructors are among the leading specialists in their fields of expertise. Their extensive know-how and professional experience as **ASME Authorized (Nuclear) Inspector Supervisors** enables them to run practice-oriented seminars offering great value for the attendees.

The **ASME Code Week Istanbul 2020** is your chance to make yourself familiar with the latest amendments and changes to the pressure vessel and piping regulations.

Looking forward to welcoming you in June.



Dr.-Ing. Dirk Kölbl
Managing Director

Volkan Palabiyik

Tahir Salih Eraktan
Managing Director





For detailed information about the seminar contents and instructors visit www.cis-inspector.com/istanbul

#1 Monday, 8th June 2020, 9:00 - 17:00 € 450

ASME Code – Not a Closed Book – General Introduction

A complete overview of the ASME Boiler and Pressure Vessel Code, the ASME Piping Codes and the referenced Standards. We will begin with the jurisdictional rules at the location of installation for the USA, Canada, and other locations, discuss the scopes of all Construction Codes and the function of all reference Codes. ASTM and ASME Code material specifications, requirements, certificates and properties will complement the topics covered by the course.

- ASME Code – Key to Export
- ASME, National Board, Authorized Inspection Agency & Authorized Inspector
- ASME Certification
- ASME Material, ASTM Specifications and EN Materials
- ASME Section I, Power Boilers
- ASME Section IV, Heating Boilers
- ASME Section VIII, Divisions 1, 2 & 3, Pressure Vessels
- ASME Section III, Nuclear Components
- ASME Piping Codes B31.1 & B31.3
- ASME Section IX, Welding
- ASME Section V, Nondestructive Examination
- NBIC – National Board Inspection Code
- ASME Code under the PED

Instructor: Salih Eraktan (AIS) - saliheraktan@codeteknikkontrol.com

#2 Monday, 8th June 2020, 9:00 - 17:00 € 450

ASME Code Section VIII, Division 1 – Pressure Vessels

An extensive introduction to the leading export Code! This course provides for a detailed introduction to ASME Code Section VIII, Division 1 for Pressure Vessels. Scope, setup, and use of this Code book are presented. The focus is on Quality Control, Ordering of Vessels, Material, Fabrication, Examination, Inspection, Testing, Assembly and Overpressure Protection. Examples provide for a better understanding of important contents. The seminar is intended for participants working in the fields of project planning, purchasing, sales, quality control, material procurement, design, fabrication, examination, and inspection.

- Guide to ASME Code Section VIII, Division 1
- How to become a certified „ASME Stampholder“
- Design registration and approvals
- Manufacturer's duties and responsibilities
- Structure, scope and use of Section VIII
- Materials (ASME/ASTM/EN)
- Material selection and properties
- Impact testing, heat treatment, exemptions
- Fabrication and welding
- Nondestructive examination
- Inspection
- Pressure test, documentation and marking
- Overpressure Protection

Instructor: Dipl.-Ing. Andreas Splinter (ANIS) - splinter@cis-inspector.com

Can't make it to Istanbul?
Then come and join us in Brussels.



#3 Monday, 8th June 2020, 9:00 - 17:00 € 450

Material Requirements of the ASME Code

How to avoid the most common mistakes when using ASME Code material! You will concisely learn the basics of Section II for ASME material. This course will also focus on the specific requirements from the construction codes for pressure vessels and boilers. Further important topics are material testing (impact, tensile, etc.), the use of non-ASME material and recertification, filler materials, correct material certificates and marking, yield/tensile/creep strength as a basis of allowable stress values, ASME Code compliant wording for material purchase orders.

- Content and structure of ASME Code Section II
 - ◊ Part A: Ferrous Materials
 - ◊ Part B: Nonferrous Materials
 - ◊ Part C: Filler Metals
 - ◊ Part D: Material Properties
- Certification of material – What do ASME compliant certificates look like?
- Difference between ASME and ASTM material
- When is supplemental testing required? How is it to be performed?
- How to order material in an ASME Code compliant way
- Permissible materials for the construction of boilers and pressure vessels
- Material requirements for non-pressure retaining items
- Recertification of material
- Which requirements have to be followed for the marking of material?
- Which options exist regarding the use of EN or „Non ASME Material“ in general?

Instructor: Dr.-Ing. Daniel Hüggenberg (AIS/ANI) - hueggenberg@cis-inspector.com

#4 Tuesday, 9th June 2020, 9:00 - 17:00 € 450

ASME Code and PED Requirements

The ASME Code as a sound basis to meet the requirements of the European Pressure Equipment Directive (PED). The seminar begins with a general introduction into PED 2014/68/EU to make the participants familiar with its features — you will learn how to apply the regulations efficiently. Furthermore the practical application of the directive will be demonstrated on an ASME Code stamped pressure vessel. In this context typical issues and challenges such as material, impact testing, personnel qualification etc. will be addressed. Some of the key points are:

- Introduction into the Pressure Equipment Directive
 - ◊ Basics from the „Blue Guide“
 - ◊ Presentation of the PED articles
 - ◊ Essential safety requirements
 - ◊ Categorization and selection of modules
- PED workshop (featuring an ASME Section VIII, Division 1 pressure vessel)
 - ◊ Fulfilling the „Essential Safety Requirements“
 - ◊ Qualification and approval of personnel and procedures according to ASME Code Section IX
 - ◊ Material requirements
 - ◊ Fabrication requirements
 - ◊ Tasks and responsibilities of the Notified Bodies
 - ◊ Conformity Assessment and Certificate

Instructor: Dipl.-Ing. Andreas Splinter (ANIS) - splinter@cis-inspector.com



#5 Tuesday, 9th June 2020, 9:00 - 17:00 € 450

ASME Code Section VIII, Division 2 Alternative Rules for Pressure Vessels

When does it make sense to switch to Division 2? In particular, the new classification into Class 1 and Class 2 vessels makes Division 2 a real alternative to the normally used Division 1. Moreover, Division 2 becomes more and more important for Division 1 users, as many of its modern calculation rules can also be used for Division 1 vessels under Code Case 2695 and now Appendix 46.

Topics covered are material requirements and certificates, design, FEA, load cycles, fabrication, testing, inspection, pressure testing, overpressure protection and of course the differences to ASME Code Section VIII, Division 1.

Instructor: Dipl.-Ing. Michael Frohnert (AIS/ANI) - frohnert@cis-inspector.com

#6 Tue.-Wed., 9th - 10th June 2020, 9:00 - 17:00 € 900

ASME Code Section I & ASME B31.1 Power Boilers & Power Piping

...under steam! This course provides a detailed introduction to ASME Code Section I for Power Boilers and ASME B31.1 for Power Piping. You will receive comprehensive insight into the requirements regarding quality control, design, fabrication, material, examination, inspection, testing, overpressure protection and assembly of power boilers and piping. The Code-compliant preparation of Manufacturer's Data Reports and stamping round off the list of topics.

- Introduction to ASME Code Section I and B31.1
- Structure and Scope of Section I and B31.1 - Boiler Proper, Boiler External Piping, Non-Boiler External Piping
- Duties and Responsibilities of Manufacturer, User, Inspector
- Design conditions and criteria
- Drum-Type Boiler vs. Forced-Flow Steam Generator
- Design formulas for Boiler Proper, BEP, NBEP
- MAWP, design pressure, design temperature, etc.
- Design criteria for different piping systems - feedwater, steam line, blow-off, blow-down, etc.,
- Requirements for overpressure protection
- Materials (ASME/ASTM) - selection, ordering, certification
- Fabrication, welding, assembly, erection
- Nondestructive examination and personnel qualification
- Inspection and testing

Instructor: Dr.-Ing. Daniel Hüggenberg (AIS/ANI) - hueggenberg@cis-inspector.com

#7 Wednesday, 10th June 2020, 9:00 - 17:00 € 450

ASME B31.3 and B31.1 – Piping

The two most important American design codes for piping in one seminar. ASME B31.3 (Process Piping) and B31.1 (Power Piping) cover most applications for piping both in the plant engineering industry and in the power plant sector. All relevant aspects of classification and scope, material (ASTM/EN), design calculation, fabrication, testing and inspection are discussed.

Further topics are standard components (e.g. ASME B16.5, B16.9 or B16.34) and their use within the framework of the piping regulations as well as questions on the duties and responsibilities of manufacturers, operators, inspectors and designers.

Instructor: Dipl.-Ing. Sascha Wegener (ANIS) - wegener@cis-inspector.com

#8 Wed.-Fri., 10th-12th June 2020, 9:00 - 17:00 € 1350

ASME Code Section VIII, Division 1 Workshop – Design Calculation of Pressure Vessels

ASME Code vessels don't always have to be "fatter"! Following a brief general introduction into the ASME Code the participants will be made familiar with the applicable ASME Code Section VIII, Division 1 design requirements. Many different practical examples and exercises will offer a deep insight into the ASME Code specific design rules. During the seminar the participants will calculate typical pressure components on their own, assisted by an experienced design engineer who is also an Authorized Inspector Supervisor. Having attended this seminar the applicants have the necessary basic knowledge to perform their own design calculations and/or review such calculations for Code compliance.

- ASME Code – brief introduction, Code Cases, Interpretations
- Structure of Section VIII, Division 1
- Design basics: determining the specific Section VIII, Division 1 design data (MAWP, design pressure, test pressure, design temperature, MDMT, seismic and wind loads, external nozzle loads, etc.)
- Material (ASME, ASTM, EN) and establishing the allowable stress values as listed in ASME Code Section II
- Joint categories, types and efficiency factors E and the corresponding scope of nondestructive examination
- Calculation of cylinders, cones, dished heads, flat covers, etc. for internal and external pressure
- Nozzles (reinforcement, large openings, external nozzle loads, UG-45, etc.)
- Dimensioning flanges according to Appendix 2 and ASME B16.5
- Vessel supports (saddles, legs, lugs, skirts)
- Special services UW-2 (lethal service, direct firing, low temperature service)
- Finite Element Analysis in Section VIII, Division 1, Appendix 46
- Fatigue analysis requirements for Division 1 vessels
- Impact test and PWHT requirements as an integral design element
- Proof test to establish the maximum allowable working pressure in VIII-1
- Calculations using non-ASME procedures/formulas covered by par. U-2(g) of Section VIII-1 (e.g. VIII-2, British Standard, AD2000, EN13445, etc.)
- Pressure testing requirements of Division 1

Instructor: Dipl.-Ing. Michael Frohnert (AIS/ANI) - frohnert@cis-inspector.com

#9 Thursday, 11th June 2020, 9:00 - 17:00 € 450

ASME Code Section IX – Welding

Get a firm grasp in just one day! In the international plant engineering business ASME Code Section IX is the most often used standard for the qualification of welding, brazing and plastic fusion. This workshop exclusively covers the topic of welding and familiarizes you with the qualification of welding procedures and welders as required by ASME Code Section IX. By means of practical exercises the basic requirements of ASME Code Section IX will be demonstrated.

During the workshop the participants gain the necessary knowledge to independently prepare and/or review Procedure Qualification Records (PQR), Welding Procedure Specifications (WPS) and Welder/Welding Operator/Performance Qualifications (WPQ/WOPQ). The participants are invited to take an active part in this workshop.

Instructor: Salih Eraktan (AIS) - saliheraktan@codeteknikkontrol.com

#10 Thu.- Fri., 11th - 12th June 2020, 9:00 - 17:00 € 900

ASME Code – Section III and NQA-1 – Nuclear Codes

The complete ASME Code nuclear world in two days! This course presents the complete range of ASME Nuclear Codes - all in two days! When you are looking for a comprehensive overview of ASME Nuclear Codes and Standards, this course should be your choice.

Your highly experienced Instructor will first introduce the legal background and then proceed to the philosophy of nuclear Quality Assurance in 10CFR50 Appendix B and ASME NQA-1. Topics such as supply chain management, dedication of commercial grade items and the ASME nuclear safety philosophy will receive special attention. The scope and use of ASME Section III Divisions 1, 2, 3 and 5 will be introduced as well as specific vocabulary, terms and interfaces. Selected paragraphs, typical requirements and several peculiarities will complete the picture. This year's highlight will be a summary of the Edition 2019 changes with recommendations to upgrade your Quality Program to be prepared for the next Survey or Audit. You will learn how to apply ASME Section III entirely, or in part, you will be able to identify the applicable rules and their consequences.

Instructor: Dipl.-Ing. Sascha Wegener (ANIS) - wegener@cis-inspector.com

#11 Friday, 12th June 2020, 9:00 - 17:00 € 450

ASME Code Section V – NDE Procedures and Personnel

How to comply with the requirements. Starting with a brief general introduction into the ASME Code the participants will learn the basics about the NDE Methods and the required content of NDE procedures according to ASME Code Section V. A complete NDE procedure will be developed. For various NDE methods (RT, UT, MT, PT, VT, LT) the specific contents and the required reports will be addressed. An Authorized Inspector Supervisor experienced in this field will explain the particular responsibilities, the acceptance criteria and the personnel qualification requirements.

- discussing the specific NDE technique(s) (e.g. RT, UT, MT, PT, VT, LT) used
- description of the examination process
- description of the interpretation and evaluation of indications depending on the ASME Construction Code applied (ASME Section VIII Div. 1 & 2, Section I, Section IV, etc.)
- final documentation required for the performed nondestructive examination
- determining the specific needs of the employer regarding the NDE personnel qualification levels depending on the NDE methods (e.g. RT, UT, MT, PT, VT, LT) applied at the manufacturing facilities
- description of the NDE levels of qualification
- required education, experience and training
- description of the written and practical examinations to be passed by the NDE personnel
- certification requirements, recertification process and technical performance evaluation
- administration and retention of the required documentation to maintain the NDE personnel qualification

Instructor: Salih Eraktan (AIS) - saliheraktan@codeteknikkontrol.com