

TEAM

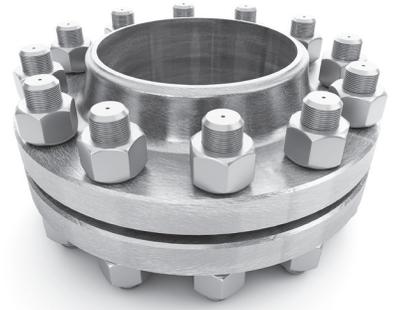


ASME PCC-1-2022
Bolting Assembler Training

Unfortunately, catastrophes have happened due to poor bolted joint integrity management. Flanges have failed, causing millions of dollars in damage and preventable fatalities. The risk is significant.

Many companies still need comprehensive programs related to bolted joints or have programs that fail to meet standards of current industry guidelines and standards, such as ASME PCC-1 2022. These programs must address the training and competency of personnel involved in bolted flange joint assembly, tightening, disassembly, and inspection.

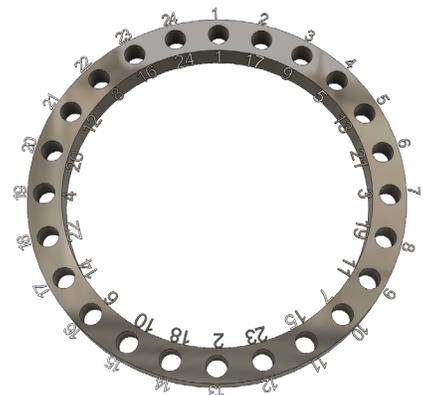
- This training will meet ASME’s PCC-1-2022 Appendix A requirements for competency level 2.
- For those seeking to further capabilities TEAM offers training for ASME’s Powered Equipment Endorsement
- Training candidates will gain valuable knowledge and understanding of the bolted flange joint as a system rather than focusing strictly on tightening the bolts to a specified torque.



ASME PCC-1 Training of Fundamentals & Piping – Manual Torque Tightening Overview



Training Of Fundamentals & Piping Endorsement Syllabus Overview	
General health and safety precautions	Calibration and maintenance of bolt-tightening equipment
Principles of bolt elongation, bolt load, and gasket stress	Inspection and reporting of defects or faults
Functionality of gasket and seal	Procedure for preparing a joint for closure
Gasket types and their limitations	Gasket handling, preparation, and installation
Bolt types and their limitations	Sources of information on joint assembly
Identification of correct joint components	Safe joint disassembly and assembly
Manual torque joint tightening	Joint assembly procedures
Importance of using the specified lubricant	Correct use of additional joint components
Manual torque joint tightening	Manual torque joint tightening
Techniques used for load control	Quality-assurance procedures, certification and records



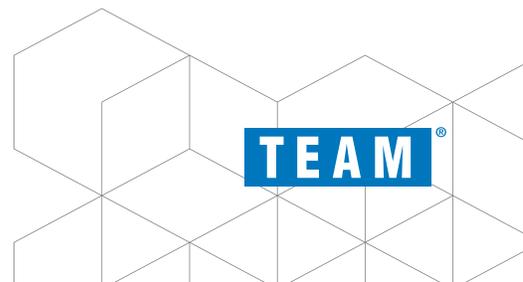
* For a more comprehensive overview please see ASME-PCC-1 2022 Table A-2.1-1, page 18-2

Course Content: ASME PCC-1 2022 Competency Level 2

Course Duration: 2-Days

Class Size: Maximum 10 Trainees

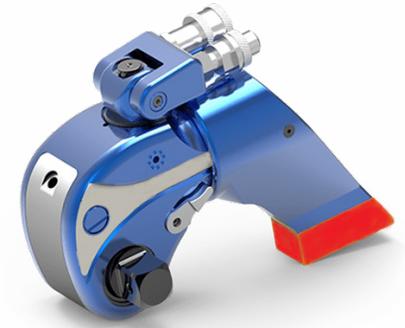
Certification: TEAM Issued Certification – Valid for 3 years



Many piping components and flanges require powered tightening equipment to achieve the necessary bolt and gasket loads. These tools present unique challenges and safety issues that must be addressed.

Unfortunately, severe injuries and damage to plant equipment are a common occurrence due to improper use of hydraulic, battery, and air-powered bolting equipment.

- TEAM’s ASME, Powered Equipment Training includes proper training, competency management, and the safe utilization of the right tools and components.
- Training candidates will gain valuable knowledge and understanding of the safe and effective operation of powered bolting equipment and tooling.
- Taking the Training of Fundamentals and Piping Endorsement course as a pre-requisite is highly encouraged.



ASME PCC-1 Powered Equipment Training

The training will consist of academic and practical applications. The training candidate will gain and demonstrate a thorough understanding of bolted joint disassembly, inspection, assembly, and tightening techniques using common powered industrial bolt tightening equipment. The trainee should have a firm grasp of piping and bolted connections fundamentals prior to taking this course.



Powered-Equipment Endorsement Curriculum Overview*	
General health and safety precautions	Safe handling of high-pressure hydraulic equipment, safe use of backup tooling, pinch points, and correct usage of sockets and other ancillary tooling
Selecting appropriate bolt-tightening tooling	Torque and tension tool limitations, clearance issues, tensioner load limitations, and alternative nut rotation methods
Powered equipment torque	Working with hydraulic, battery, and pneumatic torque tools and associated power supplies. Troubleshooting and common problems, use of single vs. multiple simultaneous tool usage.
Powered equipment tension	Identifying parts of the tensioners and pumps, methods for setting correct bolt load, safe use of the tensioning system, use of single tensioner vs. multiple tensioners, understanding load loss and elastic interaction
Calibration and maintenance of powered equipment	Understanding maintenance and calibration requirements for bolt-tightening field equipment. General inspection of hoses, fitting, and power supplies, the importance of calibration and maintenance frequency

Course Content: ASME PCC-1 2022 Powered-Equipment Endorsement

Course Duration: 2-Days

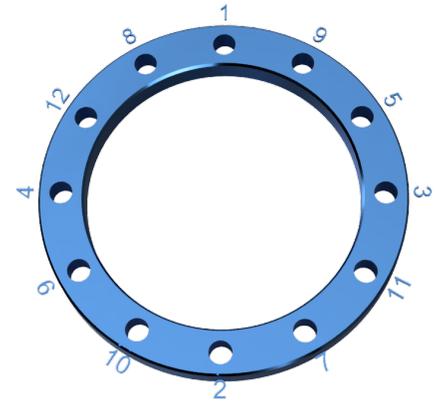
Class Size: Maximum 10 Trainees

Certification: TEAM Issued Certification - Valid for 3 years

* For a more comprehensive overview please see ASME -PCC-12022 Table A-2.3-1 page 21

Training of Fundamentals and Piping Endorsement:

This course will provide the trainee with the necessary knowledge and skill to safely perform bolted flange joint disassembly, assembly, and joint tightening utilizing manual-type torque wrenches and tooling.



2 Day- ASME PCC-1-2022 Skill Level 2	
Location: TEAM's ATTC - Alvin Texas	Location: Client Location
Price \$6250.00	Price \$10,000.00
10 individuals - maximum class size	10 individuals - maximum class size
Lunch provided	Instructor expenses Included in price
TEAM's ASME Compliant Certification - valid for 3 years	TEAM's ASME Compliant Certification - valid for 3 years
Equipment and materials included in pricing.	Equipment, materials, and shipping and handling Included. Gloves, safety toe shoes and eye protection required.
Large class rooms for academic presentation, discussions, and testing.	Continental US only
Fully safety controlled training facility	Attendee's must have Internet and browser access for testing
Practical evaluations in shop environment. Eye protection and gloves will be provided. Steel toes shoes will be required.	Large screen for projector presentation required

*Lodging and transportation for attendees not included

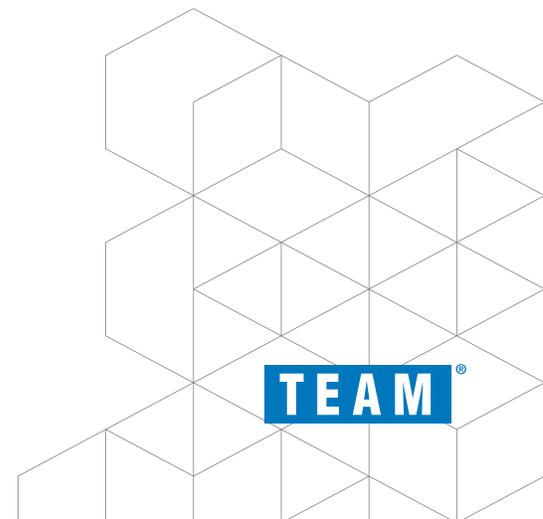


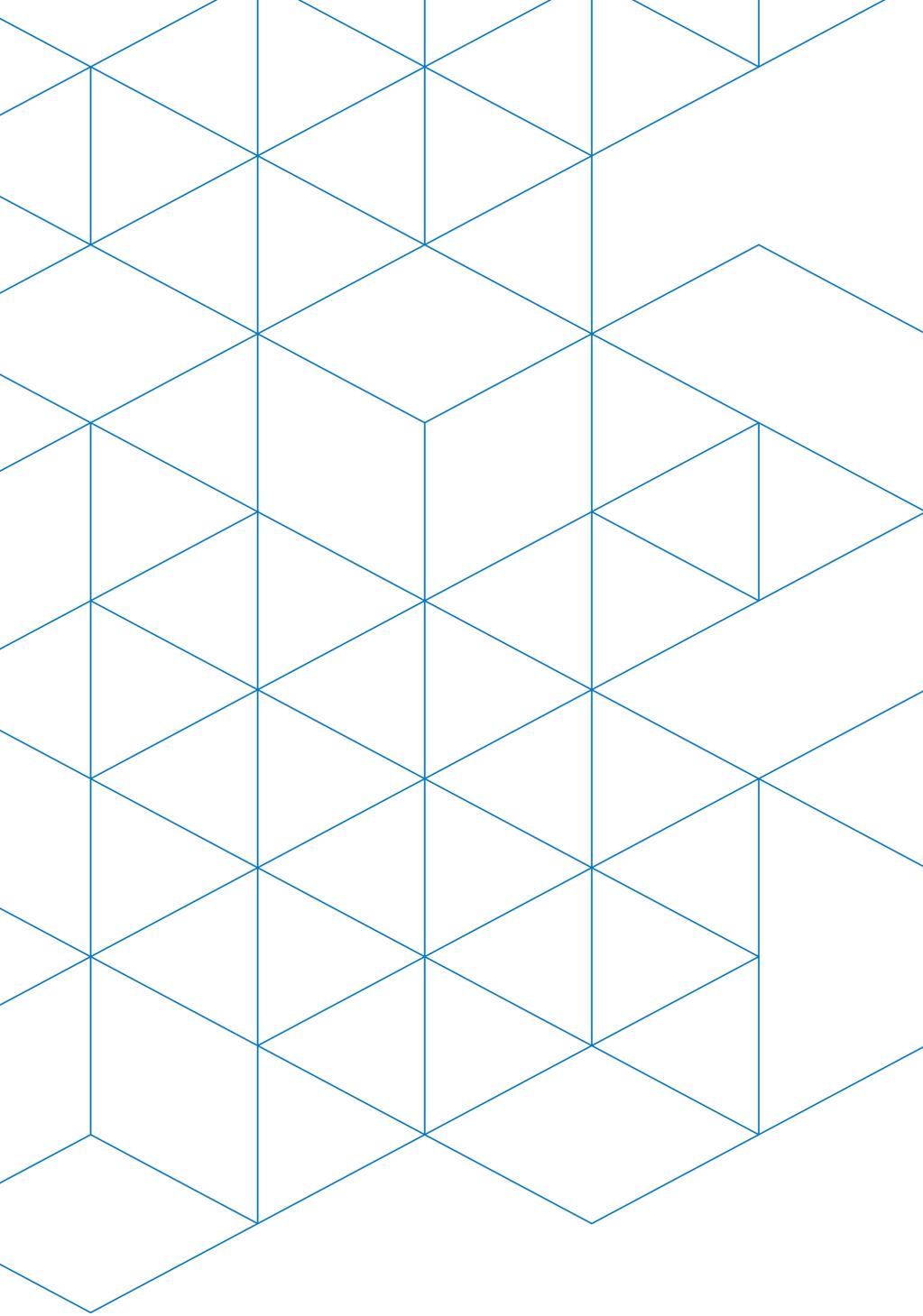
Powered Equipment Endorsement:

This course will provide the trainee with the necessary knowledge and skill to safely perform bolted flange joint disassembly, and joint tightening utilizing powered torque tools and tensioning equipment.

2 Day- ASME PCC-1-2022 Skill - Powered Equipment Supplemental	
Location: TEAM's ATTC - Alvin Texas	Location: Client Location
Price \$6250.00	Price \$10,000.00
10 individuals - maximum class size	10 individuals - maximum class size
Lunch provided	Instructor expenses Included in price
TEAM's ASME Compliant Certification - valid for 3 years	TEAM's ASME Compliant Certification - valid for 3 years
Equipment and materials included in pricing.	Equipment, materials, and shipping and handling Included.
Large class rooms for academic presentation, discussions, and testing.	Gloves, safety toe shoe, and eye protection required.
Practical evaluations in shop environment. Eye protection and gloves will be provided. Steel toes shoes will be required.	Attendee's must have Internet and browser access for testing.
Intense focus on safe tool operation	Intense focus on safe tool operation
Can be combined with Training of Fundamentals and Piping Endorsement.	Can be combined with Training of Fundamentals and Piping Endorsement.

*Lodging and transportation for attendees not included





For over five decades, TEAM Inc. has been providing asset integrity to diverse industries, including oil & gas, aerospace, petrochemicals, pipeline, and power generation. Our integrated service approach covers everything from inspection to repair, ensuring our communities operate safely and efficiently.

[TEAMINC.COM](https://www.teaminc.com)



800.662.8326 contact@TeamInc.com

