



BOLT LIKE A PRO

ABS TRAINING ACADEMY



Bolting forms the critical path of installation and maintenance activities. If neglected, faulty bolting operations lead to losses associated with injuries, shutdown costs, wasted energy, and company image.

The significance of achieving joint integrity and stability has been increasing and thus, precise bolting has become need of the hour. The importance of having in-house bolting experts is paramount and super critical in achieving accuracy and productivity in bolting joints. We helps you achieve this objective.

Training the employees to acquire practical knowledge ensures their responsibility for the integrity of bolted joints by easily identifying gaps in skills and implementing appropriate solutions.

With the vision to create a safer work environment, we offers trainings that aim at enhancing employee productivity, safety, quality of joints and overall business performance.

ABOUT ABS TRAINING ACADEMY

ABS Training Academy has been striving relentlessly to develop competence for advanced bolting methods and procedures in the industry.

We deliver ECITB MJI courses in certified facilities in India and Abu Dhabi-

 MJI10 (Hand Torque Wrench), MJI18 (Bolt Tensioning) and MJI19 (Hydraulic Torque Wrench).

Our decades of occupational experience, coupled with knowledge and understanding of working with several industries for their bolting systems, makes us your ideal partner in empowering your team with the principles of joint integrity and associated safety, thus enhancing the team's capability & performance.

Our trainings are designed to provide theoretical as well as practical training to the engineers and technicians to have a fundamental understanding of effective and safe bolting. These programs can be adapted to small and large groups, which allows for a customized and flexible approach.



TRAINING AUTHORITY

With a combined Hands-on industry experience of over 30 years, our ECITB Authorized Trainers ensure quality of technical expertise in bolted joint technology.

Across their careers, our trainers have been involved in many exciting projects with various industries for their Joint Integrity Management, including torquing and tensioning flanges to other specialized services. Their extensive practical experience on the field will help deliver technical and on-field expertise to candidates.

LEARNING GOALS

Understanding the importance of bolted joints

Understanding of joint integrity principles, bolting theory and its application

Components required to achieve a reliable bolted connection (Calibrated Tools, Certified Manpower and Compliance with Standards)

Understanding of various bolt tightening methods

Understanding of significance of controlled bolting in achieving safety and productivity

We Helps you do it right!

We provide analytical testing and technical problem-solving trainings with a fully documented process. Content for the course will be available on request. We can help you analyse and understand the issues regarding the integrity of bolted joints and provide engineering solutions based upon our considerable experience in this field.

Our training programmes are structured to provide the best practical procedures to complete critical applications on the field.



TRAINING COURSES TO OFFER

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ATA101

Basics of Bolting, Torquing and Tensioning Theory, and **Bolting Product Range**

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ATA201

Bolted Joint Integrity -Torquing and Tensioning (Theory + Hands-On Training)

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ATA301

Safety in Bolting

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ATA401

FCITB Mechanical Joint Integrity

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ATA501

Bolting Skill Validation

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ATA601

Bolting Skill Training & Validation

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ATA701

On-Site Machining ATA701P- Cold Cutting, Beveling & Counter Boring ATA701F- Flange Facing & Serration

ATA101

BASICS OF BOLTING, TORQUING AND TENSIONING THEORY, AND BOLTING **PRODUCT RANGE**



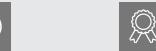
Upon successful completion of this training module, aspirants will be able to explain how bolting systems impact safety, quality, and efficiency within an organization, and the general principles involved in understanding the importance of using the proper tool for the job to maintain joint integrity.

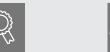


WHAT WILL YOU **LEARN**

- Introduction to Bolting Basics, Importance of Bolting on a Joint
- Identifying the different types of bolting tools & procedures required to achieve reliable joint integrity (Introduction to Torquing & Tensioning Products)
- Discuss the characteristics, principles and operational use of each product and understand the applications of each product as per specific industry
- Understanding the importance of safe practices











COURSE DURATION

CERTIFICATION

BATCH SIZE 10 - 20

MODALITY Virtual or Classroom

EQUIPMENT Bolting Product Range

1 Day Bolting Principles & Theory

^{*}Customized courses can also be designed as per client requirements upon request.

COURSE ATA201

BOLTED JOINT INTEGRITY -TORQUING AND TENSIONING (THEORY + HANDS-ON TRAINING)



Upon successful completion of this training module, aspirants will be able to learn:

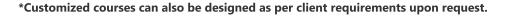
- Principles of Joint Integrity
- Bolting theory
- Various types of torquing & tensioning systems through practical hands-on experience
- Implications of each tool for a variety of industries as applicable.
- Importance of safety & quality in joint integrity
- General principles involved while using the different range of these tools











ATA201

BOLTED JOINT INTEGRITY -TORQUING AND TENSIONING (THEORY + HANDS-ON TRAINING)



WHAT WILL YOU LEARN

Day 1: Theory

- Introduction to bolting
- Torquing and tensioning procedures & systems
- Guidelines for safe practices as per ASME PCC1 guidelines
- Understanding different types of tools available in each category & their application

Day 2: Torquing Practical Training

- Hands-on practical exercises for all torquing systems as per ASME PCC1 guidelines
- Principles of torquing
- Practical implications of safe bolting practices for joint integrity
- In-person training and evaluation

Day 3: Tensioner Practical Training

- Hands-on practical exercises for tensioning systems as per ASME PCC1 guidelines
- Principles of tensioning
- Practical implications of safe bolting practices for quality in bolting operations
- In-person training and evaluation







CERTIFICATION



BATCH SIZE



MODALITY



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EQUIPMENTBolting Product Range

3 Days

Bolted Joint Integrity

4 - 8

Virtual or Classroom

COURSE ATA301

SAFETY IN BOLTING



Upon successful completion of this training module, aspirants will be able to understand the significance of safety in maintaining joint integrity, hazards and risks associated with bolting, and safe bolting practices.



WHAT WILL YOU LEARN

Day 1: Theory

- Introduction to bolting systems: manual, hydraulic, pneumatic torque wrenches & hydraulic bolt tensioners with pumps and understanding the applications for joint integrity
- Identification of Hazards and risks associated with bolting
- Guidelines for safe practices

Day 2: Practical

- Hands-on practical exercises for manual, hydraulic torque wrenches & hydraulic bolt tensioners as per ASME PCC1 guidelines for a safe operation
- Practical implementation of bolting practices for quality bolting operations while adhering to the highest safety standards
- In-person training and evaluation





2 Days



CERTIFICATIONSafe Bolting Practices



BATCH SIZE

10 - 20



MODALITY

Virtual or Classroom



EQUIPMENT

Bolting Product Range

^{*}Customized courses can also be designed as per client requirements upon request.

SPECIALIZED COURSES

We are the only approved training providers in India to offer globally recognized courses in torqueing and tensioning.

COURSE

ATA401

ECITB



COURSE OBJECTIVE

The ECITB Course framework offers three levels of training modules i.e MJI 10 / MJI 18 / MJI 19 which covers isolations, dismantling techniques, inspection of components, alignment techniques, and assembly and tightening techniques in specialist critical bolting.

Upon completion of these courses the delegates will be able to ensure joint integrity through appropriate specification methods, process, techniques & procedures in a safe and timely manner.



WHAT WILL YOU LEARN

The delegates are provided with the following modules by a ECITB Certified Trainer:

- **MJI 10-** Hand Torque Bolted Connection Techniques 1 day
- MJI 10, MJI 19- Hand and Hydraulically Torqued Bolted Connection Techniques 1.5 days
- MJI 19- Hydraulically Torqued Bolted Connection Techniques Modules 1 day
- MJI 18- Hydraulically Tension Bolted Connection Techniques 1 day
- MJI 10, MJI 18, MJI 19- Hand, Hydraulically Torqued and Tension Bolted Connection Techniques 2.5 days (Full Stage 1 Certificate)
- e-MJI First Principles- Online up to 6 hours. One registered, the trainee gets 1 month window to complete the course. Once started, the course must be completed in 1 stretch.
- **Blended Learning-** e-MJI followed by a Practical Course Module(s)





As mentioned above



CERTIFICATION

ECITB MJI Courses



BATCH SIZE

4 - 6



MODALITY

Classroom



EQUIPMENT

Bolting Product Range

COURSE **ATA501**

BOLTING SKILL VALIDATION



Now you can get your bolting personnel validated on Joint Assembly Competency, and keep them ready for deployment in Oil & Gas sector. The intent of this program is to provide a sound basis for the assessment and validation of bolted joint assemblers. This module will cover all the fundamentals & instructions for bolted joint operation and assembly.



SKILL VALIDATION

- Theory Test (Paper Based)
- Practical Assessment (Observation Checklists)

PROGRAM DELIVERABLES

- Classification of the technician based on the set performance criteria in theory test and practical test:
 - Supervisor (Expert)
 - Technician (Proficient)
 - Associate Technician (Average)
- Certificates with trainee number/ QR code for better identification and traceability
- Consultation on re-validation requirement of the trainee / advanced level training requirements







CERTIFICATION



BATCH SIZE



MODALITY



EQUIPMENT Bolting Product Range

1 Day

Bolting Skill Validation Program

2 - 4

Classroom*

ATA601

BOLTING SKILL TRAINING & VALIDATION



Now you can get your bolting personnel validated on Joint Assembly Competency, and keep them ready for deployment in Oil & Gas sector. The intent of this program is to provide a sound basis for the assessment and validation of bolted joint assemblers. This module will cover all the fundamentals & instructions for bolted joint operation and assembly.



DETAILS

SKILL VALIDATION

- Refresher Training (PPT based, on Projector)
- Training- Torqueing (Practical- Training Rig)
- Training- Tensioning (Practical- Training Rig)
- Theory Test (Paper Based)
- Practical test (Observation checklists)

PROGRAM DELIVERABLES

- Classification of the technician based on the set performance criteria in theory test and practical test:
 - Supervisor (Expert)
 - Technician (Proficient)
 - Associate Technician (Average)
- Certificates with trainee number/ QR code for better identification and traceability
- Consultation on re-validation requirement of the trainee / advanced level training requirements











COURSE DURATION

CERTIFICATION

BATCH SIZE

MODALITY

EQUIPMENT Bolting Product Range

2 Day

Bolting Skill Training & Validation Program

2 - 4

Classroom*

^{*}The details about the course is available on request.

ATA701

ON-SITE MACHINING

701P- COLD CUTTING, BEVELING & COUNTER BORING

701F- FLANGE FACING & SERRATION



Our On-Site Machining Trainings work towards upgrading and enhancing the skills of the modern workforce to improve their efficiency in the application of specialist pipework construction and maintenance services. These trainings employ classroom sessions and practical training for comprehensive understanding of the subject.



Cold Cutting, Beveling & Counter Boring

Flange Facing & Serration Machining Training

| | DURATION | CERTIFICATION | BATCH SIZE | MODALITY | EQUIPMENT |
|------|----------|---|------------|---------------------------|----------------------------|
| 701P | 2 Day | On-Site Machining-Cold Cutting, Bevelling & Counter Boring | 2 - 8 | Classroom and Workshop | Machining Product Range |
| 701F | 3 Day | On-Site Machining- Flange Facing & Serration | 1 - 5 | Classroom and Workshop | Machining Product Range |





BECOME A CERTIFIED BOLTING EXPERT



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