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TWI INDIA SHORT COURSES



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ESSENTIALS OF INDIAN BOILER REGULATIONS (IBR)

Course Objectives

To learn about Indian Boiler Regulations (IBR) and the scope; Understanding specific requirements in IBR in respect of design, construction, welding, NDE and other tests; To have better understanding on material, certificates welder qualification, and IBR Forms.

Delivery method

Virtual/Classroom

Duration

2 Days

Assessment of learning outcomes

Interactive assessment

Certification

Certificate of participation

Batch size

Up to 25 candidates

Prerequisite Experience

Experience in boiler and pressure vessel manufacturing is desirable

Suitable for

- Design Engineers
- Shop Engineers
- QA/QC Engineers
- Welding Engineers
- Materials procurement and planning engineers
- Functional Heads and managers

Course Content

- Brief history and background of Boiler Act 1923 and IBR 1950
- Some salient part of Boiler Act 1923
 - Scope
 - Definitions
- Structure of IBR, amendments, rules and regulations, Forms
- General requirements
 - Standard requirements
 - Inspecting Authority, Competent Authority, Competent Person
 - Responsibilities of boiler manufacturer, Inspecting Authority, Competent Authority, Competent Person, user/owner
 - Appendix J
 - Well known manufacturers of materials

TWI (India) Private Limited

Old No.130/1/2/3, New No.50/1/2/3, Velachery Main Road, Venkatapuram, Saidapet, Chennai - 600015, India
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ESSENTIALS OF INDIAN BOILER REGULATIONS (IBR)

- Materials and welding consumables
- Construction and workmanship
- Overview of chapters dealing with welded drums, valves and auxiliaries, superheater, economiser, steam pipes and fittings, vessels, shell type boilers, welder qualification
- Regulations for boiler registration, hydrotest, drawing approval
 - Memorandum of Inspection Book
 - Annual inspection
 - Appendix
 - Repair of boilers

What will I leave with?

At the end of the course, attendees will:

- Have sound understanding of IBR related to its scope and requirements of design, fabrication, welding, destructive and non-destructive testing in boiler construction.
- Be familiar with different IBR Forms, material and welder certification.
- Effectively contribute to the development of a culture of safety as well as regulatory compliance at workplace.
- Have the ability to interact with peers and hold meaningful conversations with stakeholders on IBR

Disclaimer: The information provided in this training course on IBR is intended for educational purposes only. It is not intended to substitute any interpretation or advice provided by competent authority. While every effort has been made to ensure the accuracy and completeness of the information presented in this course, the course instructor and the organisation make no representation or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability with respect to the course material or the information or related graphics contained in the course for any purpose. Participants shall exercise their own judgement and seek advice from competent authority before acting on any of the information provided in this course.

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NAVIGATING THE INDIAN BOILER REGULATIONS (IBR)

Course Objectives

To understand the basics of IBR and its application; to have familiarity with relevant Chapters and some of the commonly applied regulations.

Delivery method

Virtual/Classroom

Duration

1 Days

Assessment of learning outcomes

No

Certification

Certificate of participation

Batch size

Up to 25 candidates

Prerequisite Experience

Experience in boiler and pressure vessel manufacturing is desirable

Suitable for

- Design Engineers
- Shop Engineers
- QA/QC Engineers
- Welding Engineers
- Materials procurement and planning engineers
- Functional Heads and managers

Course Content

- Brief history and background of Boiler Act 1923 and IBR 1950
- Some salient part of Boiler Act 1923
 - Scope
 - Definitions
- Structure of IBR, amendments, rules and regulations, Forms
- General requirements
 - Standard requirements
 - Inspecting Authority, Competent Authority, Competent Person
 - Responsibilities of boiler manufacturer, Inspecting Authority, Competent Authority, Competent Person, user/owner
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NAVIGATING THE INDIAN BOILER REGULATIONS (IBR)

- Brief introduction to the chapters on materials, welding consumables, workmanship, welded drums, valves and accessories, shell type boilers, welder qualifications
- Regulations for boiler registration, hydrotest, drawing approval
 - Memorandum of Inspection Book
 - Annual inspection
 - Appendix
 - Repair of boilers

What will I leave with?

At the end of the course, attendees will:

- Become familiar with the scope and application of IBR
- Gain understanding and appreciation of content covered in each chapter and its practical implications
- Understand the terminologies used in the IBR
- Effectively contribute to the development of a culture of safety
- as well as regulatory compliance at workplace

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API 510 - AUTHORISED PRESSURE VESSEL INSPECTOR PREPARATORY TRAINING PROGRAM

Is it for me?

This preparatory training program is suitable for all the personnel involved in engineering, technical, operations & maintenance, and inspection activities in the oil and gas, petrochemical, power generation sector, commercial works (vendor) inspection organization, and classification society.

What will I learn?

- Basics of Pressure vessel Inspection
- Basic design principles, construction, inspection and testing of pressure vessel
- Common damage mechanisms and inspection strategy
- Material inspection and verification
- Basics of welding
- Welding procedures
- Destructive testing / Non-Destructive Examination (NDE)
- Fundamentals of Risk-Based Inspection (RBI)
- Inspection, examination and pressure testing practices
- Inspection interval, frequency and extent of inspection
- Fundamentals of repair, re-rating and alteration
- Fundamentals of painting and cathodic protection
- Quality assurance

What will I leave with?

You will gain the competence required for the API 510 pressure vessel inspection and API 510 certification examination. The candidate will have the following knowledge:

- Performing basic design calculations, construction methodologies, inspection and testing requirements in accordance with ASME section VIII, div 1 and API 510.
- Inspection techniques and principles, including Non-Intrusive Inspection and inspection planning
- Common damage and degradation mechanisms
- Basic code calculations (corrosion rate, remaining life, Inspection Interval, MAWP)
- Codes and standards commonly used by the industry
- Detection and evaluation of imperfections by means

Qualification requirements (As per API 510)

- A Bachelor of Science degree in engineering or technology, plus one year of experience in supervising or performing of inspection activities. (or)
- A two-year degree or certificate in engineering or technology, plus two years of experience in the design, construction, repair, inspection, or operation of pressure vessel, of which one year must be in supervision of inspection activities or performance of inspection activities. (or)

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API 510 - AUTHORISED PRESSURE VESSEL INSPECTOR PREPARATORY TRAINING PROGRAM

- A high school diploma or equivalent, plus three years of experience in the design, construction, repair, inspection, or operation of pressure vessel, of which one year must be in supervision of inspection activities or performance of inspection activities.(or)
- A minimum of five years of experience in the design, construction, repair, inspection, or operation of a pressure vessel, of which one year must be in supervision of inspection activities or performance of inspection activities.

Why API 510

API 510 preparatory training program is a hybrid learning program which has pre-learning, e-learning content for two to three weeks and Zoom class for 3 days. This course will provide an in-depth understanding of the API 510 certification syllabus and broaden the candidate's knowledge in pressure vessel inspection.

Learn when and where you want

eLearning is available 24/7 and lets you study around your current work hours so there is no need for time off. You can study anywhere you like and be mobile if it suits you, as long as you have a device capable of doing so.

Study at your own pace

You set the pace, spending as much time as you like on the parts you find challenging and speeding through those that you find easy. Study in short sessions or work your way through the whole day.

Track your progress

The eLearning platform will record all your work, which means you can track your progress as you go. You will have an effective way to monitor your progress and note your achievements, as well as being able to record those areas that need more work.

How does it work?

When you have registered for your preparatory training program, you will receive login credentials to enable you to access the eLearning platform at any time. Your pre-learning course will be available immediately, and will be accessible for 60 days. Once you have completed the eLearning course, please contact your local TWI Training Centre for zoom classes.

System Specifications

In order to fully access the distance learning material, you will need the following minimum system requirements:

- Latest version of your preferred web browser
- Recommended internet speed: at least 0.5 Mbps
- Display resolution: minimum 1024x768
- Ideal for use on desktops or tablets

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API 570 - AUTHORISED PIPING INSPECTOR PREPARATORY TRAINING PROGRAM

Is it for me?

This preparatory training program is suitable for all the personnel involved in engineering, technical, operations & maintenance, and inspection activities in the oil and gas, petrochemical, power generation sector, commercial works (vendor) inspection organization, and classification society.

What will I learn?

- Basics of Piping Inspection
- Basic design principles, construction, inspection and testing of process piping
- Common damage mechanisms and inspection strategy
- Material inspection and verification
- Basics of welding
- Welding procedures
- Destructive testing / Non-Destructive Examination (NDE)
- Fundamentals of Risk-Based Inspection (RBI)
- Inspection, examination and pressure testing practices
- Inspection interval, frequency and extent of inspection
- Fundamentals of repair, re-rating and alteration
- Fundamentals of painting and cathodic protection
- Quality assurance

What will I leave with?

You will gain the competence required for the API 570 piping inspection and API 570 certification examination. The candidate will have the following knowledge:

- Performing basic design calculations, construction methodologies, inspection and testing requirements in accordance with ASME B31.3 and API 570.
- Inspection techniques and principles, including Non-Intrusive Inspection and inspection planning
- Common damage and degradation mechanisms
- Basic code calculations (corrosion rate, remaining life, Inspection Interval, MAWP)
- Codes and standards commonly used by the industry
- Detection and evaluation of imperfections by means of Non-Destructive Examination (NDE)

Qualification requirements (As per API 570)

A Bachelor of Science degree in engineering or technology, plus one year of experience in supervising or performing of inspection activities.
(or)

API 570 - AUTHORISED PIPING INSPECTOR PREPARATORY TRAINING PROGRAM

A two-year degree or certificate in engineering or technology, plus two years of experience in the design, construction, repair, inspection, or operation of process piping, of which one year must be in supervision of inspection activities or performance of inspection activities. (or)

A high school diploma or equivalent, plus three years of experience in the design, construction, repair, inspection, or operation of process piping, of which one year must be in supervision of inspection activities or performance of inspection activities. (or)

A minimum of five years of experience in the design, construction, repair, inspection, or operation of a process piping, of which one year must be in supervision of inspection activities or performance of inspection activities.

Why API 570

API 570 preparatory training program is a hybrid learning program which has pre-learning, e-learning content for two to three weeks and Zoom class for 2 days. This course will provide an in-depth understanding of the API 570 certification syllabus and broaden the candidate's knowledge in process piping inspection.

Learn when and where you want

eLearning is available 24/7 and lets you study around your current work hours so there is no need for time off. You can study anywhere you like and be mobile if it suits you, as long as you have a device capable of doing so.

Study at your own pace

You set the pace, spending as much time as you like on the parts you find challenging and speeding through those that you find easy. Study in short sessions or work your way through the whole day.

Track your progress

The eLearning platform will record all your work, which means you can track your progress as you go. You will have an effective way to monitor your progress and note your achievements, as well as being able to record those areas that need more work.



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API 570 - AUTHORISED PIPING INSPECTOR PREPARATORY TRAINING PROGRAM

How does it work?

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System Specifications

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API 653 - AUTHORISED STORAGE TANK INSPECTOR PREPARATORY TRAINING PROGRAM

Is it for me?

This preparatory training program is suitable for all the personnel involved in engineering, technical, operations & maintenance, and inspection activities in the oil and gas, petrochemical, power generation sector, commercial works (vendor) inspection organization, and classification society.

What will I learn?

- Basics of above ground storage tank inspection
- Basic design principles, construction, inspection and testing of above ground storage tank inspection
- Understanding of tank foundation and various types of tank roof
- Common damage mechanisms and inspection strategy
- Basics of welding
- Welding procedures
- Destructive testing / Non-Destructive Examination (NDE)
- Fundamentals of Risk-Based Inspection (RBI)
- Inspection and examination practices
- Inspection interval, frequency and extent of inspection
- Fundamentals of repair, re-rating and alteration
- Fundamentals of painting and cathodic protection
- Quality assurance

What will I leave with?

You will gain the competence required for the API 653 storage tank inspection and API 653 certification examination. The candidate will have the following knowledge:

- Performing basic design calculations, construction methodologies, inspection and testing requirements in accordance with API 650 and API 653.
- Knowledge of tank foundation settlement types and inspection techniques
- Storage tank inspection techniques and principles, including Non-Intrusive Inspection and inspection planning
- Common damage and degradation mechanisms
- Basic code calculations (corrosion rate, remaining life, Inspection Interval, shell water fill height)
- Codes and standards commonly used by the industry
- Detection and evaluation of imperfections by means of Non-Destructive Examination (NDE)

Qualification requirements (As per API 653)

A Bachelor of Science degree in engineering or technology, plus one year of experience in supervising or performing of inspection activities. (or)



API 653 - AUTHORISED STORAGE TANK INSPECTOR PREPARATORY TRAINING PROGRAM

- A two-year degree or certificate in engineering or technology, plus two years of experience in the design, construction, repair, inspection, or operation of storage tank, of which one year must be in supervision of inspection activities or performance of inspection activities. (or)
- A high school diploma or equivalent, plus three years of experience in the design, construction, repair, inspection, or operation of storage tank, of which one year must be in supervision of inspection activities or performance of inspection activities. (or)
- A minimum of five years of experience in the design, construction, repair, inspection, or operation of a storage tank, of which one year must be in supervision of inspection activities or performance of inspection activities.

Why API 653

API 653 preparatory training program is a hybrid learning program which has pre-learning, e-learning content for two to three weeks and Zoom class for 3 days. This course will provide an in-depth understanding of the API 653 certification syllabus and broaden the candidate's knowledge in storage tank inspection.

Learn when and where you want

eLearning is available 24/7 and lets you study around your current work hours so there is no need for time off. You can study anywhere you like and be mobile if it suits you, as long as you have a device capable of doing so.

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Track your progress

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API 653 - AUTHORISED STORAGE TANK INSPECTOR PREPARATORY TRAINING PROGRAM

How does it work?

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RIGGER TRAINING PROGRAMME

Is it for me?

This training is designed to enhance the knowledge and skills of personnel involved in rigging, slinging, and lifting operations. It focuses on the safe use of lifting gear, load control techniques, and compliance with industry standards, ensuring participants can perform lifting operations confidently and safely.

Who should attend?

- Riggers & Slingers
- Crane Operators / Helpers
- Maintenance / Erection Technicians
- Construction and Fabrication Crew Members
- Anyone involved in lifting & material handling activities

What will I learn?

Participants will learn to:

- Identify different types of lifting equipment and their applications
- Understand safe rigging practices and load estimation
- Inspect lifting tools and tackles as per standards
- Interpret load charts, CoG, and sling angles
- Plan and supervise safe lifting operations
- Prevent common rigging accidents

Course content

This 10-module course covers rigging basics, lifting gear, weight estimation, sling angles, inspection criteria, hand signals, lift planning, personnel roles, accident case studies, and a final practical assessment.

Duration

2 days

Certification

Certificate of participation

Prerequisite Experience

No Experience (6 months experience is an added advantage)

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ADVANCED RIGGING / RIGGING SUPERVISOR TRAINING

Is it for me?

The Advanced Rigging / Rigging Supervisor Training programme is tailored for experienced riggers, lifting supervisors, and professionals overseeing critical and non-routine lifting operations.

This program develops technical competency, supervisory capability, and judgment-based decision-making skills in line with international lifting standards (BS, ASME, LOLER, and OSHA).

It ensures participants are qualified to plan, lead, and execute complex lifting activities safely and efficiently.

Who should attend?

- Experienced Riggers / Slingers
- Rigging Supervisors & Lifting Coordinators
- Safety Officers / Lifting Inspectors
- Construction & Maintenance Engineers
- Site Supervisors handling heavy lifts
- Erection, Shutdown & Fabrication Teams

Course content

This comprehensive training course covers advanced rigging physics, equipment inspection, and formal lift planning, while preparing participants to safely supervise critical operations—such as tandem and offshore lifts—through safety briefings, failure analysis, and hands-on practical assessments.

Certification

What will I learn?

Participants completing this course will be able to:

- Plan and coordinate lifting operations as per load charts and site conditions
- Evaluate sling configurations and determine rigging forces accurately
- Conduct detailed inspections of lifting accessories and hardware
- Develop and review Lift Plans, Method Statements, and Risk Assessments
- Supervise critical and tandem lifting activities safely
- Understand the responsibilities under statutory regulations and standards
- Lead rigging teams with confidence and compliance

Duration

3 days

Certification

Certificate of participation

Prerequisite experience

3 Year Experience as Rigger / 1 Year as Charge hand

SCAFFOLDER TRAINING PROGRAM

Is it for me?

The Scaffolder Training Program equips participants with the essential skills and knowledge to erect, modify, and dismantle scaffolds safely and efficiently.

This course covers scaffold components, stability, inspection, and fall prevention techniques — ensuring full compliance with statutory safety regulations and industry standards.

Whether you're new to scaffolding or refreshing your skills, this program builds a strong foundation in safe scaffolding practices.

Who should attend?

- Scaffold Erectors / Helpers
- Construction & Maintenance Workers
- Fabrication & Industrial Site Personnel
- Workers involved in access and working platform activities

Course content

This 8-module course covers scaffolding terminology, types, and components, alongside safe erection, dismantling, and load-bearing techniques, while emphasizing height safety, PPE, inspection tagging, and emergency response practices.

What will I learn?

Participants completing this course will be able to:

- Identify types and components of scaffolding systems
- Erect, alter, and dismantle scaffolds safely
- Apply load capacity, bracing, and stability principles
- Follow safe access, working platform, and guardrail procedures
- Conduct pre-use visual checks
- Use PPE and fall arrest systems correctly

Duration

2 days

Certification

Certificate of participation

Prerequisite experience

3-6 months as scaffold helper



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SCAFFOLDING SUPERVISOR TRAINING PROGRAM

Is it for me?

The Scaffolding Supervisor Training by TWI India is an advanced program designed for experienced scaffolders and site supervisors responsible for overseeing scaffolding operations.

The course enhances technical understanding, leadership, and inspection skills required to plan, supervise, and control scaffolding activities safely and effectively in line with BS EN 12811, OSHA 1926.451, and CSDCI standards.

Participants gain the competency to ensure that all scaffold work meets the highest safety and quality benchmarks.

Who should attend?

- Senior Scaffolders / Lead Scaffolders
- Site Engineers & Supervisors
- Construction Safety Officers
- Maintenance & Shutdown Supervisors
- Personnel responsible for scaffolding inspection or certification

Course content

Designed for leadership roles, this course covers scaffolding regulations, supervisor responsibilities, risk management, and stability calculations. It also builds practical skills in inspection tagging, team communication, safety auditing, and analyzing past scaffold failures to ensure site compliance.

What will I learn?

Participants completing this course will be able to:

- Supervise and control scaffold erection, alteration, and dismantling
- Conduct detailed scaffold inspections and tagging
- Prepare scaffolding checklists and reports
- Identify and mitigate scaffold hazards
- Manage scaffold teams and allocate resources effectively
- Ensure compliance with statutory and client safety standards

Duration

3 days

Certification

Certificate of participation

Prerequisite experience

3 Year Experience as Scaffolder or 1 year as Foreman

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MOBILE CRANE OPERATOR TRAINING

Is it for me?

This comprehensive program trains participants to operate mobile cranes safely and efficiently — including hydraulic, lattice boom, rough terrain, crawler, and truck-mounted cranes.

Learn correct operating techniques, load handling, signaling, inspection, and lifting safety — all aligned with international safety standards (OSHA / BS / ISO).

Who should attend?

- New and experienced crane operators
- Riggers and lifting crew members
- Site supervisors and maintenance technicians
- Anyone involved in lifting & material handling

Course content

This 8-module course prepares mobile crane operators by covering equipment types, controls, load charts, and boom configurations. It delivers vital training on slinging practices, pre-operational maintenance, outrigger setup, safety communication, lift planning, and hands-on operational assessments.

What will I learn?

Participants completing this course will be able to:

- Identify crane types, components & functions
- Conduct pre-use inspection & daily checks
- Interpret load charts and lifting capacities
- Understand rigging, signaling & communication
- Operate cranes safely in different environments
- Prevent tipping, overloading & accident hazards
- Follow lifting plans, SOPs & site safety norms

Duration

3 days

Customised for each crane type:

Hydraulic / Crawler / Rough Terrain / All-Terrain /
Truck-Mounted / Pick N Carry Crane

Certification

Certificate of participation

Prerequisite experience

Minimum of 6 months as assistant to Crane Operator



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TOWER CRANE OPERATOR TRAINING

Is it for me?

The Tower Crane Operator Training by TWI India develops the skills and safety awareness needed to operate tower cranes effectively on construction sites. Participants learn pre-operational checks, load control, signaling, and emergency handling in compliance with international lifting safety standards (BS, OSHA, ISO, IS codes).

Who should attend?

- Tower Crane Operators (Beginners or Experienced)
- Site Rigging / Lifting Crew
- Construction Site Supervisors
- Maintenance / Erection Personnel

Course content

This comprehensive course builds essential skills for tower crane operation by analyzing structural configurations, safety devices, and the operational impacts of wind and radius limits. It also focuses on hand signals, preventive maintenance, emergency shutdown protocols, and final hands-on performance evaluations.

What will I learn?

Participants completing this course will be able to:

- Identify tower crane components & functions
- Perform pre-use inspections and safety checks
- Interpret load charts & wind limits
- Operate crane safely under various site conditions
- Communicate effectively using standard signals
- Respond to emergency & power failure situations
- Ensure compliance with site lifting procedures

Duration

3 days

Certification

Certificate of participation

Prerequisite experience

Minimum of 6 months as assistant to Crane Operator

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EOT CRANE OPERATOR TRAINING

Is it for me?

The EOT Crane Operator Training by TWI India focuses on safe operation of Electric Overhead Travelling (EOT) cranes, gantry cranes, and jib cranes used in industrial, manufacturing, and workshop environments.

This course ensures operators gain the knowledge, skill, and discipline to perform lifting operations safely, efficiently, and in compliance with Indian and international standards.

Who should attend?

- EOT Crane Operators / Technicians
- Maintenance & Production Staff
- Workshop / Warehouse Personnel
- Supervisors & Safety Officers

Course content

This 7-module course delivers foundational training on Electric Overhead Travelling (EOT) crane types, industrial applications, key structural components, and control systems. It provides operators with essential skills for conducting pre-operational inspections, managing loads safely, utilizing standardized signal communication, and mitigating common workplace hazards. Additionally, the curriculum covers routine maintenance, troubleshooting basics, and a final practical operation assessment to verify workplace competency.

What will I learn?

Participants completing this course will be able to:

- Perform pre-operation checks & routine inspections
- Operate cranes with precision & stability
- Identify and avoid overloading, side pulling, and swing hazards
- Handle loads safely with slings, chains & hooks
- Follow communication protocols & lifting procedures

Duration

2 days

Certification

Certificate of participation

Prerequisite experience

Minimum of 6 months as assistant to Crane Operator

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FORKLIFT & TELEHANDLER OPERATOR TRAINING

Is it for me?

The Forklift & Telehandler Operator training Program develops competent operators for safe, efficient, and productive material handling.

Participants gain hands-on experience in equipment control, load stability, pre-use inspection, hazard recognition, and maintenance procedures — fully aligned with OSHA, ISO, BS, and Indian Standards.

Who should attend?

- Forklift / Telehandler Operators (Beginners & Experienced)
- Warehouse, Yard & Logistics Personnel
- Construction, Industrial & Plant Maintenance Teams
- Supervisors overseeing lifting, transport, or loading operations

Duration

Forklift Operator: 3 Days

Telehandler Operator: 4 Days

Certification

Certificate of participation

Prerequisite experience

No Experience / at least 6 Months exp is an added advantage

Course content

Forklift Operator Training:

This 8-module program covers forklift types, components, fuel handling, and core stability principles like the stability triangle and load centers.

Operators learn safe driving maneuvers on ramps and confined areas, daily inspection checklists, hazard recognition, and pedestrian safety, culminating in a written and practical competency test.

Telehandler Operator Training:

This 10-module course details telescopic boom configurations, load dynamics, radius capacity limits, and specialized attachments like winches and man baskets. It trains participants in uneven terrain maneuvering, routine hydraulic and mechanical maintenance, site traffic coordination, risk assessments, and emergency tip-over or power failure responses, followed by a supervised practical performance test.

What will I learn?

Participants completing this course will be able to:

- Operate forklift and telehandler equipment safely & efficiently
- Identify equipment components, controls, and safety systems
- Conduct pre-start inspection, maintenance & function tests
- Handle loads with correct stability and balance techniques
- Apply site-specific operating procedures & risk assessments
- Communicate effectively using signals and ground coordination
- Prevent common operational hazards, tip-overs & collisions



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LIFTING SUPERVISOR TRAINING PROGRAM

Is it for me?

The Lifting Supervisor Training by TWI India Training & Certification prepares participants to plan, supervise, and control all lifting operations in compliance with statutory safety regulations and international best practices.

This course focuses on lifting plan development, risk assessment, equipment selection, and supervision techniques — empowering supervisors to ensure that all lifts are conducted safely, efficiently, and without incidents.

Who should attend?

- Appointed Lifting Supervisors
- Site Engineers & Construction Managers
- Safety Officers / Lifting Coordinators
- Senior Riggers and Crane Crew Leaders
- Personnel involved in planning or overseeing lifting operations

Course content

This 8-module Lifting Supervision course covers lifting operation categories, team roles, and equipment compliance like SWL and color-coding. It details load assessment, formal lift planning, crane stability variables, site risk controls, and toolbox briefings. Additionally, it addresses the management of critical maneuvers—such as tandem and restricted-space lifts—alongside equipment storage procedures and real-life accident analysis.

What will I learn?

Participants completing this course will be able to:

- After completion, participants will be able to:
- Develop, review, and implement safe lifting plans
- Assess lifting operations, load conditions, and environmental factors
- Coordinate with crane operators, riggers, and signalers effectively
- Conduct risk assessments and toolbox talks
- Verify lifting gear certification, inspection, and load limits
- Supervise routine and non-routine lifts safely
- Ensure compliance with site and statutory lifting requirements

Duration

3 days

Certification

Certificate of participation

Prerequisite experience

Minimum 3 Years experience in Lifting activities

TWI (India) Private Limited

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LIFTING AND RIGGER TRAINING PROGRAMME

Why choose TWI India

- Globally recognized technical training provider
- Industry-compliant curriculum with hands-on emphasis
- Proven track record in rigging & lifting competency development
- On-site and classroom training options available
- Tailored modules for Oil & Gas, Construction, Marine, and EPC sectors

Training methodology

- Interactive theory with Audio & Videos
- Real equipment demonstrations
- Load estimation and sling force exercises
- Group lift planning activities
- Case-based learning & safety scenario simulations
- Practical performance assessments

LIFTING AND RIGGER TRAINING PROGRAM

Training category	Certification type	Objective
Basic-level Courses (e.g. Basic Rigging, Scaffolder, Forklift, EOT Crane, MEWP, Earth Moving Equipment)	Skill Certificate	These are skill-based operator courses focused on learning and demonstrating a technical skill. The learner acquires the ability to perform a specific task (e.g., operate equipment, sling loads). No prior experience is required, and learning is hands-on → Skill development certification.
Intermediate / Supervisory Courses (e.g. Rigging Chargehand / Foreman, Scaffolding Chargehand / Foreman)	Competency Certificate	These courses require prior experience (typically 1 year) and involve planning, supervision, and safety control. They validate the learner's competency — integrating skill, knowledge, and decision-making to perform independently and supervise others.
Advanced / Managerial Courses (e.g. Rigging Supervisor / Superintendent, Lifting Engineer / Appointed Person – if included later)	Occupational Competency Certificate	At this level, the learner demonstrates the ability to manage, plan, and verify lifting or scaffolding operations. These certificates are competency-based and align with occupational standards in safety-critical industries.
Operator Equipment Courses (e.g. Mobile / Tower / Lorry Loader Crane, Forklift, EME)	Skill + Competency Certificate (Dual Aspect)	While focused on equipment skill, these trainings assess operator competency — safe, efficient, and compliant operation under variable conditions. Certifications typically indicate “Operator Competency Certificate” or “Certificate of Training & Competence.”

EARTHMOVING EQUIPMENT OPERATOR TRAINING (ALL TYPES)

Is it for me?

The Earthmoving Equipment Operator training is designed to build competent, safety-conscious operators for construction, infrastructure, mining, and heavy earthworks.

Participants receive hands-on practical training combined with theory on safe operation, maintenance, inspection, and hazard management, as per OSHA, ISO, IS standards. This program covers all major categories of earthmoving machinery:

- Wheel Loaders
- Hydraulic Excavators
- Backhoe Loaders
- Motor Graders
- Road Rollers / Compactors
- Dump Trucks / Tippers

Who should attend?

- New or experienced operators
- Construction, Mining & Infrastructure Workers
- Plant & Machinery Technicians
- Maintenance Crew & Site Supervisors

Course content

CORE MODULES (COMMON FOR ALL EQUIPMENT)

This 8-module core curriculum provides foundational safety and operational training across all classifications of earthmoving machinery. It covers equipment controls, hydraulic systems, site risk assessments, and standard hand signals, alongside daily pre-operational inspections and routine mechanical maintenance. Additionally, operators learn critical techniques for managing vehicle stability, slope navigation, rollover prevention, and emergency incident handling before completing a supervised practical field assessment.

EQUIPMENT-SPECIFIC MODULES

Excavator Operator: Covers trenching, benching, bucket selection, swing radius control, slope stability, and safe digging near underground utilities.

Wheel Loader Operator: Teaches material handling, stockpiling, bucket crowding or leveling, and safe loading techniques on slopes and tight spaces.

Backhoe Loader Operator: Focuses on dual operation (front loader and rear excavator), digging, backfilling, machine stability, and road transit movement.

Motor Grader Operator: Delivers precision training on blade controls, grading, cross-slope setups, ditch cutting, and road-base finishing techniques.

Road Roller / Compactor Operator:

Explains vibratory, tandem, and pneumatic rollers alongside soil/asphalt compaction methods, frequency settings, and drum overlap patterns.

Dump Truck / Tipper Operator: Covers loading coordination with excavators, safe reversing protocols, dumping procedures, slope operations, and load balance stability.

What will I learn?

Participants completing this course will be able to:

- Identify machine components and functions
- Conduct pre-start inspections and safety checks
- Operate various earthmoving machines safely and efficiently
- Understand load, stability, and ground conditions
- Follow excavation, grading, and compaction procedures
- Perform basic maintenance and troubleshooting
- Apply safety, signaling, and site communication protocols
- Prevent accidents, rollovers, and equipment damage

Duration

Forklift Operator: 3 Days

Telehandler Operator: 4 Days

Certification

Certificate of participation

Prerequisite experience

No Experience / at least 6 Months exp is an added advantage



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