



ACE Winches



ACE Winch Academy

BRINGING EXCELLENCE TO THE WORKPLACE

www.ace-winch.com



The total solution provider

ACE Winches is a global leader in the design, manufacture and hire of lifting, pulling and deploying solutions and the provision of associated hire personnel for the oil and gas, marine, decommissioning, civil engineering and renewable energy markets.

ACE Winches is the expert partner to manage the total project solution from concept design through to manufacture, testing, installation, commissioning, operation, training and ongoing client support.

ACE Winches have delivered products and services to over 50 countries across all continents and continue to lead industry standards for quality and reliability.

ACE Winches offers its clients bespoke tailor made solutions through six divisions

ACE ENGINEERING



ACE MANUFACTURING



ACE HIRE EQUIPMENT



ACE HIRE PERSONNEL



ACE SERVICES



ACE WINCH ACADEMY





ACE WINCH ACADEMY

Our Winch Academy provides training for all aspects of winch and spooling operations, as well as a variety of associated training programmes and competence management systems, for both clients and ACE Winches' employees.

Training frameworks are available with specific focus on developing competency to ensure safe-deployment, management and operation of winches and deck machinery. Our Winch Academy offers a series of core courses and bespoke services to meet clients' needs, all of which can be delivered at the ACE Winch Academy or at clients' operational site.

- ACE Manual Handling
- ACE Abrasive Wheels Awareness
- ACE Lifting Equipment Inspection
- ACE Wire Rope Socketing
- ACE Winch Familiarisation
- ACE Winch Awareness
- ACE Winch Operator
- ACE Spooling Operator
- ACE Standard Hydraulic Component Familiarisation
- ACE Overhead Gantry Crane
- ACE Lift Planning & Load Hazard Awareness
- ACE Working at Height
- ACE Wire Rope Examiner/Inspector



How can we deliver your training needs?

WINCH SPECIFIC TRAINING

The Winch Academy has developed a number of training programmes specifically designed to educate personnel about the safe operation and maintenance of winch equipment.

We provide expert trainers and assessors who have first-hand experience of the industry and deliver theory and practice to the highest standard.

Our winch specific courses focus on the competent and safe deployment, management and operation of winches, enabling enhanced client performance.

TRAINING DEVELOPMENT

In addition to the winch specific courses available, the ACE Winch Academy cover a wide variety of topics - such as Abrasive Wheels, Overhead Gantry Crane, Working at Height and Wire Rope Inspection.

We tailor our training to meet our client's precise requirements for both onshore and offshore working environments.

COMPETENCE

The Winch Operator and Winch Technician competence management system is modelled on the International Marine Contractors Association (IMCA) Competence Assurance and Assessment schemes, recognised internationally across the industry.

The Winch Academy can also assist with the development of competence schemes in a format suitable to individual client requirements across a wide range of disciplines. We can provide additional assessment and verification of staff portfolios, either as part of a full scheme development or simply in a supporting role to existing company competence schemes.

All candidates will be assessed at the end of the training courses by completing a short answer/multiple choice paper to demonstrate knowledge retention across the course.

It is recommended that all programmes are refreshed every three years.



Course Descriptions

Manual Handling

Aims & Objectives:

This programme provides a thorough understanding of methods, to minimise the risk of injury to themselves and others, by increasing awareness of potential manual handling hazards and their outcomes.

Entry Requirements:

None. This course is suitable for both experienced and non-experienced personnel.

Course Content:

The course takes four hours to complete, and covers the theoretical and practical topics:

- Definition of a "manual handling" task
- Understanding the regulatory requirements for manual handling
- Awareness of the injuries which can result from poor manual handling technique
- Correct procedures for carrying out a manual handling risk assessment
- Stopping any unsafe manual handling operations
- Practical training in lifting and moving a variety of equipment

Abrasive Wheels Awareness

Aims & Objectives:

This course is suitable for all personnel who select, mount, specify or use abrasive wheels as defined in the PUWER Regulations 1998.

The course enables and encourages delegates to work safely with abrasive wheels and associated equipment by promoting awareness of the related dangers and hazards.

Abrasive wheel regulations are part of the Provision and Use of Work Equipment Regulations 1998. Therefore, it is a legal requirement that all staff using abrasive wheels receive adequate training in the safe use of the equipment.

Entry Requirements:

None. This course is suitable for both experienced and non-experienced personnel.

Course Content:

The programme will cover:

- An overview of the relevant legislative regulations
- Hazards and risks that could arise from the use of abrasive wheels and the precautions to be observed
- Methods of marking abrasive wheels with type, size and maximum operating speed
- How to store, handle and transport abrasive wheels
- How to inspect and test abrasive wheels for damage
- The functions of all components used with abrasive wheels
- The proper method of dressing an abrasive wheel
- The correct adjustment of the work rest on the pedestal or bench grinding machines
- The use of suitable PPE and equipment guards

Course Descriptions

Lifting Equipment Inspection

Aims & Objectives:

This two day training programme is designed to give delegates a detailed understanding of all aspects lifting equipment inspection.

The programme will teach the statutory requirements for inspection, rejection and exporting of lifting gear in service and will provide some practical advice that will enable attendees to carry out lifting gear inspections confidently.

Entry Requirements:

None. This course is suitable for both experienced and non-experienced personnel.

Course Content:

Following completion of the course, the candidates will have a working knowledge of:

- Legislation, regulations and standards governing the use of lifting equipment, including British, European and US legislation, Health & Safety at Work Act, and Lifting Operations and Lifting Equipment Regulations 1998
- Identification and selection of the necessary sockets, tools and equipment required to complete a socketing operation
- Lifting equipment definitions and terminology
- Requirements of an inspection, declaration of conformity and reports of thorough examination
- The different materials used in the manufacture of lifting equipment, and the different stress and strains that can occur
- Lifting equipment components including: chain slings, textile slings, steel wire rope and slings, shackles, eyebolts etc.
- Various methods of testing lifting methods
- The ability to carry out a thorough examination of various items of lifting equipment and create a report

Wire Rope Socketing

Aims & Objectives:

This two day training programme is aimed at those involved in the maintenance and socketing of wire ropes.

The programme will provide delegates with a thorough understanding of the legal requirements, safe working practices and practical aspects of resin socketing and wire ropes, with particular emphasis on the practical skills involved in wire rope socketing.

Entry Requirements:

None. This course is suitable for both experienced and non-experienced personnel.

Course Content:

The course, which is a mix of both theory and practical training, will cover:

- Identification of various types of socketing applications
- Identification and selection of the necessary sockets, tools and equipment required to complete a socketing operation
- Preparation of the equipment for socketing
- Measurement of adequate quantities of resin
- Mixture of resin to the correct quantities
- Complete procedure for successful resin socketing operation using correct methods and processes

Course Descriptions

Winch Familiarisation

Aims & Objectives:

This half day training programme is designed to develop an understanding of winches and associated equipment, at an elementary level.

The course is more suited to personnel who are not directly involved in the winch operation, but require a basic understanding of a winch and its application.

Entry Requirements:

None. This course is suitable for both experienced and non-experienced personnel.

Course Content:

This programme introduces personnel to winches and associated equipment and focuses on:

- Describing a winch and its function
- Reviewing the types of winches available and where they are used
- Reviewing the power supply required for a winch package
- Describing the general components of a winch package

Winch Awareness

Aims & Objectives:

This two day training programme provides candidates with an understanding of winches and associated ancillary equipment.

Following completion of the course, candidates will have a detailed understanding of safe winch operations for both onshore and offshore applications.

The programme is most suitable for personnel responsible for safe winch operations including Managers, Supervisors and those who act as Technical Authority.

Entry Requirements:

None. This course is suitable for both experienced and non-experienced personnel.

Course Content:

The programme will cover:

- Composition and operation theory of winch operations and winch ancillary equipment
- Understanding of HSEQ requirements, legislation, and codes of practice which govern winch operations, both onshore and offshore
- Description of the safe operation of winch equipment and safe systems of work
- Description of various winch types and their key features with specific reference to client equipment
- Understanding basic principles of winch hydraulic systems and both electrical and mechanical prime movers
- Understanding and completion of all relevant documentation related to winch operations
- Practical experience setting up and operating a range of winches and ancillary equipment

Course Descriptions

Winch Operator

Aims & Objectives:

This four day training programme provides candidates with an understanding of winches and associated ancillary equipment to a standard where the candidate can proficiently operate and control the equipment. It covers winch operations in a range of onshore and offshore applications.

It will develop an understanding of safe operations regarding winches and ancillary equipment and provide practical training of setting-up and operating winch packages, to form the basis for assessment as a Winch Operator:

Entry Requirements:

None. This course is suitable for both experienced and non-experienced personnel.

Course Content:

This programme will cover:

- Construction, composition and operational theory of winch operations and winch ancillary equipment
- Understanding of the HSEQ requirements, legislation and codes of practice which govern winch operations
- Description of safe operation of winch equipment and safe systems of work
- Understanding the impact of a positive personal contribution to safe winch operations
- Description of different winch types and their key features with specific reference to client equipment
- Understanding of the basic principles of winch hydraulic systems and both electrical and mechanical prime movers
- Understanding and completion of all relevant documentation related to winch operations and maintenance
- Practical experience setting up and operating a range of winches and ancillary equipment

Spooling Operator

Aims & Objectives:

This two day training programme will provide the Winch Operator with a working knowledge and understanding of the use of spooling equipment in relation to winch operations.

Entry Requirements:

Completion of ACE Winch Operator Course or demonstratable relevant experience. Logbook or company letter required as evidence.

Course Content:

The programme will focus on the following topics:

- Spooling procedures
- Toolbox talks and risk assessments in relation to spooling operations
- Setting up a spooling machine for operation
- Daily checks on spooling and winch equipment
- Transfer of wire/rope from spooler to winch
- Introduction to the spooling machine, checks, pre-start/daily checks
- Start-up procedures
- Checking equipment prior to reel installation
- Setting up the spooling equipment including locating shaft and loading the reel onto the spool.
- Spooler and winch controls
- Transfer of wire from spooler to winch drum

Course Descriptions

Standard Hydraulic Component Familiarisation

Aims & Objectives:

This one day training programme will introduce and familiarise candidates with the construction and operation of the component parts of a hydraulic system.

This hydraulic training course will cover the fundamental principles of hydraulics, as well as the individual components of the system.

Entry Requirements:

None. This course is suitable for both experienced and non-experienced personnel.

Course Content:

This basic introduction to hydraulics provides candidates with a solid understanding of the equipment used in hydraulic systems, including:

- Understanding of basic hydraulic principles
- Definition of the different pumps, valves and motors used in a hydraulic system
- Identification of the various symbols used in hydraulic circuit drawings
- The importance of hydraulic fluid quality
- Differentiation between open and closed loop hydraulic systems
- Identification of the following equipment items within the system:
 - Vane pump cartridge
 - Relief valve (in parts)
 - Small gear pump parts
 - Piston pump rotating group
 - Small solenoid operated DCV parts
 - Pressure filter and filter cartridge
 - Spin on cartridge
 - Check and flow control valves

12 Lifting. Pulling. Deploying.

Overhead Gantry Crane

Aims & Objectives:

This training programme aims to ensure that successful candidates who complete the theory, practical training and written assessment, will have the basic knowledge and practical skills required to allow the safe operation of an overhead gantry crane.

Entry Requirements:

None. This course is suitable for both experienced and non-experienced personnel.

Course Content:

The course is comprised of practical and theoretical training including:

- Understanding of the requirements of LOLER
- Understanding of the definitions of WLL & SWL
- Knowledge of overhead gantry crane safe operating practice
- Knowledge of the daily/pre-use checks required
- Understanding and operation of the safety features for the overhead gantry crane
- Understanding and demonstration of good load slinging practice
- Safe operation of the overhead gantry crane

Following completion of this programme, candidates will be able to carry out a safe, pre-shift inspection of the equipment and operate the machine safely and correctly in accordance with equipment instructions.

The candidate will also be able to operate the crane safely using the pendant, where applicable, as well as responding to and working with a Slinger/Banksman using recognised hand signal.

Course Descriptions

Lift Planning & Load Hazard Awareness

Aims & Objectives:

This one day training programme has been developed to give an insight into the operation, safety requirements and forces involved when using winches to move loads, and to give an understanding of the regulations and legislation concerned with lifting and the use of equipment in the workplace.

To comply with current legislation, all personnel involved in lifting operations must have the appropriate training and experience. The course contains both theoretical and practical elements, focusing on the changes in dynamic load and the management of change during a winch lifting operation.

Entry Requirements:

None. This course is suitable for both experienced and non-experienced personnel.

Course Content:

This course will cover the following theoretical topics:

- Witness and review of an actual winch lifting operation incident
- Winch terminology
- Risk assessments
- Provision and Use of Work Equipment Regulations 1998 (PUWER)
- Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)
- Lift planning
- Forces and Dynamics

The course will cover the following practical topics:

- Practical Exercise 1 - Lift Planning Exercise
- Toolbox Talks
- Practical Exercise 2 - Complex Lift Planning Exercise
- Management of Change
- Practical Exercise 3 - Complex Lift Planning Exercise

Working at Height

Aims & Objectives:

This one day programme is designed for all personnel required to work at height, and for managers and supervisors who are responsible for those working at height. By the end of the course, attendees will have a broad knowledge of the basic skills and techniques for working at height in line with national standards.

Entry Requirements:

None. This course is suitable for both experienced and non-experienced personnel.

Course Content:

The programme will focus on the following topics:

- Introduction to working at height, current legislation and guidelines
- Performance criteria, plan and co-ordinate own work, adopting safe working practices
- Practical activities include:
 - Ladder safety, selection, inspection and use
 - Donning/doffing equipment
 - Anchor point selection and traversing
 - Simple ascending/descending
 - Passing obstacles
 - Work position and simple rescue techniques
 - Inspection and storage of equipment
 - Safety equipment, identifying suitable anchor points, safe routes and safety hazards

All activities will be conducted under 5 metres in height

Course Descriptions

Wire Rope Examiner/Inspector

Aims & Objectives:

This two day training programme is aimed at personnel who have a working knowledge of wire ropes and involvement in the inspection and/or safe use of wire ropes.

Entry Requirements:

None. This course is suitable for both experienced and non-experienced personnel.

Course Content:

This course will focus on the following areas:

- History of wire rope and the international standards that apply
- Rope design and manufacturing
- Wire rope discard criteria
- Inspection procedures - how and where to examine rope
- Practical inspection of wire rope in use
- How to report the results of examination

SAFETY AND RESPONSIBILITY

Our number one priority is Health, Safety, Environment and Quality. With robust management systems in place and a deep rooted culture of safety and responsibility, we are compliant with the following safety standards:

QUALITY

BS EN ISO 9001:2015 Quality Management

Our comprehensive, co-ordinated quality management system demonstrates commitment to continual improvement

ENVIRONMENTAL RESPONSIBILITY

ISO 14001:2015 Environmental Management

We are compliant with environmental regulations and recognised industry standards, continually seeking to protect and enhance the natural environment. We promote environmental practices to assist in long term sustainability.

HEALTH AND SAFETY

ISO 45001:2018 Occupational Health and Safety Management

Designed to improve employee safety, reduce workplace risks and create better, safer working conditions.



Accreditations

Since 2013, ACE Winches is a Lifting Equipment Engineers Association (LEEA) accredited centre for delivery of training programmes.

LEEA is a highly respected representative body involved in promoting the highest technical and safety standards worldwide.

Satisfactory completion of an ACE Winches' training programme and assessment will lead to the award of an accredited course attendance certificate by LEEA.



ACCREDITED TRAINING PROGRAMMES:

LEEA Accredited Centre

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COMPETENCE ASSESSMENT AND ASSURANCE:

- ACE Scheme Development and Support
- ACE Competence Assessment
- ACE Portfolio Verification

CURRENTLY UNDER DEVELOPMENT:

- ACE Working Safely with Hydraulic Hoses & Connectors
- ACE Reel Drive System Operation & Maintenance
- ACE Linear Winch Operator

Lifting.
Pulling.
Deploying.



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