



Qualification Specification

Pool Plant Operations

This qualification is regulated by Ofqual (England) , Qualifications Wales (QW) and CCEA (Northern Ireland)

STA Level 3 Award in Pool Plant Operations

Qualification Number: 600/6015/3

Credit Value: 6 Credits

Unit Structure

This qualification consists of 3 mandatory units

Unit Title	Code	Credit Value	Unit Level	GLH
Swimming Pool Water Testing	Y/503/0740	1	2	4
Principles of Swimming Pool & Spa Water Treatment	R/504/0179	1	2	4
Operating a Swimming Pool Plant	F/503/0988	4	3	25

Total Qualification Time

33 Hours

QW Designation No:

Swimming Pool Water Testing	C00/0453/9
Principles of Swimming Pool & Spa Water Treatment	C00/0453/8
Operate a Swimming Pool Plant	C00/0454/0

Introduction:

The STA Level 3 Award in Pool Plant Operations enables candidates to manage and maintain a Swimming Pool, Spa and interactive play features operation via receiving the training necessary to reflect the most up to date requirements and standards for Pool Plant operation.

Qualification Objective:

Upon completion of the course candidates will be fully trained to operate safe bathing conditions for swimmers.

Target Learners

This qualification is relevant to those responsible for pool plant operations, maintaining plant rooms, ensuring safe bather conditions and water testing. Some examples of sites where this qualification is required include:

- Swimming Pools
 - Sports and Leisure Centres
 - Health Clubs
 - Spas (Including those displayed in retail outlets / distributors / installers
 - Hotels
 - Holiday Parks
 - Hydrotherapy Pools
 - Schools
 - Parks
 - Lidos
 - Interactive water features
 - Swim schools
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Progression

Following completion of this qualification learners can further their education in other leisure and recreation related qualifications. Gain experience / continue employment in leisure management, maintenance or train to become pool plant tutors.

Industry Standards

The Pool Plant Operations qualification follows principles set out in the Pool Water Treatment Advisory Group's (PWTAG) code of practice and publication 'Swimming Pool Water'. It follows a range of Health and Safety guidance documents including:

- HSG 179
- HSG 274
- HSG 282

Entry Requirements

Learners must be 18 years of age or above on the first day of the course

Grading Format

Pass / Fail

Assessment Methods

This qualification is tutor assessed through the completion of portfolio worksheets, a practical water test and a routine maintenance practical assessment.

Validity of Qualification

This qualification is valid for 5 years

Tutor / Assessor Requirements

All tutors must have the skills, knowledge and experience to be able to teach and demonstrate the subject.

Each tutor must be approved by Safety Training Awards and provide evidence of a relevant in date pool plant operations qualification or acceptable recognised equivalent.

IQA Requirements

Internal Quality Assurers (IQAs) of this qualification must have knowledge and competency in Pool Plant Operations as well as knowledge and competency in internal quality assurance.

An IQA must hold:

1. Minimum of STA Pool Plant Operations (or acceptable equivalent)
2. Internal quality assurance qualification

Note: IQAs cannot quality assure a course for which they were the Tutor and/or Assessor.

Resource Requirements

Venue:

- Room size: Adequate space for all learners on the course to undertake theory and practical work
- Seats: One per learner
- Writing surfaces - Adequate for each learner to make notes
- Toilets: Separate facilities for male and female candidates
- Ventilation - Should be adequate
- Lighting: Should be suitable for reading, combining a mixture of natural and artificial light
- Heating - Should maintain a 'shirt sleeve' environment, minimum temperature 16oC
- Access / Exits: Should be safe, well lit and cater for people with special needs
- Cleanliness: Maintain a clean, tidy and hygienic environment
- Noise: Consider whether there is noise that may distract learners from training

Location:

Where possible the lecture venue should be in close proximity to the pool plant

Equipment:

Electrical items: When projectors and other electrical items are used, the equipment must be checked to ensure it is in safe working order. It is important to be aware of trip hazards associated with electric cables in order to reduce such risks.

Minimum requirements

- Laptop
- PowerPoint presentation
- Projector
- Pool testing equipment: Photometer or comparator - ratio 1:8 (1 to every 8 candidates on the course)

Recommended

- Flipchart
- Dry wipe board

Unit Specification

Unit Title	Swimming Pool Water Testing
Unit Aim	To have the basic knowledge and skills necessary to competently test swimming pool & spa water and to provide a basic understanding of the outcomes of those tests.
Learning Outcomes	Assessment Criteria
1. Know about swimming pool water tests	1.1 Explain the importance of maintaining the quality of swimming pool water 1.2 Describe the range of tests that are used to judge the quality of swimming pool water, including: <ul style="list-style-type: none"> • Sensory inspections (for example, clarity, scum lines and foaming) • pH • Free disinfectant levels • Combined disinfectant levels • Microbiological 1.3 Explain why it is important to ensure test equipment is free of contamination 1.4 Describe an active leisure organisation's standard operating procedures for taking water samples 1.5 Explain the importance of following procedures to record the results of swimming pool water tests 1.6 Describe what an active leisure member of staff should do if they identify hazardous contaminants (for example, faeces or vomit) in the water
2. Be able to carry out swimming pool water testing	2.1 Take water samples <ul style="list-style-type: none"> • Carry out the following pool water tests • pH • Free disinfectant levels • Combined disinfectant levels 2.2 Microbiological 2.3 Record the results of pool water tests

Unit Specification

Unit Title	Principles of Swimming Pool & Spa Water Treatment	
Unit Aim	To enable candidates to understand the basic principles of the treatment of swimming pool water. It provides candidates with the knowledge and skills to competently test water and maintain safe bathing conditions.	
Learning Outcomes	Assessment Criteria	
1. Understand the responsibilities of pool & spa water operators to provide a safe environment	1.1	Describe the operators' legal responsibility for providing a safe bathing environment
	1.2	State the ways in which operators can meet these legal requirements
2. Understand the causes of water contamination	2.1	List the various causes of contamination
3. Understand the key principles of a pool & spa water circulation system	3.1	List the main components of the circulation system
	3.2	Understand the role of these main components and the effect they have on maintaining safe bathing water
4. Understand the importance of bather swim hygiene and good cleanliness within the Pool & Spa Environment	4.1	List the advantages of good pre swim hygiene
	4.2	List ways to minimize transfer of physical pollution around the pool surrounds
5. Understand the key principles of Pool & Spa Water Disinfectants	5.1	Explain reasons why we disinfect Pool & Spa waters.
	5.2	Describe the different chlorine based disinfectants
	5.3	Describe the recommended disinfectant and pH ranges
5. Understand principles of COSHH	6.1	Identify key principles of COSHH

Unit Specification

Unit Title	Operating a Swimming Pool Plant
Unit Aim	To equip candidates with the theoretical knowledge and understanding to manage and maintain a Swimming Pool, Spa and interactive play features plant room operation on a regular basis. Candidates to be fully trained on the theory behind operating safe bathing conditions.
Learning Outcomes	Assessment Criteria
1. Understand the systems used to maintain the quality of swimming pool water	1.1 Describe the systems used in swimming pools for: <ul style="list-style-type: none"> • Circulation • Filtration • Disinfection • Heating • Coagulation • Pressure • Measuring Control • Chemical balance
2. Understand how to monitor and maintain swimming pool plant	2.1 Explain the tests and checks that need to be carried out on swimming pool plant 2.2 Demonstrate how to record the results of the checks and tests carried out on swimming pool plant 2.3 Describe the significance of pool pressure readings in the filtration process 2.4 Describe a range of possible faults with swimming pool plant that may cause variations from recommended conditions, and how to respond to these 2.5 Describe routine (daily/weekly) maintenance procedures to swimming pool plant
3. Understand how to maintain the quality of swimming pool water	3.1 Explain the importance of maintaining the quality and temperature of swimming pool water 3.2 Describe the checks and tests that need to be carried out to maintain the quality of swimming pool water and how to carry these out correctly 3.3 Describe how to record the results of tests and checks on swimming pool water 3.4 Explain how to respond to results that are outside of recommended ranges
4. Understand how to work safely with the chemicals used in swimming pool plant operations	4.1 Explain the purpose of a range of chemicals used in the treatment of swimming pool water 4.2 Describe the hazards involved in working with swimming pool chemicals, and their related risks 4.3 Describe the legal requirements and best practice guidelines that cover the types of chemicals used in the operation of swimming pool plant 4.4 Explain how to store, handle and use swimming pool chemicals safely, including the use of personal protective equipment
5. Be able to carry out routine (daily/weekly) maintenance procedures to swimming pool plant	5.1 Carry out a backwash of pool filtration systems in line with manufacturer's instructions and local written procedures 5.2 Clean pump strainer baskets in line with manufacturer's instructions and local written procedures 5.3 Complete all records relating to the achievement daily/weekly maintenance procedures