



## BIIAB Level 2 Certificate in Cellar Service Installation and Maintenance

England – 501/1532/7

Version 2.1

## About Us

BIIAB Qualification Limited is part of Skills and Education Group, a charitable organisation that champions education and skills-oriented organisations, providers and learners, making real change locally, nationally and internationally.

BIIAB Qualifications Limited has an on-line registration system to help customers register learners on its qualifications, units and exams. In addition it provides features to view exam results, invoices, mark sheets and other information about learners already registered.

## Sources of Additional Information

---

The BIIAB Qualifications Limited website [www.biiab.co.uk](http://www.biiab.co.uk) provides access to a wide variety of information.

## Copyright

---

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publishers.

This document may be copied by approved centres for the purpose of assessing learners. It may also be copied by learners for their own use.

Version	Date	Details of Change
2.0	November 2017	Update handbook throughout to remove reference to "QCF"
		Updated RoC with TQT figures
2.1	March 2023	Reformatted into new branding

## Contents

1. About the BIIAB Level 2 Certificate in Cellar Service Installation and Maintenance	5
2. Objective and Purpose of this Qualification.....	5
3. About this Guidance .....	5
4. BIIAB Qualifications Limited Customer Service .....	6
5. What are Rules of Combination (ROC)? .....	6
6. BIIAB Level 2 Certificate in Cellar Service Installation and Maintenance Rules of Combination (ROC) and Structure.....	7
7. Age Restriction .....	7
8. Entry Requirements and Progression.....	8
9. Assessment .....	8
10. Initial Assessment and Induction .....	10
11. Resources.....	10
12. Design and Delivery .....	10
13. Format of Units.....	11
14. Initial Registration.....	12
15. Qualification Review and Feedback.....	13
16. Mandatory Units .....	13

This is a live document and as such will be updated when required. It is the responsibility of the approved centre to ensure the most up-to-date version of the Qualification Specification is in use. Any amendments will be published on our website and centres are encouraged to check this site regularly.



### Qualification Summary

BIIAB Level 2 Certificate in Cellar Service Installation and Maintenance	
<b>Qualification Purpose</b>	Obtain and then demonstrate the knowledge related to safe practices relating to the installation of dispense equipment at Level 2.
<b>Age Range</b>	<b>Pre 16</b> <input type="checkbox"/> <b>16-18</b> <input checked="" type="checkbox"/> <b>18+</b> <input type="checkbox"/> <b>19+</b> <input checked="" type="checkbox"/>
<b>Regulation</b>	The above qualification is regulated by Ofqual.
<b>Assessment</b>	<ul style="list-style-type: none"> <li>Multiple-choice exam</li> </ul>
<b>Type of Funding Available</b>	See FaLa (Find a Learning Aim)
<b>Qualification/Unit Fee</b>	See BIIAB Qualifications Limited web site for current fees and charges
<b>Grading</b>	Pass/Fail To achieve a Pass grade, learners <b>must</b> achieve all the Learning Outcomes and Assessment Criteria in all the units completed
<b>Operational Start Date</b>	01/09/2010
<b>Review Date</b>	30/06/2025
<b>Operational End Date</b>	
<b>Certification End Date</b>	
<b>Guided Learning (GL)</b>	296 hours
<b>Total Qualification Time (TQT)</b>	351 hours
<b>BIIAB Qualifications Limited Sector</b>	Hospitality and Catering
<b>Ofqual SSA Sector</b>	07.4 Hospitality and Catering
<b>Support from Trade Associations</b>	
<b>Administering Office</b>	See BIIAB Qualifications Limited web site

## 1. About the BIIAB Level 2 Certificate in Cellar Service Installation and Maintenance

BIIAB Qualifications Limited is regulated to deliver this qualification by Ofqual in England. The qualification has a unique Qualification Number (QN) which is shown below. Each unit within the qualification will also have a regulatory Unit Reference Number (URN).

The QN code will be displayed on the final certificate for the qualification.

Qualification Title	Qualification Number (QN)
<b>BIIAB Level 2 Certificate in Cellar Service Installation and Maintenance</b>	501/1532/7

## 2. Objective and Purpose of this Qualification

This qualification has been designed to allow learners to obtain and then demonstrate the knowledge related to safe practices relating to the installation of dispense equipment at Level 2.

The primary purpose of the qualification is to progress to the next level of vocational learning by preparing for further learning or training by developing knowledge and/or skills in a subject area. However, employers can also rely on the knowledge provided as meeting nationally recognised standards at this level as such the sub-purpose is to develop knowledge and/or skills in a subject area.

Due to constant Regulatory, policy and funding changes users are advised to check this qualification has been placed in the relevant Apprenticeship Framework and / or is funded for use with individual learners before making registrations. If you are unsure about the qualifications status please contact BIIAB Qualifications Limited.

## 3. About this Guidance

This guidance has been developed to provide guidance for learners, assessors and quality assurers undertaking, delivering, or quality assuring this qualification.

The purpose of the guidance is to provide the majority of the key information that may be needed to prepare for, and help support, the successful delivery of the qualification, in one place.

If this guidance is updated, centres will be notified by BIIAB Qualifications Limited.

## 4. BIIAB Qualifications Limited Customer Service

BIIAB Qualifications Limited is committed to giving the highest possible levels of customer service. Our Service Level Agreement is available via [www.biiab.co.uk](http://www.biiab.co.uk)

Our Customer Service team can be contacted between the hours of 0900 and 1700 Monday to Friday by using the contact details below, or outside those hours, by leaving a message on our voicemail service.

Customer Support Contact Details: 0115 854 1620

Email: [CustomerSupport@biiab.co.uk](mailto:CustomerSupport@biiab.co.uk)

Our Customer Support team will be happy to assist with any administration related enquiries you may have. For example:

- registration and certification enquiries
- re-certification issues
- centres available in the local area
- appeals
- whistleblowing

## 5. What are Rules of Combination (ROC)?

Under the Regulatory Qualifications Framework (RQF), qualifications can be made up of a combination of mandatory and/or optional units. The units and credits required to complete a qualification are set out by the rules of combination (RoC). The RoC allows for flexibility and transferability.

The ROC will specify:

- the total credit value of the qualification
- the amount of credit that must be achieved within specific groups of units (e.g. Mandatory, Optional Unit, and Optional groups)
- the minimum credit which must be achieved at the level or above the level of the qualification
- the Total Qualification Time (TQT)
- the title, Unit Regulation Number and BIIAB Qualifications Limited Unit number for each unit, alongside its level, credit, and Guided Learning Hours (GLH)
- any barred units (units that cannot be taken together as part of the qualification)

When choosing the appropriate route for a learner or group of learners, it is the responsibility of the centre to ensure the rules of combination are adhered to.

## 6. BIIAB Level 2 Certificate in Cellar Service Installation and Maintenance Rules of Combination (ROC) and Structure

To achieve the BIIAB Level 2 Certificate in Cellar Service Installation and Maintenance, learners **must** gain a **total of 35** credits. This **must** consist of:

- **Minimum total** credit: **35**
- A **minimum of 35** credits **must** be achieved through the completion of units at **Level 2** and above.
- Minimum Guided Learning Hours: **269 hours**
- Total Qualification Time: **351 hours**

This qualification has been developed based upon industry feedback as to the fundamental knowledge required to work in the sector at this level.

Listed below are the qualification units.

### Mandatory Unit Group A

Unit No.	URN	Unit Title	Level	Credit	GLH	Assessment Method
HSSC	T/600/5337	Health and Safety And Survey Of The Cellar	2	4	31	Multiple-choice exam
PBBDE	T/600/5338	Properties Of Beer And Beer Dispense Equipment	2	3	25	Multiple-choice exam
CSE	F/600/5339	Cellar Service Equipment	2	11	97	Multiple-choice exam
SI	T/600/5340	Service Installation	2	10	86	Multiple-choice exam
DiPS	A/600/5341	Dispenses Pressure Systems	2	7	60	Multiple-choice exam

## 7. Age Restriction

The qualification in this handbook is appropriate for use in the following age ranges:

- 16 - 18
- 19+

## 8. Entry Requirements and Progression

There are no entry requirements for this qualification. However, learners must be assessed to ensure they have a reasonable chance of achievement and will be able to generate the required evidence.

The qualification is designed to equip learners with the knowledge related to safe practices relating to the installation of dispense equipment at Level 2. The recommended progression route is to the BIIAB Level 3 Award in Hospitality Business Management. It also will allow for a number of progression routes to into other areas of learning and employment.

- BIIAB Level 3 Award in Hospitality Business Management 600/4570/X

## 9. Assessment

### Overview of assessment strategy

The Assessment Strategy has been designed by BIIAB, in conjunction with an expert panel, and a steering group. All BIIAB approved training centres and their assessment must adhere to the designed assessment strategy for this qualification. The qualification contains one knowledge unit and one competency-based unit. The knowledge unit is externally set and marked by BIIAB. This examination comprises of 20 Multiple Choice questions. Assessments provided by BIIAB will ensure that effective learning has taken place and that learners have the opportunity to:

- meet the assessment criteria
- achieve the learning outcomes.

### Assessment process

Assessments will be accessible and will produce results that are valid, reliable, transparent and fair. BIIAB Qualifications Limited will ensure that the result of each assessment taken by a learner in relation to a qualification reflects the level of attainment demonstrated by that learner in the assessment, and will be based upon the achievement of all of the specified learning outcomes.

Details of the ordering process, assessment documentation, invigilation requirements to centres and the documentation to be completed can be found in the Examination and Invigilation Regulations for the Administration of BIIAB Qualifications document.

BIIAB Qualifications Limited will make every effort to ensure that it allows for assessment to:



- Be up to date and current
- Reflect the context from which the learner has been taught
- Be flexible to learner needs

Assessment is the process used to judge the competence, of a learner, against set standards.

The assessor is the person who is responsible for determining learners' competence. The assessor may be a work place supervisor or an external person who is trained and qualified, or working towards a qualification relevant to the assessor role.

Assessors base their judgement on performance and decide how it compares to the national standard. The assessor will also ask questions based on the knowledge required to do the work, to ascertain the knowledge and understanding of the learner.

When the required units have been completed and the assessor is satisfied that the learner has met the national standard, a recommendation for a certificate will be made.

An Internal Quality Assurer (IQA) is responsible for the quality assurance of the qualifications within the training organisation and will provide advice, guidance and support to the assessors. IQAs also ensure that the assessors apply the standards consistently and fairly. The IQA will review the portfolio of evidence during the assessment process.

An External Quality Assurer (EQA), who is appointed by BIIAB, will quality assure the assessment and internal quality assurance decisions involved in the development of the portfolio. The EQA will quality assure the qualification process, which ensures that certification of the qualification is reliable, consistent and to the national standard, by checking the consistency of assessments made by the training provider, and across training providers.

## Appeals

If learners are dissatisfied with an assessment outcome, they have the right to appeal. The **main** reasons for an appeal are likely to be:

- learners do **not** understand why they are **not** yet regarded as having sufficient knowledge
- learners believe they are competent and that they have been misjudged

BIIAB Qualifications Limited expects most appeals from learners to be resolved within the centre. BIIAB Qualifications Limited will only consider a learner's appeal after the centre's internal appeals procedure has been fully exhausted.

For full details of the BIIAB Qualifications Limited's appeals procedure please refer to <https://biiab.co.uk/policies-and-procedures/>

## 10. Initial Assessment and Induction

Prior to the start of any programme it is recommended that centres should make an initial assessment of each learner. This is to ensure that the learners are entered for an appropriate type and level of qualification.

The initial assessment should identify the specific training needs that the learner has, and the support and guidance that they may require when working towards their qualification.

The centre must also identify any units the learner has already completed, or credits they have accumulated, relevant to the qualification.

BIIAB Qualifications Limited suggests that centres provide an induction programme to ensure the learner fully understands the requirements of the qualification they will work towards, their responsibilities as a learner, and the responsibilities of the centre.

## 11. Resources

BIIAB Qualifications Limited provides the following additional resources for this qualification:

- Externally set assessments: Multiple-choice Exam

Please contact BIIAB Qualifications Limited for further information.

### Access to the Units

Units form the qualification and the standard that **must** be achieved in order to be awarded each unit. This is covered within the learning outcomes, assessment criteria and the indicative content that form part of the delivery. BIIAB Qualifications Limited includes the mandatory units within this guidance document.

## 12. Design and Delivery

Centres must refer to the units that form the qualification and the standard that must be achieved in order to be awarded each unit. This is covered within the learning outcomes and assessment criteria that forms part of the delivery.

Each unit within this qualification has been allocated a number of Guided Learning hours (GL).

This can include activities such as training/class room based sessions, tutorials, supervised study or supervised 'on-the-job' learning and face-to-face or other pre-

arranged 1:1 teaching sessions (e.g. simultaneous electronic communication such as webcam contact or internet messaging). It could also include time spent undertaking assessments.

The qualification will be assigned Total Qualification Time (TQT), which, as well as GL, will include the estimated number of hours spent in preparation, study or any other supervised learning, study or assessment for an average learner.

When planning how to deliver the qualification it is important to refer to this definition.

BIIAB Qualifications Limited will not prescribe how the qualification is delivered, but centres **must** ensure the delivery chosen meets their learners' needs.

### 13. Format of Units

All units within this qualification will be presented in a standard format that is consistent with the format for all units of assessment. The format will give tutors and learners guidance as to the requirements of the unit for successful completion. Each unit within this guidance document will be in the format below:

#### **Unit Title**

This will be shown as it appears on the Register of Regulated Qualifications (<http://register.ofqual.gov.uk>).

#### **Unit Number / Unit Reference Number (URN)**

The Unit Reference Number is the unique code that the unit is given by the Regulator. This unit will be referenced on the final qualification certificate. The same unique code for the unit applies in whichever qualification the unit is included within. BIIAB Qualifications Limited also assign unique unit numbers which is consistent when the unit is used in multiple BIIAB qualifications.

#### **Level**

This identifies the level of demand for the unit, but may be a different level to that of the overall qualification. The level of the units will be set according to National Occupational Standards and the level descriptors.

#### **Credit**

When a whole unit is completed the learner will achieve credits specified by the number of hours' learning time it will take an average learner to complete the unit including the assessment.

**Guided Learning Hours (GLH)**

The required number of hours that learning should take place under the immediate guidance or supervision of a lecturer, supervisor, tutor or other appropriate provider of education or training.

**Total Qualification Time (TQT)**

Total Qualification Time (TQT) is defined by Ofqual as the number of notional hours which represents an estimate of the total amount of time that could reasonably be expected to be required in order for a Learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of a qualification. TQT is comprised of the following two elements:

- The number of hours which an awarding organisation has assigned to a qualification for Guided Learning, and
- An estimate of the number of hours a Learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place as directed by – but, unlike Guided Learning, not under the Immediate Guidance or Supervision of – a lecturer, supervisor, tutor or other appropriate provider of education or training.

TQT is always assigned to the qualification however a similar calculation may on occasions also be assigned to a unit.

**Learning Outcomes and Assessment Criteria**

Learning Outcomes are what the learner is expected to know, understand or be able to do upon successful completion of the unit.

Assessment Criteria are descriptions of the requirements that a learner is expected to meet in order to demonstrate that a learning outcome has been achieved. There are usually multiple assessment criteria for each Learning Outcome.

**14. Initial Registration****Registration and Certification**

Learners should be registered and certificated via BIIAB Qualifications Limited's Customer Management System

**Equal Opportunities and Diversity Policy**

BIIAB Qualifications Limited has in place an equal opportunities policy, a copy can be found at <https://www.biiab.co.uk/policies-and-procedures/>

BIIAB Qualifications Limited is committed to ensure that:

- approved centres operate an equal opportunities policy
- approved centres communicate the policy to staff and learners
- approved centres have an effective complaints and appeals procedure of which both staff and learners are made aware
- approved centres are aware of their responsibilities in providing equality of opportunity, particularly with regard to provision for learners with particular assessment requirements

### **Reasonable Adjustment Policy**

Learners who require reasonable adjustments for their assessments **must** inform their assessor at the beginning of their course of their requirements. BIIAB Qualifications Limited has a reasonable adjustment policy in place, a copy of which is provided to all approved centres and can be found at <https://www.biiab.co.uk/policies-and-procedures/>

## **15. Qualification Review and Feedback**

BIIAB Qualifications Limited is committed to the ongoing review of this qualification to ensure it remains fit for purpose.

This review approach involves the collation of evidence in the form of any information, comments and complaints received from users of this qualification in relation to its development, delivery and award.

BIIAB Qualifications Limited will give due regard to any credible evidence received which suggests that a change in approach to the development, delivery and award of this qualification is required in order to ensure that no adverse effects will result. This qualification will be periodically reviewed and revised to ensure the content remains relevant, assessment approach remains appropriate and that it remains valid and fit for purpose.

## **16. Mandatory Units Group A**

The following units are mandatory for this qualification.



### Health and Safety and Survey of the Cellar

<b>Unit Reference</b>	T/600/5337
<b>BIIAB Reference</b>	HSSC
<b>Level</b>	2
<b>Credit Value</b>	4
<b>Guided Learning (GL)</b>	31
<b>Unit Summary</b>	This unit will provide the learner with an understanding of health and safety and survey of a cellar.
<b>Learning Outcomes (1 to 10)</b> The learner will:	<b>Assessment Criteria (1.1 to 10.2)</b> The learner can:
1. Understand the duties of employers and employees under Health and Safety legislation, and the enforcement of that legislation	1.1 State the duties of employers and employees under the Health and Safety at Work Act 1974  1.2 Identify the key points of the Management of Health and Safety at Work Regulations 1999  1.3 State how Health and Safety legislation is enforced  1.4 State what happens during and following a Health and Safety inspection visit  1.5 State the meaning of commonly used Health and Safety terminology  1.6 State the duties of an employer under the Provision and Use of Work Equipment Regulations 1998 (PUWER)  1.7 State the requirement for first aid provisions
2. Understand the definitions of risk and hazard and the steps in conducting a risk assessment	2.1 State the definitions of a risk and a hazard  2.2 Identify the Health and Safety recommended '5 steps to risk assessment'  2.3 State the hierarchy of risk controls

	2.4 State the duties of employers and employees under the Work at Height Regulations 2005
3. Understand the main types of hazards in a premises and how to deal with them	<p>3.1 Identify housekeeping hazards and state how to prevent them</p> <p>3.2 Identify electrical hazards and state the key areas of the Electricity at Work Regulations</p> <p>3.3 Identify fire hazards and state how to prevent fires</p> <p>3.4 State how to deal with fire</p> <p>3.5 State the legal requirements for the reporting of accidents and injuries in the workplace</p>
4. Understand the duties of employers and employees by the Manual Handling Operations Regulations 1992	<p>4.1 State the duties of employers under the Manual Handling Operations Regulations 1992</p> <p>4.2 State the duties of employees under the Manual Handling Operations Regulations 1992</p>
5. Understand how to work with chemicals and hazards associated with them	<p>5.1 State how chemicals are labelled</p> <p>5.2 State how chemicals enter the body</p> <p>5.3 Identify hazards associated with chemicals</p> <p>5.4 State the key points to observe when working with chemicals</p> <p>5.5 State the steps that must be taken to comply with the Control of Substances Hazardous to Health Regulations 2002 (COSHH)</p>
6. Understand what asbestos is and where it can be found	<p>6.1 State what asbestos is</p> <p>6.2 State where asbestos can be found</p>

	6.3 State the key requirements of the Control of Asbestos Regulations 2006
7. Understand confined spaces risk assessment and the hazards to be found in a confined space	7.1 State the guidelines for conducting a confined spaces risk assessment 7.2 Identify gas and other hazards in a confined space
8. Understand the procedures required to prepare for a cellar survey	8.1 State the importance of checking the works instruction before setting out to conduct a survey 8.2 State how to plan a site survey 8.3 Identify the tools and equipment required to carry out a site survey
9. Understand the procedures for carrying out an in depth site survey and how to deal with any anomalies found	9.1 State the correct procedure on first arriving at a site to conduct a cellar survey 9.2 State how to respond any anomalies found while conducting a site survey 9.3 Identify matters to consider with regard to suitability of cellar, storage and bar area when conducting a cellar survey
10. Identify procedures required on completion of a cellar survey with regard to the completion of documents	10.1 State how to complete a cellar survey form and how to advise the customer 10.2 State the required timescales for the completion of forms and correct procedures for returning completed forms





### Properties of Beer and Beer Dispense Equipment

<b>Unit Reference</b>	A/600/5338
<b>BIIAB Reference</b>	PBBDE
<b>Level</b>	2
<b>Credit Value</b>	3
<b>Guided Learning (GL)</b>	25
<b>Unit Summary</b>	This unit will provide the learner with knowledge of beer and beer dispense equipment.
<b>Learning Outcomes (1 to 5)</b> The learner will:	<b>Assessment Criteria (1.1 to 5.3)</b> The learner can:
1. Understand the basic properties of beer	1.1 State what beer is, the ingredients and materials used to make beer and how each ingredient influences the quality and taste of the beer  1.2 State the characteristic features of the main beer types in the UK  1.3 Identify the main stages in the production of beer and state the purpose of each stage  1.4 State the role of yeast in the brewing of lagers and ales  1.5 State reasons for the use of vertical extractors
2. Understand the key differences between cask and keg beers with respect to processing, storage and dispense	2.1 State the key differences with regard to the processing of cask beer and keg beer  2.2 State which beers are pasteurised and why  2.3 State what is meant by secondary fermentation and which beers it applies to  2.4 State how cask beer should be prepared for sale

	<p>2.5 State the correct storage temperature for beer and how incorrect temperature affects beer quality</p> <p>2.6 State the gases present in the main beer types, the typical amounts and the effect of each gas on beer presentation and dispense</p> <p>2.7 Identify the functional aspects of casks and kegs as beer containers</p> <p>2.8 State basic safety precautions when handling casks and kegs</p>
<p>3. Understand the key faults in beer quality, reasons for these faults and how they can be detected</p>	<p>3.1 Identify the factors which affect the formation and retention of the head on beer including equipment settings and cleaning</p> <p>3.2 Identify signs and likely causes of changes in beer flavour and state how these are affected by cellar conditions and beer type</p> <p>3.3 State the importance of beer colour and how cellar practices may affect clarity</p> <p>3.4 State the reasons why only certain materials can be used in contact with beer</p>
<p>4. Understand the requirements for stock control of beer in the cellar</p>	<p>4.1 State the shelf lives of cask, keg, bottled and canned beers</p> <p>4.2 State the dispense life of cask and keg beers</p>
<p>5. Understand the key aspects of legislation relevant to cellar installations</p>	<p>5.1 State the relevant aspects of the Food Safety Act 1990</p> <p>5.2 State the relevant aspects of the Food Hygiene (England or Scotland or Wales or N. Ireland) Regulations 2006</p> <p>5.3 State the relevant aspects of the Materials and Articles in Contact with Food (England</p>

	or Scotland or Wales or N. Ireland) Regulations 2005
--	---------------------------------------------------------



### Cellar Service Equipment

<b>Unit Reference</b>	F/600/5339
<b>BIIAB Reference</b>	CSE
<b>Level</b>	2
<b>Credit Value</b>	11
<b>Guided Learning (GL)</b>	97
<b>Unit Summary</b>	This unit will provide the learner with knowledge and basic understanding of cellar service equipment.
<b>Learning Outcomes (1 to 10)</b> The learner will:	<b>Assessment Criteria (1.1 to 10.3)</b> The learner can:
1. Understand basic refrigeration, the purpose of coolers and the general principles of their operation	1.1 State the need for cooling 1.2 State the main function of the compressor 1.3 State the main purpose of the condenser 1.4 State the main function of a thermostat 1.5 State why a thermal expansion valve (TEV) / capillary is necessary 1.6 State the main function of the evaporator 1.7 State the main function of the agitator and the water bath pump
2. Be able to identify the common types of coolers, their characteristics and the pros and cons associated with their use	2.1 State the basic features of shelf coolers and the pros and cons associated with their use 2.2 State the basic features of integral/ air cooled remote coolers and the pros and cons associated with their use 2.3 State the basic features of split/water cooled remote coolers and the pros and cons associated with their use 2.4 State the basic features of heat exchangers and the pros and cons associated with their use

	2.5 State how faulty cooling units should be safely disposed of
3. Understand the legal requirements for serving measures of beers, ciders etc and the definition of a measuring instrument and how it is approved for use	<p>3.1 State the legal measures for beers and ciders and the legal tolerance allowed on them</p> <p>3.2 State what is meant by a measuring instrument and how they are approved for use</p>
4. Be able to identify the two types of meters and the differences between them and state their basic operational functions	<p>4.1 State how positive displacement meters operate</p> <p>4.2 State how non-positive displacement meters operate</p> <p>4.3 State the function of the cellar transformer and assess the total electrical load on the system</p>
5. Understand how dispense pumps operate, why they are used and the differences between gas operated and electric pumps	<p>5.1 State the basic function of electric pumps and how they operate</p> <p>5.2 State the basic function of gas operated pumps and how they operate</p>
6. Be able to identify the basic features of a font and understand how to install and maintain a font system	<p>6.1 State the basic function of a font</p> <p>6.2 State the features of a mechanical font system</p> <p>6.3 State the features of an aesthetic font system</p> <p>6.4 State how to install a font</p> <p>6.5 Identify maintenance and troubleshooting tips for fonts and installations</p>
7. Understand how to install beer engines and hand pumps and how these should be maintained and disposed of	<p>7.1 State the factors to consider when fitting beer engines</p> <p>7.2 State how to install pump clips and pump handles</p>

<p>8. Understand the basic method of operation of beer engines, their essential components and actions to rectify common faults</p>	<p>8.1 State the function of the inlet non-return valve and how it works</p> <p>8.2 State the function of the transfer valve across the piston and how it works</p> <p>8.3 State the function of the piston seal and how it works</p> <p>8.4 State the function of the cylinder and how it works</p> <p>8.5 Identify possible causes of and actions to rectify common faults in beer engines</p>
<p>9. Understand how regional variations and brewery preferences determine the most appropriate type of beer engine, spouts and sparklers and situations where cooling jackets and pump assisted beer dispense are useful</p>	<p>9.1 State the basic design and purpose of the beer engine spout</p> <p>9.2 Identify the basic design features of the swan neck and bottom fill spouts and state reasons why each is used</p> <p>9.3 Identify circumstances when an on/off tap may be necessary</p> <p>9.4 State the purpose of sparkler caps</p> <p>9.5 State the purpose of cylinder cooling jackets</p> <p>9.6 Identify circumstances when a pump assisted beer engine may be necessary</p>
<p>10. Understand the features and advantages and disadvantages of the different types and styles of beer engines</p>	<p>10.1 Identify the features and disadvantages of cased beer engines</p> <p>10.2 Identify the features and the advantages of clamp-on beer engines</p> <p>10.3 Identify the features and the advantages of the cylinder-less beer engine</p>

## Service Installation

<b>Unit Reference</b>	T/600/5340
<b>BIIAB Reference</b>	SI
<b>Level</b>	2
<b>Credit Value</b>	10
<b>Guided Learning (GL)</b>	86
<b>Unit Summary</b>	This unit will provide the learner with knowledge and basic understanding of service installation.
<b>Learning Outcomes (1 to 5)</b> The learner will:	<b>Assessment Criteria (1.1 to 5.2)</b> The learner can:
1. Understand the suitability, quality, installation and cleaning process of a python	1.1 State how to determine the python size, specification and number of pipes required  1.2 State how to identify product and coolant lines  1.3 State how to allocate lines  1.4 State how to check and assess uniformity of python length  1.5 State how to check and assess the quality of the python insulation, outer protection and all pipes in the system and the negative impact this can have  1.6 State how to check line formation, the cleanliness of the python and how contamination can affect performance and product quality  1.7 State how to route and clamp the python  1.8 State how to terminate the python  1.9 State how to reseal the python ends  1.10 State how to test the python



<p>2. Understand the basic materials and equipment required to carry out line cleaning safely and effectively, including how to prepare for cleaning and why and how often beer lines need to be cleaned</p>	<p>2.1 State why and how often beer lines need to be cleaned and the basic materials and equipment required for line cleaning</p> <p>2.2 State the basic precautions for line cleaning and how to prepare to clean beer lines</p> <p>2.3 State the correct procedure for carrying out line cleaning and how to leave beer lines which are not to be used immediately</p> <p>2.4 Identify elements of bad practice in line cleaning and why state bad practice has a negative impact on hygiene and beer quality</p>
<p>3. Understand how to clean dispense equipment, including cask taps and vertical extractors</p>	<p>3.1 State the correct procedure for cleaning cask taps</p> <p>3.2 State the correct procedure for cleaning vertical extractors</p>
<p>4. Understand how to maintain hygiene with regard to glasses and glass washing equipment and how poor glass hygiene affects product quality</p>	<p>4.1 State how dirty and incorrectly stored glasses affect beer quality</p> <p>4.2 State the typical operating temperature for an efficient glass washer and what should be checked when it is not operating correctly</p> <p>4.3 State what can and can't be cleaned in the glass washer and how the machine should be left when not in use</p>
<p>5. Understand the basic information areas that a technician must include in a handover to the operator or responsible person</p>	<p>5.1 State the responsibilities of the technician to the operator/responsible person during the handover</p> <p>5.2 Identify the documents that must be completed as part of a handover</p>





### Dispense Pressure Systems

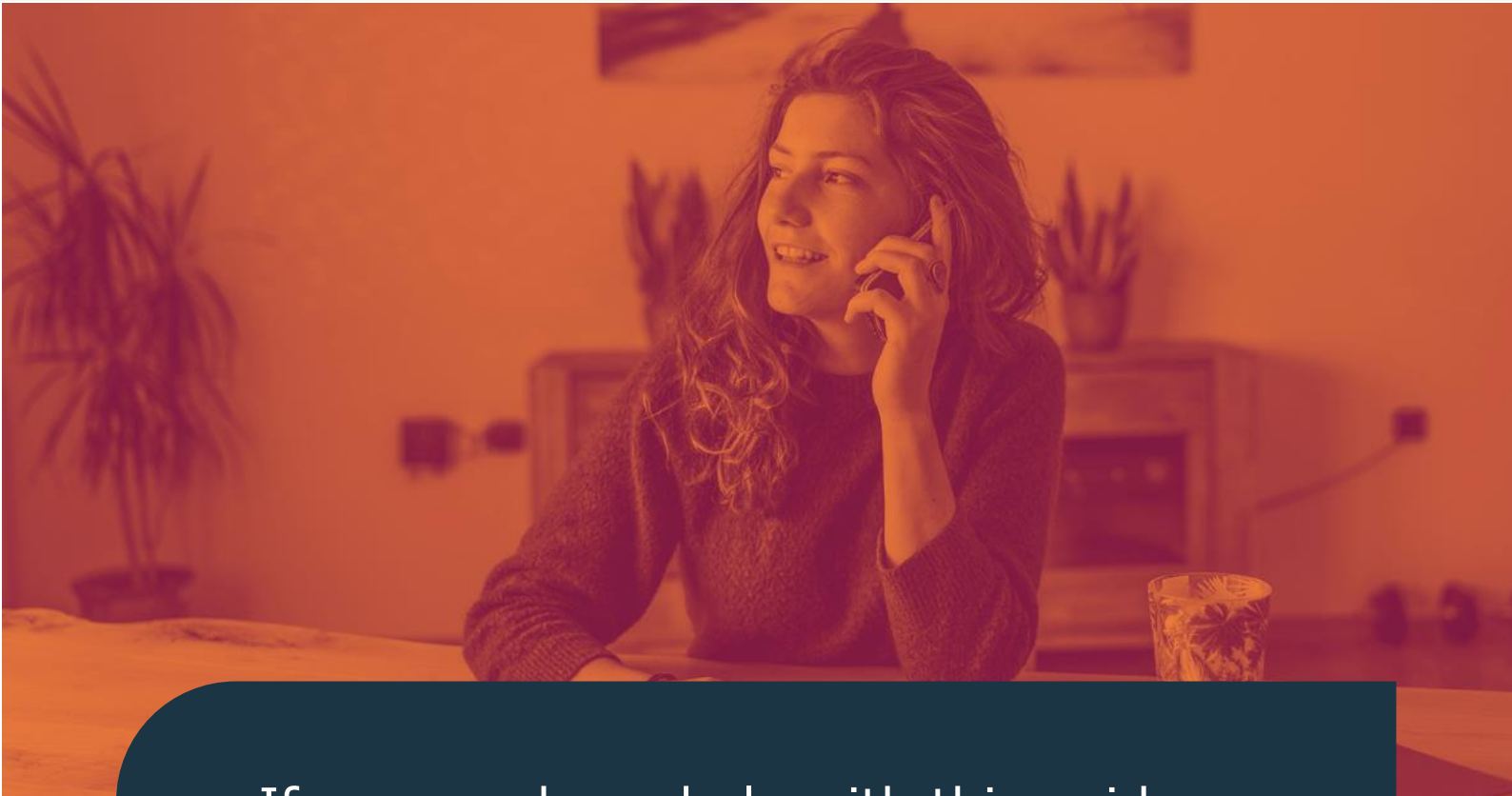
<b>Unit Reference</b>	A/600/5341
<b>BIIAB Reference</b>	DiPS
<b>Level</b>	2
<b>Credit Value</b>	7
<b>Guided Learning (GL)</b>	60
<b>Unit Summary</b>	This unit will provide the learner with knowledge and understanding around dispense pressure systems.
<b>Learning Outcomes (1 to 6)</b> The learner will:	<b>Assessment Criteria (1.1 to 6.2)</b> The learner can:
1. Understand why and how CO <sub>2</sub> is used to dispense beer	1.1 State what CO <sub>2</sub> is and its uses in dispensing and brewing  1.2 State how CO <sub>2</sub> content is measured and what CO <sub>2</sub> content specifications are  1.3 State what equilibrium pressure is  1.4 State how equilibrium pressure is calculated, and how it can be affected  1.5 State the effects of distance upon dispense pressure and considerations of beer pouring speeds
2. Understand the types of gases used in dispensing and gas and cylinder safety	2.1 State the properties of CO <sub>2</sub> and mixed gas and the features of their containers  2.2 State the reasons for using mixed gas and types of mixed gases  2.3 State the requirement to use food grade quality gas in dispensing  2.4 State cylinder and tubing colour coding and safety considerations  2.5 State what illicit fillers are and the dangers of using them  2.6 Identify other methods of gas supply

<p>3. Understand aspects of gas safety including working with high pressure, the effects of gases and how to conduct a confined spaces risk assessment</p>	<p>3.1 State what must be considered when working with high pressure systems</p> <p>3.2 State the definition and effects of excess CO<sub>2</sub> and action to take on suspicion of a leak</p> <p>3.3 State the effects of insufficient oxygen (nitrogen asphyxiation) and its possible causes</p> <p>3.4 State the correct procedures for storing cylinders</p> <p>3.5 State the recommended procedures for manual handling</p> <p>3.6 State the dangers of cold burns and how to treat them</p> <p>3.7 State who is responsible for a confined spaces risk assessment and what such an assessment should consider</p>
<p>4. Understand the principles behind the beer gas systems</p>	<p>4.1 State the features of a gas supplier installed system</p> <p>4.2 State the differences in dispensing soft drinks compared to a beer system</p>
<p>5. Understand the key aspects of the pressure systems code of practice</p>	<p>5.1 State what records need to be kept in order to comply with the pressure systems code of practice and identify where such records must be kept</p> <p>5.2 State the importance of the transfer of responsibility</p> <p>5.3 Identify who is responsible for which aspects of the pressure system</p> <p>5.4 State the installation requirements for CO<sub>2</sub> and mixed gas systems</p>

6. Understand how to identify and solve gas problems such as leaks

6.1 State how to use a CO2 monitor

6.2 Identify the most common places for a gas leak to occur and state methods of identifying and resolving leaks



If you need any help with this guide  
please contact our team.

0115 854 1620

[QualsDevelopment@BIIAB.co.uk](mailto:QualsDevelopment@BIIAB.co.uk)

[biiab.co.uk](http://biiab.co.uk)

*We are part of the Skills and Education Group.*