

## Authorised Gas Tester Workplace Competence Assessment

**Upon completion the JMS Consultants Authorised Gas Tester course, delegates should be assessed on-site using the following criteria**

### **Competence Assessment levels**

Authorised Gas Tester: Personnel undertaking this role will be assessed against the Competence Units 1, 2 & 3

Authorised Gas Monitor: Personnel undertaking this role will be assessed against Competence Unit 3

The following units and elements apply:

- |               |  |
|---------------|--|
| <b>Unit 1</b> | <b>Perform a Test for Oxygen, Flammable and Toxic Gases in Confined Spaces</b>       |
| Element 1.1   | Prepare to carry out a test for oxygen, toxic and flammable gases in confined spaces |
| Element 1.2   | Complete the gas test for oxygen, toxic and flammable gases in confined spaces       |
| <b>Unit 2</b> | <b>Perform a Test for Flammable Gases in Preparation for Hot Work</b>                |
| Element 2.1   | Prepare to carry-out a test for flammable gases in preparation for hot work          |
| Element 2.2   | Complete the gas test for flammable gases  |
| <b>Unit 3</b> | <b>Monitor the Work Area for Flammable Gases</b>                                     |
| Element 3.1   | Monitor the work area for flammable gases  |

*\*During this assessment the candidate must take account of the relevant operational requirements and safe working practices – As they apply to the candidate*

**Assessors will be discipline experts trained and qualified in assessment techniques**

### **Assessment methods**

- D = Direct observation
  - S = Simulated at workplace
  - I = Inspection of output (e.g. permits)
  - Q = Questioning
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## Authorised Gas Tester Workplace Competence Assessor Checklist

Candidate Name:		Company:	
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Assessor Name:	
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### Unit Wide Knowledge and Understanding Criteria

Ref No.	Performance Criteria	Achieved Y/N	Assessment Method	Comments
(a)	How to select, use and care for PPE for different toxic and flammable gases - to include both sight and hearing protection, gloves, footwear, hard hats and coveralls			
(b)	The strengths and weaknesses of the various types of atmospheric flammable and toxic gas detection equipment - to include transportable, portable and personal monitors			
(c)	The implications of organisational and statutory requirements			
(d)	The implications of Occupational Exposure Limits for flammable and toxic gases			
(e)	The hazards associated with working within a toxic, flammable or Non-Life supporting atmosphere			
(f)	How to work both with and within the Permit to Work system			
(g)	How to interpret operational requirements - to include policies, procedures, instructions, codes of practice and standards			
(h)	The range and frequency of tests and their acceptable limits			
(i)	The hazards and properties of flammable, toxic and inert gases			
(j)	The principles of gas testing as applied to confined space entry			
(k)	The type of production operation being tested for flammable and toxic gases			

Assessor Signature:		Assessment Date:	
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## Authorised Gas Tester Workplace Competence Assessor Checklist

Candidate Name:

Company:

Assessor Name:

### **Unit 1 - Perform a Test for Oxygen, Flammable and Toxic Gases in Confined Spaces**

Ref No.	Performance Criteria	Achieved Y/N	Assessment Method	Comments
<b>1.1</b>	<b>Prepare to carry out a test for oxygen, toxic and flammable gases in confined spaces</b>			
1.1.1	Undertaken a risk assessment with the relevant personnel to identify and confirm all the types of potential gas hazards and their possible locations			
1.1.2	Selected, inspected and prepared for use the appropriate oxygen or gas detector(s) in accordance with the relevant instructions			
1.1.3	Confirmed the equipment functional and fit for purpose			
1.1.4	Identified equipment defects and taken the appropriate remedial action			
1.1.5	Confirmed the status of the relevant work permits and authorisations with the relevant personnel			
1.1.6	Selected the appropriate documentation for the test and environment			
1.1.7	Worked safely in accordance with operational requirements.			
1.1.8	How to access and interpret the relevant operational instructions			
1.1.9	How to produce general risk assessments and how to apply them in the workplace			
1.1.10	The hazards and properties of flammable and toxic gases including oxygen deficiency and enrichment, nitrogen and specialist materials appropriate to the location			
1.1.11	The different types of detectors used for the relevant application			
1.1.12	How to set up the relevant detector for each gas testing application and confirm its correct functioning			
1.1.13	How to correctly select between aspirating and non-aspirating detectors to obtain a representative sample of the atmosphere being tested			

Ref No.	Performance Criteria	Achieved Y/N	Assessment Method	Comments
1.1.14	The operating principles of atmosphere monitoring and measuring equipment including their strengths weaknesses and frequently observed failure modes			
1.1.15	The potential cumulative effects of operations within an oxygen deficient, toxic or flammable environment			
1.1.16	How to document the results and advise relevant personnel			
Assessor Signature:		Assessment Date:		

**Scope:**

In preparing to carry-out a test for oxygen, toxic and flammable gases in confined spaces you must use the following pieces of equipment and /or operations:

- (a) Personal protective equipment
- (b) Portable atmospheric monitoring equipment relevant to the test in hand
- (c) Work permits and authorisation documentation
- (d) Recording documentation
- (e) Personal monitoring equipment

## Authorised Gas Tester Workplace Competence Assessor Checklist

Candidate Name:		Company:	
Assessor Name:			

### Unit 1 - Perform a Test for Oxygen, Flammable and Toxic Gases in Confined Spaces

Ref No.	Performance Criteria	Achieved Y/N	Assessment Method	Comments
<b>1.2</b>	<b>Complete the gas test for oxygen, toxic and flammable gases in confined spaces</b>			
1.2.1	Completed the gas test to conform to statutory and organisational requirements			
1.2.2	Effectively used equipment in accordance with the relevant instructions			
1.2.3	Confirmed the readings were within the specified limits			
1.2.4	Identified any deviations and took appropriate action in accordance with work place requirements			
1.2.5	Worked safely and in accordance with operational instructions relevant to confined spaces			
1.2.6	Accurately recorded the results of the test on the appropriate documentation			
1.2.7	How to interpret the results, to include both normal and abnormal			
1.2.8	The acceptable levels of flammable and toxic gases and the correct amount of oxygen			
1.2.9	The behaviour of different gases – to include heavier than air and lighter than air behaviour and “neutral buoyancy” effect			
1.2.10	Where to site portable or transportable equipment that will be used to continuously monitor the atmosphere			
1.2.11	How to obtain a representative atmosphere sample from a range of confined spaces			
Assessor Signature:		Assessment Date:		

#### Scope:

Whilst completing the test for oxygen, toxic and flammable gases in confined spaces you must use the following:

- (a) Portable atmospheric monitoring equipment to include oxygen, flammable and toxic gas detectors, including both
  - electrical and chemical stain types
- (b) Personal monitoring equipment
- (c) Gas testing techniques to include physical measurements, observation, sampling, records and data assessment
- (d) Relevant Instructions to include legislation, codes of practice, manufacturers’ and company instructions

## Authorised Gas Tester Workplace Competence Assessor Checklist

Candidate Name:

Company:

Assessor Name:

### Unit 2 - Perform a Test for Flammable Gases in Preparation Hot Work

Ref No.	Performance Criteria	Achieved Y/N	Assessment Method	Comments
<b>2.1</b>	<b>Prepare to carry out a test for flammable gas in preparation for hot work</b>			
2.1.1	Undertaken a risk assessment with the relevant personnel to identify and confirm all the types of potential gas hazards and their possible locations			
2.1.2	Selected, inspected and prepared for use the appropriate oxygen or gas detector(s) in accordance with the relevant instructions			
2.1.3	Confirmed the equipment functional and fit for purpose			
2.1.4	Identified equipment defects and taken the appropriate remedial action			
2.1.5	Confirmed the status of the relevant work permits and authorisations with the relevant personnel			
2.1.6	Selected the appropriate documentation for the test and environment			
2.1.7	Worked safely in accordance with operational requirements.			
2.1.8	The hazards and properties of flammable gases including oxygen deficiency and enrichment and specialist materials appropriate to the location			
2.1.9	How to produce general risk assessments and how to apply them in the workplace			
2.1.10	The operating principles of the different types of detectors used for the flammable product including their strengths, weaknesses and frequently observed failure modes			
2.1.11	How to correctly set up the relevant detector for each gas testing application			
2.1.12	How to correctly select between aspirating and non-aspirating detectors, relevant to the atmosphere being tested			
2.1.13	How to document the results and advise relevant personnel			
Assessor Signature:		Assessment Date:		

**Scope:**

In preparing to carry out a test for flammable gases you must use the following pieces of equipment and/or operations:

- (a) Personal protective equipment
- (b) Portable atmospheric monitoring equipment relevant to the test in hand
- (c) Work permits and authorisation documentation
- (d) Recording documentation
- (e) Personal monitoring equipment

## Authorised Gas Tester Workplace Competence Assessor Checklist

Candidate Name:		Company:	
Assessor Name:			

### Unit 2 - Perform a Test for Flammable Gases in Preparation Hot Work

Ref No.	Performance Criteria	Achieved Y/N	Assessment Method	Comments
<b>2.2</b>	<b>Complete the gas test for flammable gases</b>			
2.2.1	Completed the gas test to conform to statutory and organisational requirements			
2.2.2	Effectively used equipment in accordance with the relevant instructions			
2.2.3	Confirmed the readings were within the specified limits			
2.2.4	Identified any deviations and took appropriate action in accordance with workplace requirements			
2.2.5	Worked safely and in accordance with operational instructions relevant to the work area			
2.2.6	Accurately recorded the results of the test on the appropriate documentation			
2.2.7	The principles of hot work gas testing as applied to the work area			
2.2.8	How to interpret the results, to include both normal and abnormal			
2.2.9	The acceptable levels of flammable gases and the correct amount of oxygen			
2.2.10	The behaviour of different gases – to include heavier than air and lighter than air behaviour and “neutral buoyancy” effect			
2.2.11	Where to site portable or transportable equipment that will be used to continuously monitor the atmosphere			
Assessor Signature:		Assessment Date:		

**Scope:**

Whilst completing the test for oxygen, toxic and flammable gases in confined spaces you must use the following:

- (a) Transportable and portable atmospheric monitoring equipment
- (b) Personal monitoring equipment
- (c) Gas testing techniques to include physical measurements, observation, sampling, records and data assessment
- (d) Relevant Instructions to include legislation, codes of practice, manufacturers and company instructions



## Authorised Gas Tester Workplace Competence Assessor Checklist

Candidate Name:		Company:	
Assessor Name:			

### Unit 3 - Monitor the work area for Flammable Gases

Ref No.	Performance Criteria	Achieved Y/N	Assessment Method	Comments
<b>3.1</b>	<b>Monitor the work area for flammable gases</b>			
3.1.1	Accurately sited the equipment for optimum benefits			
3.1.2	Monitored the level of gas at intervals as required by the work permit			
3.1.3	Effectively and regularly checked the operation of the gas monitor			
3.1.4	Identified and reported any deviations to the relevant personnel			
3.1.5	Confirmed that the detector / monitor is correctly responsive to a flammable gas atmosphere			
3.1.6	How to select, use and care for PPE for different toxic and flammable gases - to include both sight and hearing protection, gloves, footwear, hard hats and coveralls			
3.1.7	The implications of organisational and statutory requirements - to include Occupational Exposure Limits for flammable gases			
3.1.8	How to work both with and within the Permit to Work system			
3.1.9	How to access and interpret operational requirements - to include policies, procedures, instructions, codes of practice and standards			
3.1.10	The hazards and properties of flammable gases			
3.1.11	The type of production operation being tested for flammable gases			
3.1.12	The importance of checking the controls on the equipment is as specified			
3.1.13	The importance of regular communication			
3.1.14	Who to contact if there is a problem you cannot resolve			
3.1.15	What documentation needs to be completed			

Ref No.	Performance Criteria	Achieved Y/N	Assessment Method	Comments
3.1.16	How a flammable gas or vapour clouds could arrive at the hot work site			
3.1.17	The behaviour of different gases – to include heavier than air and lighter than air behaviour and “neutral buoyancy” effect			
Assessor Signature:		Assessment Date:		

**Scope:**

Whilst monitoring the work area for flammable gases you must use:

- (a) Transportable and portable atmospheric monitoring equipment
- (b) Personal monitoring equipment