



INSTITUTE OF THE
MOTOR INDUSTRY

WELDING ASSESSMENT STRATEGY

IMI ACCIDENT REPAIR
ACCREDITATIONS
AOM009, AOM028
AOM030, AOM134





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INTRODUCTION

This document sets out the requirements of the Institute of the Motor Industry (IMI) for the assessment of IMI Accident Repair Accreditations by all IMI approved assessment centres. The Strategy is designed to operate across all Accident Repair routes. Further guidance on each route will set out any specific requirements for individual IMI Accreditations.

This is the overarching strategy for the assessment and verification and will come into force on the 01st April 2019 and apply to any full IMI Accreditation or IMI Re-accreditation containing welding AOM's.

This document outlines the IMI principles in regards to:

- assessment processes
- requirements of assessor and quality assurer
- external quality control of assessment
- simulated work environments
- centre devised assessments

Please note that because the Assessed Outcome Module 009 (Resistance Spot Welding) and (MAG Welding) is based on two British Standards, they have their own specific assessment and testing criteria which is detailed in the module documentation. In addition to this, AOM 133 (Bonding and Mechanical Fastening following Researched Repair Methods) has its own specific Assessment Strategy, hence, it is not included in this document. This document is split into Part A and B to ensure clearer guidance is provided against specific AOM's.

CENTRE APPROVAL

Centres wishing to offer IMI Accreditation must first be approved by the IMI. Approval of the different accreditation routes and levels will only be achieved where centres have appropriate resources and technically competent assessors for the route and level they are assessing.

ASSESSMENT

The IMI Accreditation is a national voluntary scheme which tests the current competence of individuals working in the automotive retail industry and who are committed to an ethical code of conduct.

The IMI Accreditation reflects the unique needs of the workplace, and will vary by route/discipline.

Each route/discipline should be assessed by technically competent assessors, who have been approved by the IMI prior to delivering any assessment.

IMI Accreditation assessment must attest to competence in an occupational role (where competence is defined as the ability to apply knowledge, understanding, practical, and thinking skills to be effective in work: these skills will usually include problem-solving, being flexible to meet changing demands and the ability to work with or alongside others). The primary method of assessment must therefore always be direct observation of practical tasks carried out in a simulated but realistic work environment.



FULL ACCREDITATION

For a technician to achieve the initial accreditation recognition; a technician must successfully complete all of the assessments (both UPK test and practical) within a twelve month window as identified in IMI documentation.

Prior to assessment, the approved centre must ensure that the technician:

- Is eligible to take the assessments (**meeting any pre-requisites for the route being undertaken**) and technicians to provide original copies of certificates. Once confirmed the technician is eligible to be registered
- Has been registered at least 24 hours prior to taking the assessments with the Awarding Organisation
- Has agreed to the IMI Accreditation Code of Conduct

The assessment centre must ensure that the technician provides evidence to confirm they are who they say they are. Positive identification of the technician can be made through a valid passport or driving licence. The assessment centre must have an audit trail to support confirmation of this. (The assessment centre is not required to take a copy of the technicians ID).

INITIAL ACCREDITATION RE-ASSESSMENT

The technician may re-take the online knowledge test as many times as the centre considers appropriate. However, if they are not successful after two attempts and suitable refresher training, the centre should review whether they are being assessed at the most appropriate level.

Any technician who is referred on any of the initial practical assessment tasks may re-take these assessments within the twelve-month period.

IMI ACCREDITATION STRUCTURES

The mandatory and optional requirements for each IMI Accreditation route will be set out in the specific documents for each route and level.

REACCREDITATION

There are 2 options for re-accreditation:

- Full re-assessment
- Modular approach

Organisations wishing to offer assessments through the modular approach must first be approved by the IMI to carry out such assessments.

For a technician to achieve the initial reaccreditation via the use of the modular route; a technician must successfully complete all of the assessments and they must also be claimed for while their current Accreditation is still valid.



CENTRE DEVISED ASSESSMENTS

Centres may devise their own assessments in place of IMI devised assessments. These centre devised assessments must however reflect the type of assessments specified, i.e. competence assessments must be replaced by other competence assessments. It is not acceptable to substitute competence assessments with assignments, knowledge tests etc.

Centre devised assessments must cover the competences or knowledge statements specified for the accreditation route/level being delivered. This can be demonstrated by 'mapping' the competences being assessed in the centre devised assessments to the Accreditation competences or knowledge statements, and having the centre devised alternative assessment approved. There may be a charge for approval of centre devised assessments.

The Centre must apply for approval of centre devised assessment before they are used by completing an application form within Centres Hub.

Further details on centre devised assessments can be found in the Awarding Organisation Operations Manual (Section 2.7).



ASSESSOR REQUIREMENTS

The assessment of all Accident Repair accreditations must be carried out by occupationally competent assessors and evidence made available to the IMI on request.

Assessors will be responsible for and accountable for, the validity, reliability, and authenticity of any evidence.

The primary responsibility of the assessor is to ensure that technician's satisfy the requirements of the critical competences outlined within each IMI Accreditation (Competence) route. It is important that an assessor can recognise occupational competence as specified within the specific documentation for each IMI Accreditation route. Assessors therefore need to have a thorough understanding of assessment and quality assurance practices, as well as have in depth technical competence related to the IMI Accreditation (Competence) for which they are assessing technician's.

It will be the responsibility of the approved centre to select and appoint assessors.

Centres **must** ensure the appointed assessors:

- Have sufficient and relevant technical /occupational competence in the IMI Accreditation route, at or above the level of the route being assessed as well as the minimum relevant Industry/trade experience. (5 years' industry experience in an appropriate role relative to the route being assessed)
- Have been certificated in the last two years for BS1140 and BS4872. In addition to this they must hold a CSWIP - Visual Welding Inspector. Further guidance given on Part A & B of this document

(For these to remain valid the assessor **MUST** have carried out welding activities at least once every 6 months). The centre must make supporting evidence available for external quality assurance monitoring.

- Have copies of the standards for BS1140 and BS4872
- Have in depth knowledge of the IMI Accreditation routes critical competences and evidence requirements
- Where applicable, hold the required accredited assessor award as specified by the IMI
From 1st April 2017 all Assessors must attend and complete an Accredited Assessor workshop and an online knowledge assessment which is route specific. Note: Please see Part A & B guidance against specific AOM's.
- Demonstrate knowledge and understanding of the competencies that a learner is required to demonstrate for the IMI Accreditation (Competence) that they are undertaking
- Ensure that their technical knowledge is kept up to date to include at least 15 hours related CPD over a twelve month period. You will be asked to provide evidence of completing Continual Professional Development (CPD)
- Be linked by the centre co-ordinator to the IMI Accreditations they are competent in

Assessors **cannot** assess the IMI Accreditation if they are not currently linked to the accreditation within Centres' Hub, or have had their approval removed by the Awarding Organisation.



TECHNICIAN TO ASSESSOR RATIO

All practical assessments have a **maximum** ratio of four technician's to one assessor.

Note: A workshop technician must be available to reset tasks between assessments and resolve any technical issues which may arise during the assessment day.

KNOWLEDGE ASSESSMENT REQUIREMENTS

Knowledge assessments must be invigilated and must be linked as an invigilator within Centres' Hub. Further details on online assessment requirements are provided in the IMI Operating Manual.

INTERNAL QUALITY ASSURANCE REQUIREMENTS

IMI Accreditations must be underpinned by quality assurance appropriate to centre based delivery. At a minimum this should reflect the principles outlined below.

Internal Quality Assurance of IMI Accreditations shall be the responsibility of an industry competent internal quality assurer.

The primary responsibility of the internal quality assurer is to assure the quality and consistency of assessments by the assessors for whom they are responsible.

Internal quality assurers therefore need to have a thorough understanding of quality assurance and assessment practices, as well as technical competence related to the IMI Accreditations that they are internally quality assuring.

Internal quality assurers will be responsible for, and accountable for consistency, quality, and reliability of evidence and assessors.

It will be the responsibility of the approved centre to select and appoint internal quality assurers.

It is a requirement that all Centres must have a robust and effective internal quality assurance (IQA) system which is defined by the Centres IQA strategy.

To be an approved internal quality assurer the person must:-

- Have in-depth knowledge of the IMI Accreditation routes critical competences and evidence requirements.
- Be occupationally aware of the relevant industry sector being internally quality assured so, for example, when monitoring assessors and assessor judgements they are able to confirm that the correct decision has been reached.
- Ensure that their technical knowledge is kept up to date and will be asked to provide evidence of completing Continual Professional Development (CPD).



- Be Linked within Centres Hub before they carry out internal quality assurance for relevant IMI Accreditations
- Demonstrate knowledge and understanding of the quality assurance processes required by the centre and the awarding organisation

Approval of internal quality assurers can be **removed**. Internal quality assurers **cannot** verify the IMI Accreditation if they are not linked to the accreditation route, able to provide evidence to support occupationally awareness, or have had their approval removed by the Awarding Organisation.

EXTERNAL QUALITY CONTROL

It is expected that the awarding of IMI Accreditation (Competence) will be underpinned by quality assurance processes and procedures. At a minimum this should reflect the principles outlined below.

Centres will be monitored by an External Quality Assurer on an ongoing basis using a risk-based approach.

The IMI reserve the right to carry out **spot checks** without prior notice to observe IMI Accreditation assessments.

Assessment dates must be published within Centres' Hub in the location shown below:

The screenshot shows the 'My centre' page in the IMI AWARDING system. The navigation bar includes 'Home', 'My centre', 'Documents', 'Users (10)', 'Sites (5)', 'Staff (2)', 'Qualification library', and 'Programmes'. The 'My centre' sidebar lists 'Centre details', 'Qualifications', 'Programmes', 'AO contact', 'Risk', 'Compliance', and 'Notes' (highlighted). The main content area is titled 'The IMI' and contains several tabs: 'All categories', 'Accreditation assessment dates' (selected), 'Irtec assessment dates', 'Audits', 'MOT delivery dates', 'Other', 'FS SLC delivery dates', and 'Gateway delivery dates'. A note titled 'Notes: The IMI - Accreditation assessment dates' is visible, with a text area below it. Below the text area is a file upload section: 'Select a file to attach to this note (optional)', a 'Browse...' button, and a note: 'By the way, documents must be under 25Mb!'. At the bottom of the section is a button: '+ Add note for The IMI'.

Centres **will** be subjected to unannounced observations, therefore, it is a requirement that all centres must have the images/evidence for required assessments that have taken place after the last External Quality Assurer visit. Any deviation from this ruling will result in direct claims being removed.



The IMI recommends that approved centres adopt a risk rating and risk management system for centres offering IMI Accreditations.

The IMI recommend that such systems identify:

- Commercial Risk – is there potential for commercial pressures to ensure that technician's achieve IMI Accreditations within unduly short time frames?
- Assessment/Verification risk – are factors apparent in the relationship between technician's, assessors and quality assurers that might prejudice a fair and consistent assessment process?

Where risks or potential risks are identified, The IMI expects that the approved centre, via the external quality assurer takes appropriate action to ensure that the credibility of the assessment process is not prejudiced.

Awarding Organisations will be responsible for and accountable for the quality of IMI Accreditations delivered and assessed by their approved assessment centres.



SIMULATED WORK ENVIRONMENT

The IMI Accreditation is based on critical competences required in the workplace and therefore the technicians are to be assessed under conditions as close as possible to the normal workplace.

It is essential that organisations operate a simulated environment which reflects a real work setting. This will ensure that any competence achieved in this way will be sustained in real employment.

For Accident Repair accreditation routes, 'live' or customers vehicles are not permitted as assessment vehicles.

The observation of the assessment process must be undertaken away from the direct working environment i.e. with no customers or work colleagues present. This can be in a segregated area within or controlled by an IMI approved assessment centre.

The area used for assessment purposes must be a "controlled environment" and thereby provide a 'fair assessment'. Any vehicles used for assessment purposes must be screened off appropriately to prevent external viewing of the assessments.

The technician must not be subject to external influence during an assessment.

To undertake the assessment in a simulated environment the following guidelines must be met:

1. The simulated environment represents a real work situation
2. Assessments must be carried out under realistic business pressures
3. All services that are carried out should be completed in a way and to a timescale, that is acceptable in business organisations
4. The technician's must be expected to achieve a volume of work comparable to normal business practices
5. The range of services, products, tools, materials and equipment that the technician's use must be up to date and available
6. Account must be taken of any legislation or regulations in relation to the type of work that is being carried out
7. The technician's must be given workplace responsibilities to enable them to meet the requirements of the individual modules
8. The technician's must show that their productivity reflects those found in the work situation being represented.

ACCIDENT REPAIR ACCREDITED ASSESSOR WORKSHOP

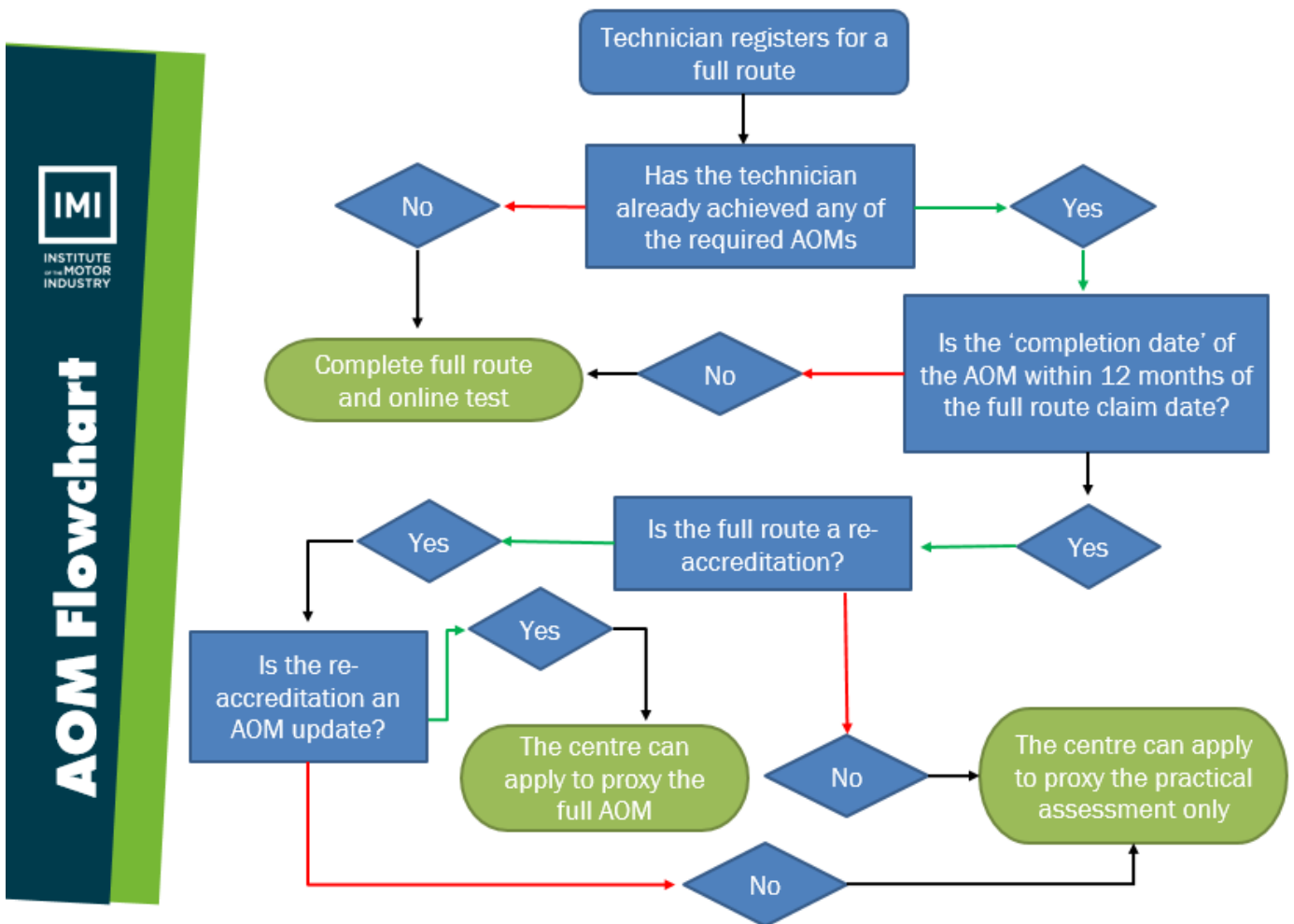
The IMI recognised that some technician's may require training prior to completing an assessed outcome module, however the purpose of the accredited assessor workshop is to ensure that the assessment of Accident Repair accreditations is standardised and conducted by competent assessors.

The technician's which attend the accredited assessor workshop **must** have current knowledge of vehicle accident repair processes and in addition to this they must know how to interpret and follow researched repair methods and technical data sheets.

RECOGNITION OF PRIOR ACHIEVEMENT

The flowchart below displays the rules regarding recognising prior achievements of Assessed Outcome Modules for full and reaccreditation routes.

IMI approved centres must ensure that they know and understand the information provided.





PART A GUIDANCE FOR ASSESSING AOM 009

It is the responsibility of the Assessor to verify that the technician's joining methods meet the competences within the Assessed Outcome Modules.

The following information provides guidance, with regards inspecting welds which are carried out as part of the Accident Repair Accreditation Routes, or included within standalone Assessed Outcome Modules.

Assessors **ONLY** assessing AOM009 are not required to attend and complete an Accredited Assessor workshop and the online knowledge assessment.

Centres **must** ensure the appointed assessors:

- Have sufficient and relevant technical /occupational competence in the IMI Accreditation route, at or above the level of the route being assessed as well as the minimum relevant Industry/trade experience. (5 years' industry experience in an appropriate role relative to the route being assessed)
- Have been certificated in the last two years for BS1140 and BS4872. In addition to this they must hold a CSWIP - Visual Welding Inspector
- Due to changes made to assessor requirements, those assessors who have completed CSWIP-ATA-22-12 only, the IMI have allocated a 2 year transitional period for centres to ensure each assessor has completed and holds a CSWIP - Visual Welding Inspector. Therefore, by 1st April 2021 all centres **MUST** have this in place

Assessors **must** ensure the following actions are carried out:

- a) Ensure the material grade, material dimensions, joint preparation, welding position and any other criteria required by the assessment are in accordance with the requirements before the assessment commences.
- b) Verify the name and any other means of identification of the person and record these details.
- c) Establish that the person carrying out the assessment understands the requirements and is familiar with what he/she has to do.
- d) Record all necessary data relating to the assessment and prepare and issue the Technicians Instructions detailing objectives required by the standard, specifications and task to be completed.
- e) Ensure that the weld is made by the named technician.
- f) Ensure that the completed test pieces are correctly identified and the positions where test pieces were carried out they are clearly marked and identified.
- g) Undertake all required weld inspections to confirm assessed outcome.
- h) Assess the results of weld inspections and establish if the technician has been successful.
- i) Generate all necessary records for Internal Quality Assurance to take place.

There is no requirement to take photographic evidence for AOM 009 for passed assessments, however, detailed copies of the technicians reporting sheet identifying each learners outcomes (Passed or Referred) must be retained and made available to the IMI on request.



It must be noted that the assessments carried out within AOM009 must comply with the techniques and specific criteria which are set out in the module, for example no on/off trigger welding is allowed and will result in the technician being referred. Welds must be a single run with one stop start procedure. Please see the quick reference guide.

Quick Reference Guide

AOM Reference and Content	Accepted Technique(s)	Inspection Method
009 - Resistance Spot Welding (BS1140) and MAG Welding (BS4872)	Single run as stated in the AOM requirements	Visual and Destructive testing – as stated in the AOM Workstation Requirements



PART B GUIDANCE FOR ASSESSING AOM 028, 030 and 134

It is the responsibility of the Assessor to verify that the technician's joining methods meet the competences within the Assessed Outcome Modules.

Technicians **MUST** present a current Assessed Outcome Module Certificate for AOM 009 to the centre when registering for IMI Panel or Senior Panel Full Assessment, AOM Update or AOM028/AOM030 as a standalone module.

The following information provides guidance, with regards inspecting welded and brazed joints which are carried out as part of the Accident Repair Accreditation Routes, or included within standalone Assessed Outcome Modules.

Appointed assessor(s) who assess the welding competence through the welded panel section (AOM028 or AOM030) **MUST** hold:

- Sufficient and relevant technical /occupational competence in the IMI Accreditation route, at or above the level of the route being assessed as well as the minimum relevant Industry/trade experience. (5 years' industry experience in an appropriate role relative to the route being assessed).
- Have been certificated in the last two years for BS1140 and BS4872. In addition to this they must hold a CSWIP - Visual Welding Inspector.
- IMI Accredited Assessor
- Due to changes made to assessor requirements, those assessors who have completed CSWIP-ATA-22-12 only, the IMI have allocated a 2 year transitional period for centres to ensure each assessor has completed and holds a CSWIP - Visual Welding Inspector. Therefore, by 1st April 2021 all centres **MUST** have this in place.

Assessors **must** ensure the following actions are carried out:

- a) Ensure the material grade, material dimensions, joint preparation, welding position and any other criteria required by the assessment are in accordance with the requirements before the assessment commences.
- b) Verify the name and any other means of identification of the person and record these details.
- c) Establish that the person carrying out the assessment understands the requirements and is familiar with what he/she has to do.
- d) Record all necessary data relating to the assessment and prepare and issue the Technicians Instructions detailing objectives required by the standard, specifications and task to be completed.
- e) Ensure that the weld is made by the named technician.
- f) Ensure that the completed test piece's is correctly identified and the positions where test pieces were carried out are clearly marked and identified.
- g) Undertake all required weld inspections to confirm assessed outcome.
- h) Assess the results of weld inspections and establish if the technician has been successful.
- i) Generate all necessary records for Internal Quality Assurance to take place.

Welding and Brazing Techniques – Stop/Start or Single Run?

Technicians can use either a stop/start technique or single run when carrying out MIG brazing and MAG welding processes on the ‘industry standard’ accreditations AOM028, AOM030 and AOM134, however, it is paramount that the method which they use produces results that meet the competences within the individual Assessed Outcome Modules.

AOM Reference and Content	Accepted Technique(s)	Inspection Method
028 - MAG welding, blind riveting, bonding and resistance spot welding.	Stop/start or a single run	Visual - In accordance with the AOM Quality Levels located in the assessor instructions
030 - MAG welding, MIG brazing, blind riveting, bonding and resistance spot welding.	Stop/start or a single run	Visual - In accordance with the AOM Quality Levels located in the assessor instructions
134 - MAG welding, self-piercing riveting, bonding (combined with a reinforcement plate) and resistance spot welding.	Stop/start or a single run	Visual - In accordance with the AOM Quality Levels located in the assessor instructions

A standard and assessment criteria can be located in the assessor instructions. The quality standard must be available and understood by the technician prior to starting the Assessed Outcome Module.

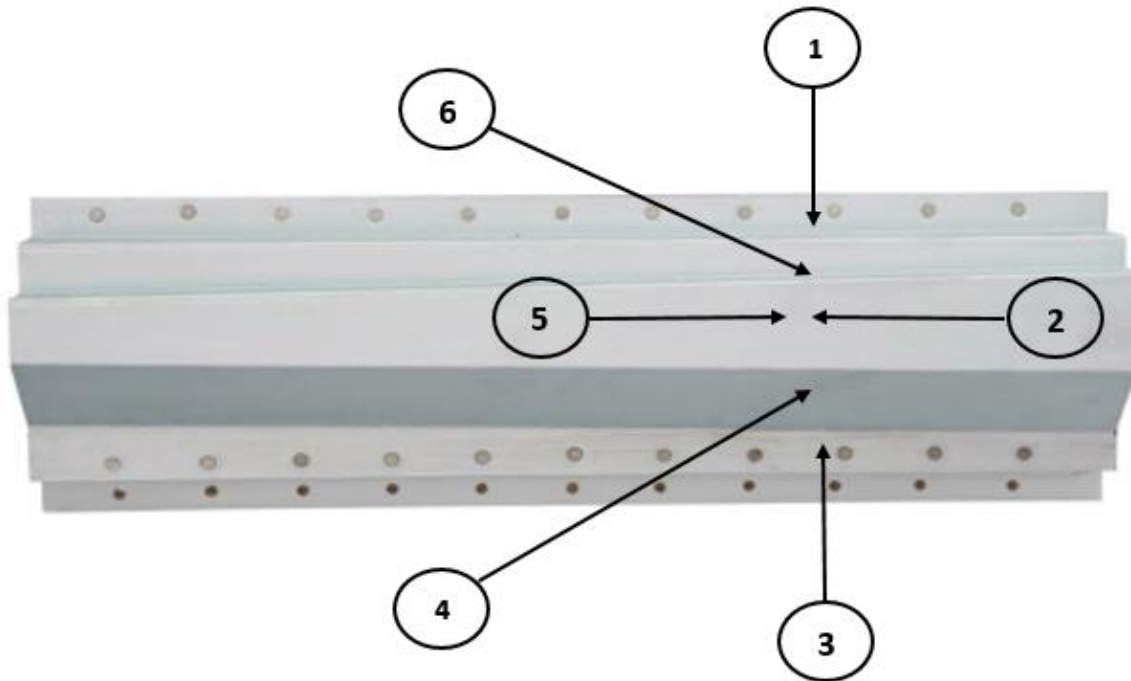
Practical Assessment Photographic Evidence

When joining techniques feature in the assessed outcome modules, the assessment centre must take digital images of the evidence which is produced during the practical assessment.

When taking photographic images, it’s important that:

- High quality images show the front of spot welds, mechanical joining methods and the results of any weld defects found on inspection.
- High quality images show the front and back of welded and brazed joints from a range of angles, please see the guidance below:

Joining Methods – Photographic Image Guide for the Sill Section



Photographic images must show:

1. The top flange joint and the run to the first bend
2. The 90 degree angle to the front section of the panel
3. The front section of the panel
4. The joint across the lower angled section of the panel
5. The joint on lower flange
6. The penetration from the back of the panel.

Note: This is easily accessed by separating the upper panel flange and bending the panel to 90 degrees, which will enable the assessor to identify the penetration of the MAG welded and MIG brazed butt joint. If the Assessor has any doubts about the quality of the joint after visual inspection, the full panel must be fully removed for further examination.

The images must form part of the assessor feedback and **be kept electronically until they have been approved by the External Quality Assurer**. IMI documentation is available to record the evidence, however, if the centre has their own recording methods which contains the same information, this can be used in place of documentation supplied by the IMI.