

Assessment Strategy for Glass N/SVQs

Assessment Strategy

Produced by

GLASS TRAINING LIMITED, the Standards Setting Body for the Glass Industry

Assessment Strategy to cover the Glass Industry qualifications

A. General Requirements

- 1 The Assessment Strategy for all glass industry units and qualifications is detailed below. It applies throughout the standards and should be used as the basis for all individual assessments.
- 2 The requirements have been brought together in this single document and they represent a key part of the assessment process. They are supplemented by award-specific Assessment Guidance which identifies appropriate forms of evidence for the particular competence being assessed.
- 3 In the development and implementation of all glass industry standards and awards, reference should be made back to this strategy when specifying the assessment requirements for each element of competence.

4.0 Requirements

- 4.1 Assessment of performance and knowledge is required. Evidence of performance should be assessed from activities and outcomes and must be demonstrated:
 - within the workplace
 - during normal working situations
 - using relevant industrial or commercial standards and procedures
 - in accordance with the Assessment Plan jointly prepared by and agreed between the Candidate and the AssessorAssessment of knowledge can be made from performance evidence and through questioning by the Assessor. This illustrates the importance of the Assessor's occupational competence. Whilst not precluding the use of pre-set questions, the Assessor will use planned 'free-form' questioning on all aspects of competence referred to in the Standards but not adequately demonstrated by other forms of evidence. Assessors should also encourage candidates, through use of the Assessment plan for each Unit or family of Units, to derive evidence of knowledge and understanding from a variety of valid sources. Candidates should also be directed into economical use of items of evidence where they can be shown to apply to more than one Unit.
- 4.2 Observation should be supported by documentary evidence of having met specific components of the standard.
- 4.3 Simulation generally is not acceptable, but may be allowed in situations where performance in the normal working environment is impracticable, for example, with regard to candidate competence in dealing with accidents or emergencies. If simulation is the only source of evidence, it must be of a scale and scope that will provide sufficient evidence to infer that the candidate can competently carry out the activities in a work-based environment.
- 4.4 Evidence should be produced and recorded, by the Candidate, over a period of time sufficient to show an accumulation of practice that will indicate the achievement of the consistent application of skill, and knowledge and

understanding that underwrites competent performance. However, where the evidence for any Unit is more than two years old, the Candidate will be required to demonstrate current competence.

- 4.5 There should be evidence of an effective partnership between candidate and assessor in order to promote efficient and effective assessment in the workplace.
- 4.6 Evidence should be taken over a period of time in order to demonstrate all components of the standards. The time period should fit the complexity, variability and duration of the activity and the frequency of normally occurring opportunities for assessment. Assessment of simple, routine and regularly occurring tasks can be carried out over a much shorter timescale than those in which there are significant variables, such as technical complexity or where opportunities to demonstrate competence are relatively infrequent.
- 4.7 Wherever possible, evidence for assessment should be drawn from work activities in which the candidate has been continuously involved throughout the process i.e. preparing for and setting up the task, carrying out the task, completing the task and accounting for / recording actions taken.
- 4.8 While evidence may usefully be drawn from different contexts to complement the candidate's evidence, to demonstrate breadth in competence and to fill gaps, ill-assorted material should not constitute the main part of the evidence presented for assessment
- 4.9 A single assessment event and the accompanying evidence can be used to demonstrate more than one competence and as such may apply to more than one element of the standards. This 'integrated (or holistic) assessment' approach is strongly recommended by Glass Training Ltd.
- 4.10 Individual pieces of evidence should be substantially different from each other and should be representative of the range of activities and conditions encountered within the job role of the candidate.
- 4.11 Evidence presented should be accompanied, where appropriate, by a clear statement of the specific context in which it has been generated.
- 4.12. Overall, the evidence presented should reflect realistic work activities satisfying the standards for which accreditation is sought.

B. Specific Requirements

- 5 Each component of the Evidence Requirements has implications for designing an effective assessment procedure to ensure valid and reliable measurement of the standards. These are clarified below.

5.1. Location and context of assessment

There must be evidence of candidates demonstrating competence in the real (or, at least, realistic) work environment. For most candidates this means his/her normal place of work. Short work placements or non-realistic work environments, which do not replicate the pressures and requirements of normal commercial or industrial activities, will not be acceptable. The bulk of the candidate's evidence should be drawn from their normal working activity and not consist of artificially contrived opportunities for one-off demonstration of competence. Similarly, equipment must be that used in current commercial and industrial contexts. Procedures and standards used should be those that are nationally or internationally recognised or devised by specific companies as standard operating procedures. In the assessment of knowledge, particularly where this relates to legislation, regulations and procedures, it is essential that currently applicable documentation be used as a basis for assessment.

5.2. Acceptable forms of evidence

Candidates will need to present evidence that will include the following components:

- 5.2.1 Proof that qualified Assessors or third parties such as line managers have **observed** the candidate correctly performing the competences required in the standards. Details of the nature of the work being performed during the observation must also be available for external verification. Third parties involved in providing 'witness testimony' must be competent to make judgements about the activity (ies) for which they are providing the testimony. They act as secondary and corroborating sources of evidence and must be carefully selected and approved. The Assessor will make all decisions on the candidate's competence. See 5.7 below.
- 5.2.2 All awarding bodies must ensure that the Assessors fulfil the assessment process, specified in relevant National Occupational Standards, by identifying appropriate and cost effective opportunities for assessing performance, and by planning for the use of different types of evidence. These requirements are intended to ensure that Assessors can conduct the assessment process rigorously, but flexibly and efficiently.
- 5.2.3 Observations must be formally recorded and fully describe what has been observed and how the activity/task has met the standard. In addition, documentation can be used to support the successful performance of an activity when not directly observed by the Assessor. Normally this evidence would include reference to specifications or standard operating procedures, production or process records, quality assurance records and final records of end results. If the candidate proposes to use such supplementary documentation, they should list what it is and identify where it is stored and only bring it forward if the Assessor agrees it will be helpful in the assessment process.

- 5.2.4 The supporting documentation must be validated as relating to the candidate's normal work and must be clearly cross-referenced to the standards and, where appropriate, to the specific requirements for each award. This is usually confirmed by line manager or QA signatures on work documents. Where appropriate additional evidence such as customer endorsements or reports of results may be used.
- 5.2.5 To avoid the unnecessary assembly of supporting documentation, the Assessment Plan should seek to define:
- What evidence is to be collected
 - What will be acceptable sources of evidence
 - What will constitute sufficient evidence for assessment purposes
 - Any special assessment requirements

5.3. Candidates with special assessment requirements

- 5.3.1 Where candidates have poor reading and writing skills or where they have a physical and/or a sensory impairment and where their impediment does not constrain their ability to operate competently and safely in the workplace, the Assessor should adapt the method(s) of assessment to ensure that the candidate is not put at a disadvantage because of the assessment process (e.g. the Assessor might use oral questioning in place of written tests). Special assessment requirements should be approved by the External Verifier.

5.4. Simulation

- 5.4.1 Simulation, where permitted, can be used to demonstrate particular competences that would be difficult or dangerous to demonstrate directly (e.g. dealing with emergencies). They should only be used where direct evidence of candidate performance cannot be obtained.
- 5.4.2 The External Verifier must approve in advance the use of simulation and will require clear reasons for its planned use. Details of planned assessment using simulation should be provided to the External Verifier.
- 5.4.3 If approval is given, all specific Awarding Body guidance and requirements for simulation should be observed. Also, Assessors, Internal Verifiers and External Verifiers should monitor the proportion of evidence generated via simulations to ensure that it will not be the primary source of a candidate's claim to competence.

5.5. Knowledge and Understanding

- 5.5.1 Knowledge and Understanding will be assessed via (pre-set and/or free form) questions and by evidence of performance, which cover three primary types of knowledge:
- Knowledge of facts and procedures
 - Understanding of principles and concepts underpinning procedures
 - How to apply principles and procedures in specific contexts
- Alternatively the Candidate can be directed, through the Assessment Plan, to collect relevant items of evidence that will prove satisfactory acquisition of the knowledge and understanding in the three categories given above.
- 5.5.2 All questions should be asked by the Assessor at appropriate moments throughout the assessment process, preferably linked to observed activity and/or review of documentary evidence. If not appropriate, for example, due to a noisy environment, the questions may be asked following the observation of performance. The questions asked of, and answers provided by, the candidate may be recorded and used as the basis for a useful question/answer bank. The order in which the candidate provides the response is not material. Where the candidate fails to provide a complete answer, the Assessor should carry out further questioning to check whether or not the candidate has the necessary knowledge and understanding. This can take the form of further open questioning or providing a guided opportunity to acquire the missing knowledge and re-present for assessment.
- 5.5.3 There must be some form of verification that the questions have been asked either by detailed cross-referencing to other forms of evidence, by a sample selection of candidate's responses provided in writing or by an Assessor report on when and how the questions were asked. The precise form of verification must be agreed between the Assessor and the Internal Verifier applying specific Awarding Body procedures.
- 5.5.4 The second form of knowledge and understanding questioning encouraged is the free-form questioning of the candidate during other forms of assessment e.g. during observation or when reviewing procedures and related documentation. Assessors should ask "What if?" questions that test the candidate's depth of understanding. For example: how they would deal with anomalies and special requirements; how they would go about tackling rare occurrences; cope with new situations or solve problems. Sometimes this requires the description by the Assessor of different 'scenarios' that help to reveal whether the candidate has an adequate grasp of what action is required in situations that only occur infrequently. Using 'scenario testing' should not be confused with 'simulation'. The former is based on evidence that the candidate has already demonstrated the essentials of competence in the workplace and tests versatility and depth; the latter is used as a substitute for evidence of work based competence.

5.6. Sufficiency and balance of evidence required

- 5.6.1 Candidates will be expected to bring together over a period of time evidence which, collectively, meets all the requirements of the Unit, the individual components of each Element and adequately reflects

the range of work situations and contexts. The broad requirements of section A of this document must also be met and the evidence must follow the detailed assessment guidance for the award as well as meeting the requirements set out and agreed in the Assessment Plan by the Candidate and the Assessor.

5.6.2 The following features of sufficiency should be addressed:

- **Sustained performance over time** is required to show competence and consistency in performance across the full range of normal working conditions, meeting all the requirements and providing an adequate number of examples of varied work activity. Assessment plans should specify the quantity of practice that should be recorded to show development of a consistent level of performance. Centres should, where necessary, make provision for identified "Workbased recorders" that are authorised to endorse evidence that indicates candidates developing level of practice. What is being looked for is the capacity to consistently perform what is required of the candidate in the work environment over the full range of activities, conditions and contexts.
- Much will depend upon the nature of the activity in question, as some complex activities may take a considerable period of time and involve a series of mutually independent stages. Some simple sampling or testing activities are frequent and repetitive and may be demonstrated over a relatively short period of time.
- Assessors should always attempt to achieve an appropriate **balance of types of evidence.**
- As a safety critical industry, no assessments are valid unless the health, safety and environmental requirements set out in the National Occupational Standards have been fully met (even where health and safety issues are not the primary focus of the assessment event).
- Similarly, Assessors must not conduct work-based assessments in contexts, and under conditions where they are dissatisfied with the health and safety arrangements in place.
- In such situations, the Assessor must give appropriate feedback to the candidate and, as necessary, to the appropriate employer's representative.

5.7. Expertise of Assessor and Verifiers

5.7.1 Assessors and Internal Verifiers must:

- be registered with an approved centre
- be competent to make qualitative judgements about the units they are assessing/verifying. This may be illustrated by:
- the Assessor/Internal Verifier having achieved the award themselves and/or
- having substantial current or recent experience at a skilled level in the job function(s) being assessed (including working with current legislation, regulations, procedures and technology), or
- being in a day to day line or functional management, training, technical or quality assurance role that involves making detailed appraisals and/or assessments of those carrying out work covered by the units they are assessing/verifying (and will have substantial experience in this area.)
- be in possession of the appropriate Assessor/Internal Verifier award(s).

- carry out their duties in accordance with the National Occupational Standards for Assessment and Verification and current guidance on best assessment practice issued by the regulatory authorities.

5.7.2 External Verifiers must:

- be registered with an approved Awarding Body
- be sufficiently familiar with and/or experienced in the glass industry to be able to verify that candidate evidence has met the National Occupational Standards.
- be in possession of the appropriate External Verifier Award.
- carry out their duties in accordance with the National Occupational Standards for Assessment and Verification and current guidance on best verification practice issued by the regulatory authorities.

5.7.3. Assessors and Internal Verifiers must have a working knowledge of the awards and a full understanding of that part of the award for which they have responsibility.

5.7.4. Third party 'Witnesses' referred to in section 5.2 must also be competent to make judgements about the activity(ies) for which they are providing the testimony. **As the assessment *decision* lies with the Assessor, it is their responsibility to verify this and, where challenged, to justify their acceptance of third party 'witness testimony' to the Internal Verifier.**

5.8. External Quality Control

5.8.1 The external quality control of assessment is to be provided, in this highly regulated and safety critical sector, by the use of External Verifiers employing 'Enhanced External Verification'

5.8.2 *Enhanced External Verification*

This will involve the 'traditional' External Verification role supplemented by verifying a representative sample of candidates' assessments from each Assessor. However, it will cover **all** Assessors in each Centre over a period of time agreed between the External Verifier and the Centre, and for **each** Assessor will be conducted in accordance with the Quality Control Matrix given at Annex A. This matrix is intended to provide for the External Verifiers strategic intervention into the assessment process in a way that:

- Provides an accurate and cost effective sampling of the assessment process to establish a measure of the quality of the resulting certification,
- Provides a documented check on the assessment process' conformity with that set out in the National Occupational Standard for performance of the activity.

The matrix is formed from a horizontal axis which defines the factors involved in the assessment process i.e.:

- Assessment Planning
- Assessment Method
- Assessment Evidence Record

The vertical axis specifies the characteristics that will underwrite the quality of the process and hence the certification; i.e.:

- Validity
- Reliability
- Sufficiency of evidence
- Cost effectiveness of process

It will be at the Awarding Body's discretion to determine the areas of the matrix in which they require their External Verifiers to expend their effort. It is expected that these will include a cross-section of qualifications, units, candidates, assessors and internal verifiers, though they should require the selected combination to be optimally effective and economical of verifier effort. A sample distribution of effort is given at Annex A. Use of such a combination should establish a quality datum across all assessment centres and thus provide the awarding body with an indication of the quality of the overall delivery of any award, while at the same time identifying remedial actions to be undertaken by individual centres.

Notes on the Quality Control Matrix

Reliability - this is defined as the ability of a method of assessment to ensure consistent results for different assessors on each assessment occasion. Reliability of the assessment method is the root of consistent assessment between assessors and across centres. Judgements of the validity and sufficiency of evidence will be easier to provide consistently if they are founded on a reliable assessment method. Careful advice on assessment methods and good quality training and standardisation of assessor practice are the key to reliability.

Validity - in N/SVQ assessment is a measure of the relevance of the method used to assess occupational competence. In general the more direct and obvious the link between the evidence collected by the assessment process and the competence under assessment the better the validity of the assessment method.

Sufficiency of evidence –the requirements for this are set out in para. 5.6 above.

Cost effectiveness –is an important characteristic of the assessment system for candidates, employers and awarding bodies. External Verifiers must therefore ensure that assessors exploit all the facilities embodied within the assessment process specified by the NOS in the Unit A1 "**Assess candidates using a range of methods**", and thereby optimise the benefits of the assessment process.

ANNEX A - Quality Control Matrix

Process Characteristic	Assessment Planning	Assessment Method	Assessment Evidence Record
Validity			10%
Reliability		5%	
Evidence Sufficiency	5%		5%
Cost Effectiveness	10%		