



Course report 2025

National 5 Practical Metalworking

This report provides information on candidates' performance. Teachers, lecturers and assessors may find it useful when preparing candidates for future assessment. The report is intended to be constructive and informative, and to promote better understanding. You should read the report with the published assessment documents and marking instructions.

For information about the practical activity, which is internally assessed, please refer to the 2024–25 Qualification Verification Summary Report on the [subject page](#) of our website.

We compiled the statistics in this report before we completed the 2025 appeals process.

Grade boundary and statistical information

Statistical information: update on courses

Number of resulted entries in 2024: 1,776

Number of resulted entries in 2025: 1,753

Statistical information: performance of candidates

Distribution of course awards including minimum mark to achieve each grade

Course award	Number of candidates	Percentage	Cumulative percentage	Minimum mark required
A	516	29.4	29.4	70
B	503	28.7	58.1	60
C	391	22.3	80.4	50
D	197	11.2	91.7	40
No award	146	8.3	100%	Not applicable

We have not applied rounding to these statistics.

You can read the general commentary on grade boundaries in the appendix.

In this report:

- 'most' means greater than or equal to 70%
- 'many' means 50% to 69%
- 'some' means 25% to 49%
- 'a few' means less than 25%

You can find statistical reports on the [statistics and information](#) page of our website.

Section 1: comments on the assessment

Question paper

Feedback from markers and centres suggested that the question paper was fair in terms of course coverage and level of demand. Overall, the question paper discriminated effectively between candidates.

Section 2: comments on candidate performance

Areas that candidates performed well in

Question paper

Well-prepared candidates who demonstrated knowledge and understanding of practical metalworking skills gained marks in the upper range. The most successful candidates fully developed and justified their comments to gain maximum marks.

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|--------------------|--|
| Question 1(c): | Most candidates correctly stated that a reason for using a hide mallet rather than a ball pein hammer to shape fold on the sheet metal plinth, was that the hide mallet would not damage or dent the sheet metal. |
| Question 1(h)(i): | Most candidates correctly stated the length of the M6 thread from the given image. |
| Question 2(b): | Most candidates correctly stated the name of a ferrous metal. Responses to this question varied. |
| Question 2(d)(i): | Most candidates correctly stated that the purpose of part A was to adjust the height of the table on the pillar or pedestal drill from the given image. |
| Question 2(d)(ii): | Most candidates explained why the engineer's square components must be clamped before drilling the holes. Most candidates explained that this was to ensure the workpiece did not move and, therefore, the drilling process was more accurate. |
| Question 2(i): | Almost all candidates correctly identified the ball pein hammer from the given image. |

Question 3(b)(i): Most candidates correctly identified the hacksaw from the given image.

Question 3(g)(i) and (ii): Most candidates gave the correct name of two machines where a Jacobs chuck can be used.

Areas that candidates found demanding

Question paper

As with previous years, many candidate responses to 'explain' and 'describe' questions were too short and lacked the detail required to gain marks.

Question 1(f): Few candidates correctly described how to prevent aluminium from becoming dull over a period of time. Some candidates did not attempt this question.

Question 1(h)(ii): Most candidates attempted this question, however, few candidates correctly explained the purpose of showing the pictorial isometric view on the given image.

Question 1(i): Most candidates attempted this question, however, few candidates correctly explained the purpose of the third-angle projection symbol as shown by the image provided.

Question 1(k): Most candidates attempted this question, however, few candidates stated the correct reading from the image of the micrometer.

Question 2(g): A few candidates correctly described two methods of ensuring that the holes in the engineer's square components line up accurately so that it can then be correctly assembled.

Question 3(c): A few candidates correctly described two environmental benefits of recycling metal.

- Question 3(d): A few candidates correctly described two advantages of using a CNC milling machine instead of a manual milling machine.
- Question 3(f): A few candidates correctly stated two factors that will affect the selection of cutting feeds and speeds when using a centre lathe.
- Question 3(h)(i): A few candidates correctly described how to prevent oxidation from occurring when brazing. Most candidates did not attempt this question.

Section 3: preparing candidates for future assessment

Question paper

From session 2025–26, we're removing the question paper from the course and expanding the practical activity to include a case study.

Appendix: general commentary on grade boundaries

Our main aim when setting grade boundaries is to be fair to candidates across all subjects and levels and to maintain comparable standards across the years, even as arrangements evolve and change.

For most National Courses, we aim to set examinations and other external assessments and create marking instructions that allow:

- a competent candidate to score a minimum of 50% of the available marks (the notional grade C boundary)
- a well-prepared, very competent candidate to score at least 70% of the available marks (the notional grade A boundary)

It is very challenging to get the standard on target every year, in every subject, at every level. Therefore, we hold a grade boundary meeting for each course to bring together all the information available (statistical and qualitative) and to make final decisions on grade boundaries based on this information. Members of our Executive Management Team normally chair these meetings.

Principal assessors utilise their subject expertise to evaluate the performance of the assessment and propose suitable grade boundaries based on the full range of evidence. We can adjust the grade boundaries as a result of the discussion at these meetings. This allows the pass rate to be unaffected in circumstances where there is evidence that the question paper or other assessment has been more, or less, difficult than usual.

- The grade boundaries can be adjusted downwards if there is evidence that the question paper or other assessment has been more difficult than usual.
- The grade boundaries can be adjusted upwards if there is evidence that the question paper or other assessment has been less difficult than usual.
- Where levels of difficulty are comparable to previous years, similar grade boundaries are maintained.

Every year, we evaluate the performance of our assessments in a fair way, while ensuring standards are maintained so that our qualifications remain credible. To do this, we measure evidence of candidates' knowledge and skills against the national standard.

For full details of the approach, please refer to the [Awarding and Grading for National Courses Policy](#).