

Candidate Style Answers

GCSE Design & Technology: Resistant Materials

OCR GCSE in Resistant Materials: J306

Unit: A564

These candidate style answers are designed to accompany the OCR GCSE Resistant Materials specification for teaching from September 2009.

GCSE Design & Technology:

Resistant Materials

Unit A564 Technical aspects of designing and making

OCR has produced these candidate style answers to support teachers in interpreting the assessment criteria for the new GCSE specifications and to bridge the gap between new specification release and availability of exemplar candidate work.

This content has been produced by senior OCR examiners, with the support of the Qualification Manager, to illustrate how the sample assessment questions might be answered and provide some commentary on what factors contribute to an overall grading. The candidate style answers are not written in a way that is intended to replicate student work but to demonstrate what a “good” or “excellent” response might include, supported by examiner commentary and conclusions.

As these responses have not been through full moderation and do not replicate student work, they have not been graded and are instead, banded “medium” or “high” to give an indication of the level of each response.

Please note that this resource is provided for advice and guidance only and does not in any way constitute an indication of grade boundaries or endorsed answers.

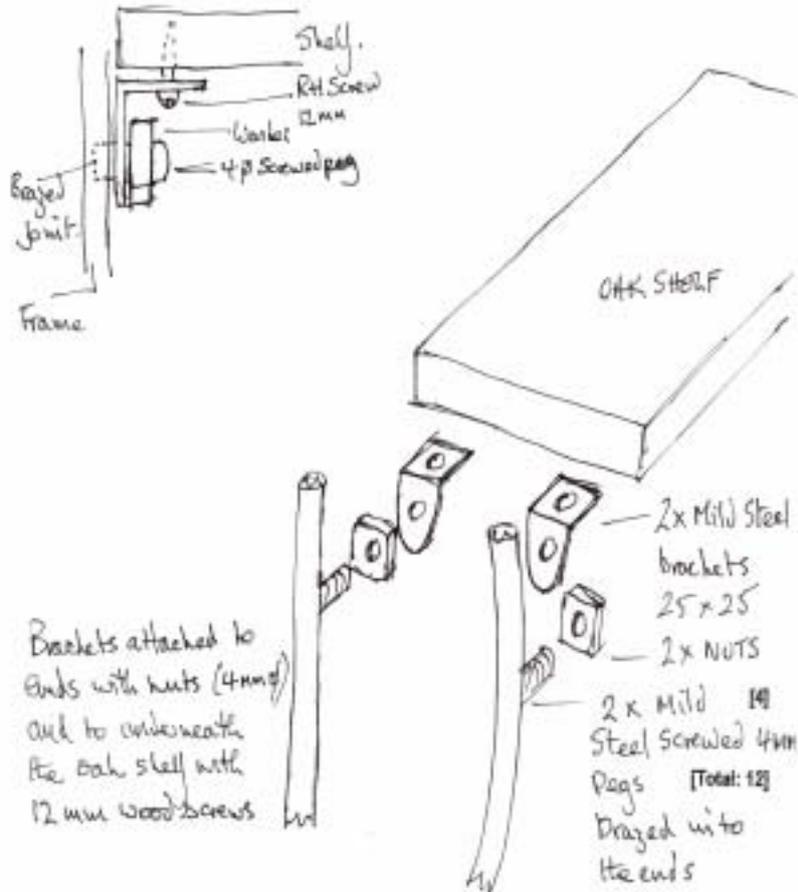
3d) Use sketches and notes to show how the mild steel end frames could be fixed to the shelves. Your solution must be capable of being taken apart.

Modifications may be made to the end frames and/or the shelves. (4)

Candidate style answer

Examiner's commentary

(d) Use sketches and notes to show how the mild steel end frames could be fixed to the shelves. Your solution must be capable of being taken apart.
Modifications may be made to the end frames and / or the shelves.



High level answer

The candidate achieved good marks for this answer as appropriate modifications were shown to the end frames – by brazing pegs into the frames to support the angle brackets screwed to the underside of the oak shelves. Details were given of the sizes of the brackets, pegs and nuts. An exploded side view of the method of attachment was shown. This, together with the main drawing showed details of the fixing to both the frame and the shelf.

4c) Discuss why the manufacturer has chosen to produce 10 000 DVD racks using the injection moulding process. (5)	
<i>Candidate style answer</i>	<i>Examiner's commentary</i>
<p><i>This process has been chosen to make the racks as it's the most common method. Once the setting up has been done and the operators trained it is a fast process which causes minimal waste. Some difficult processes can be produced with this method. One of the main reasons for the use of this process is that the more produced gives a lower cost per item. A higher profit can be made than if the item was batch produced.</i></p>	<p>High level answer</p> <p>In this question the candidate shows some knowledge of the issues relating to the process. The information is presented in a structured format. Reference is made to the speed of the process; the issue of waste is addressed. The initial cost of training and "tooling up" is mentioned, together with the possibility of making more intricate products. The relationship between initial costs and quantity is understood.</p>