

TOLERANCES

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On behalf of The World Association of Technology Teachers

W.A.T.T.



World Association of Technology Teachers

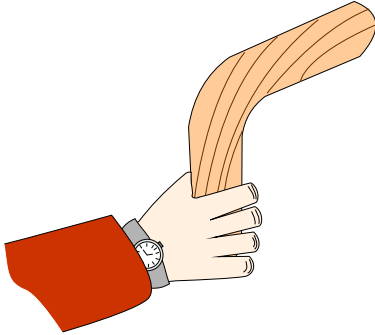
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1. When a product is manufactured, it is checked to ensure that it falls within certain tolerances. What is meant by the term tolerance / tolerances?



When a product is manufactured, in large numbers, by batch or continuous production, it is almost impossible to ensure that each individually finished product is exactly the same. For example, the boomerang shown opposite, has been manufactured as one in a batch of a thousand. Each boomerang will differ very slightly in its size and shape due to the way it has been manufactured. This is usually the case, when manufactured products are made completely by hand or part manufactured by hand.

2. Using notes and sketches explain the type of tolerance checks that should be carried out on the finished boomerang.

NOTES:

SKETCHES

3. Components for cars and aeroplanes are checked to ensure that they fall within strict / precise tolerances. Why is this the case? The key words / phrases may help you answer this question.

QUALITY CONTROL

SAFETY OF THE FINAL PRODUCT

COMPANY REPUTATION

4. If a product or component falls outside the set tolerances, it is normally rejected. Instead of discarding or dumping the component, how could it be used productively ? The key words / phrases may help you answer this question.

RECYCLE MATERIALS

REPAIR

USE AS TEST PIECE

USE FOR TRAINING PURPOSES
