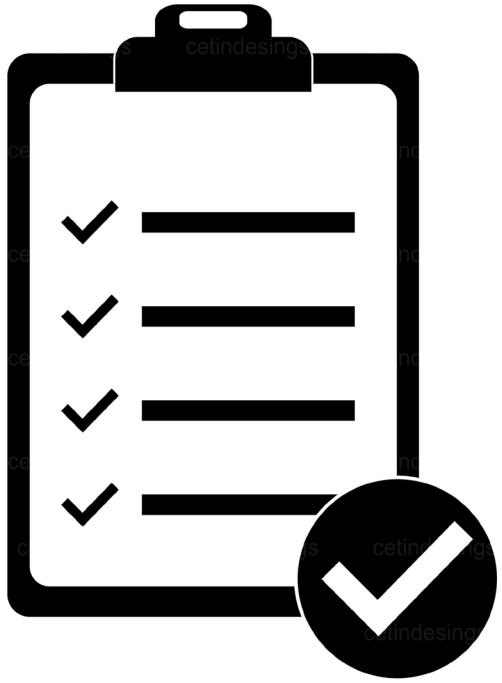
Evaluation and Implementation report

Layout of an evaluation and implementation report

- Introduction
- Manufacturing information
- Operating Efficiency
- Testing Methods
- Evaluation of Design
- Improvements and adaptations
- Conclusion

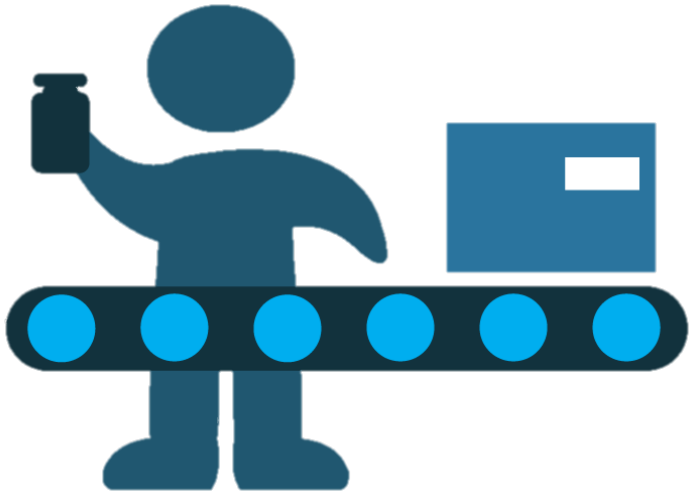


Introduction (50–75 words)

- Briefly restate the purpose of the device (why did you make it)
- Outline what will be covered in the report (manufacture info, efficiency, testing, evaluation, improvements).

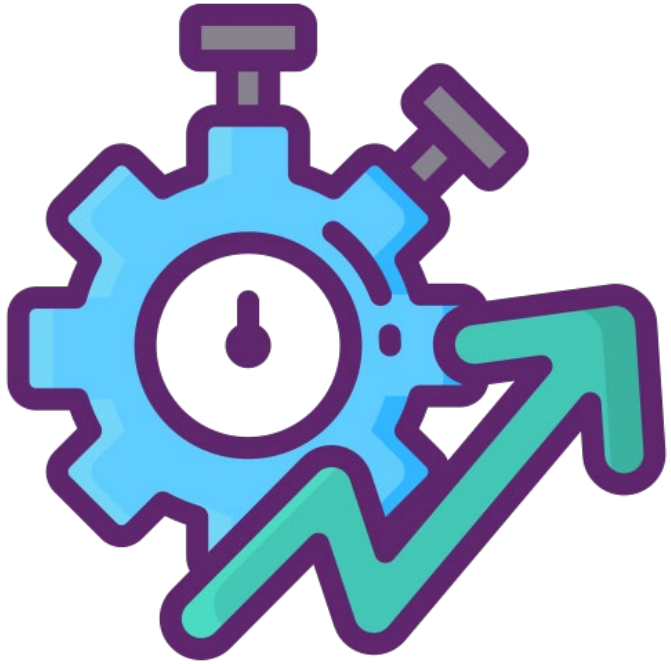
Manufacturing Information for third parties (150–175 words)

- Provide all details a third-party manufacturer would need
- Refer to the bill of materials
- Any changes that need to be made for mass production
  - Assembly and joining methods that need to be used (e.g. welding, adhesives, fasteners).
  - Any environmental considerations (waste, sustainability, material choice).
  - Health & Safety: include relevant legislation (PUWER, LOLER, COSHH, etc.), PPE, safe handling, ergonomics.



Operating Efficiency (100–125 words)

- Present your efficiency calculation (e.g. mechanical advantage, energy transfer, load-to-effort ratios).
- Show working clearly with formulae.
- Interpret what the result means within context (performance and usability)
- Mention any assumptions



Testing Methods (100–125 words)

- Qualitive and Quantitive testing
- Explain the test methods used (e.g. load testing, functional trials).
- Justify why these tests were chosen (validity, safety, realism).
- Identify limitations of testing (time, resources, accuracy, simulation vs. real-world).
- Discuss how results informed design refinements.

Evaluation of Design (150–175 words)

- Judge how well the device meets the design criteria:
  - Conformance to specifications (distance, weight, screen constraints).
  - Reliability, durability, ergonomics.
  - Refer to bill of materials (was it the right materials)
- Include comments on usability and operator safety.

Improvements & Adaptations (125–150 words)

- Identify any further improvements needed:
  - Materials, geometry, mechanisms, efficiency.
  - Cost or ease of manufacture.
- If no improvements are required, justify with evidence.
- Consider future adaptations (e.g. scaling, alternative applications).

Conclusion (50–75 words)

- Summarise key findings from testing and evaluation.
- Highlight whether the device is fit for purpose and ready for implementation.

Hints

- Flesh out every part and then go back to improve
- Get a first draft then go back through, then worst comes to worst you have a report
- Don’t just use text, use screenshots, diagrams, tables ect.
- Refer to the screenshots, diagrams and tables in the text
- Imagine this is the first time someone has heard of your project, they cant see the prototype so they must rely on your report