

Yr12 Bridging Task: Product Design

Task 1)

Analyse 3 completely different products. (one functional and everyday, one luxury, one creative and extra ordinary).

Research how they were made.

What they are made from (just saying plastic is not enough!).

Materials used and why?

How they are used

How environmentally friendly they are.

What the strong and weak points of them are.

Please see an example below.

ANALYSING THE STRENGTHS AND WEAKNESSES OF THE PRODUCT

PRODUCT STRENGTHS

Can hang from any hook or peg, making it easy to store away.

PRODUCT WEAKNESSES

Need to find videos for this page.

FUNCTION

- Curved end – means the tongs can be hung from any peg or handle.

MATERIALS

- The stainless steel – tongs are hard and durable enough to be used for decades without weakening or rusting.
- Waterproof – so the tongs are not affected by weathering or rust.
- Fireproof – to prevent any melting or damage done to them after years of use.
- Steel is lightweight – to make the job of barbequing and cooking pleasant and enjoyable as well as easy.

MANUFACTURING

- Quickly manufactured – due to the fact that there is not a great deal of material needed for manufacture to process.
- Limited components – means that the tongs can be produced quickly and in less time.
- Cheap manufacture – due to little material used at relatively cheap prices.

ERGONOMICS/EASE OF USE

- Comfortable in hand – thanks to the lightweight steel, the tongs will be comfortable in the users hand for at least 30 minutes.

AESTHETICS

- Smart and sophisticated look – the stainless steel effect already gives the tongs a plain yet smart look as well as a polished finish.
- Plain finish – this means the range of customers will broaden as the silver colour and effect of the steel tongs eliminates any potential offences to certain countries or cultures and still look an attractive product.

COST

- Relatively cheap manufacture – as there are not many components to be produced for one product, there will not be many manufacturing process to be done, reducing costs and time of production.
- Cheap price – under £10 due to cheap manufacturing + materials.

FUNCTION

- Not versatile enough – tongs can only pick up and hold small pieces of food, not larger pieces that could be necessary to cook too.
- Short arms – means it is dangerous for the user to barbeque as the arms will get too hot to hold, potentially burning the user, being too short for the job.

MATERIALS

- Just one material – this means the tongs as a product looks too plain with no originality or unique edge, with it just being boring steel. It could look much better.

MANUFACTURING

- Not ridiculously cheap – although manufacture should be as cheap as possible, there needs to be a decent standard of quality about the tongs and so for that, more money should be spent to buy the necessary quality materials for production.

ERGONOMICS/EASE OF USE

- Hands/pickers' too small – the tongs cannot pick up larger pieces of food as they are too small in size, this limits the versatility of the product.
- Balance not right – the arms on the tongs are too short to BBQ with as the user's hands will get burnt, there is not enough space between where the tongs will get hot and where they will be held.

AESTHETICS

- Looks boring – as there is only one plain silver colour on the tongs, being steel, the product can be seen to not have a lot of vibe to it. If there were different coloured parts/materials, it would be much more attractive.

COST

- Materials not cheapest – due to the necessary satisfaction of the potential customers, the quality materials used for the mass production of the tongs will be slightly more expensive than the ones initially intended, costing more, therefore the cheapest materials will be irrelevant for my tongs.

Short arms mean the heat, conducting through steel will burn users hands after a while.

Video on the short arms and consequences of them. [CLICK TO PLAY!!](#)

Spot welded joint is quick and easy to fix and is very strong.

Not big enough area on hands/pickers to pick up and hold larger pieces of food.

Video on the small 'hands/pickers' and consequences of them. [CLICK TO PLAY!!](#)

Task 2)

Create a mind map of all your interests, things that you do (activities) and hobbies.

In the mind map explore any problems that you find, have or can see. This will be a starting point for your coursework.

Say which is your favourite and why.

Task 3)

Draw lots....buy a sketch pad and fill it with drawings. These should not be neat and should not take you a long time of each.

These drawings should show detail and the shape/ form of products. You can stick pictures in, draw over them and try to improve the design of them... aim for 50 drawings (10 per week)....