

Design for manufacturer report



Design for manufacturer report People live in a world of materials that give substance to all things that they see and touch. Through the ability to design, these people have been able to make things out of these materials and in the ability to see things better in an object than in their external form. These objects are made to efficiently ease the ability to do work or assist in other activities. The adiclip project is aimed at improving the efficiency of shoe packaging and cost reduction for materials required for the packaging process. It is a re-think project for sustainable packaging and a product design that addresses the sustainability issue through the use of less material for more use (Collier & Evans, 2010, pg. 11).

Made of plastic and ferritic stainless steel, adiclip addresses the astonishing over use of materials in packaging. Such materials like shoe boxes and nylon materials serve a single purpose and after which, they are disposed. The adiclip can be reused and recycled to make other types or similar materials.

Single track stainless steel material is used in making the chain that bind the pair of shoes. A plastic coat is made all-round to ensure adequate protection of the chain against dirt and rust. Ferritic stainless steel profile is recommended for the straight sections. The profiles should be fixed with a surface finish of maximum 1.5 µm and a hardness of about 24 HRC.

Curves are constructed to enable easy movement of debris. Stainless steel is recommended for the inside guides as it can be used in the avoidance of embedding of dirt and the wear life of packaging chains (Poli, 2001, pg. 34).

The ends of the materials are cured to provide the hugging positions. The adiclips are given out to adidas customers who use them to store their

shoes and can sell them back to the company. A single chain can serve the packaging process.

With regards to costs, ferritic stainless steel offers reduced life-cycle costs compared to the conventional materials whose service conditions entail abrasion and corrosion. Also, when compared to the conventional materials ferritic stainless steel tend to lessen the initial cost by eliminating the use of protective coatings in addition to reducing the deterioration allowances. Further, service cost savings got from the use of ferritic stainless steel in adiclip originate from the abridged maintenance, enhanced productivity and considerably longer life span.

On the other hand, plastic is one of the readily available raw materials whose price is quite low and can be easily molded into the required shape. The use of plastic as an essential part of the adiclip is, therefore, likely to reduce the cost of producing the shoebox. Additionally, the rationale that plastic is recyclable also reduces the cost of materials as well as the cost of manufacturing the adiclips. Thus, it is quite cheaper to use plastic and ferritic stainless steel in manufacturing the adiclips compared to using paper to manufacture shoeboxes. This is as a consequence of the fact that both plastic and ferritic stainless steel are readily available and can be recycled thereby reducing the cost of production. An adiclip would go for 10\$ and can be re-used in reducing the trash volume of about 120, 000 shoe boxes in a year (Demarco, 2011, pg. 78).

Bibliography

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