


The use of design for assembly (DFA) method for ergonomics improvement of a design

Alexandre Teixeira do Amaral, Nilton Luiz Menegon

Abstract: This article introduces the use of the DFA method in a situation of ergonomics intervention in the process of product redesign in a home appliance company, helping with acquiring technical solutions to be applied to the product. The design for assembly method is used to reduce various assembly procedures lowering the number of components and favoring the assembly procedures, which are to be carried out. This methodology has been used in many situations to simplify products and reduce the cost assembly. The QFD, the analysis of Kano and the principal of Pugh are some of the other examples of the methodologies and techniques used in the industry to integrate participative methods of ergonomics with the perspective in the design as well as the DFA. However, the use of the DFA method, besides simplifying the structure of designs and reducing the assembly cost, may also be applied to product redesign situations aiming to improve ergonomics in work places.

Keywords: DFA, ergonomics, product development.

Download PDF 

Close window 