ABSTRACT

THE DEVELOPMENT ANALYZE OF A BEARING TREKER CONCEPT DESIGN USING QUALITY FUNCTION DEPLOYMENT (QFD) METHOD

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Competitive products that occur in the manufacture of assistive devices, technical innovation competition both in the form of form, function and the size and price is more strict. Industrial world, especially the manufacturing industry, an additional tool that representative and useful to simplify and save money is needed, therefore research to create a working tool when it needs to be improved. Moreover, an additional tool to facilitate the work will affect the production cost of a product which is produced primarily cost and production time.

Development of the technical parameters required in the design step, performed prior determination of the attributes that need to measure the level of satisfaction of users (consumers). Method of Quality Function Deployment (QFD) felt quite effectively applied for design purposes. QFD (Quality Function Deployment) is a method that serves as a tool to transform information about the wants and needs of consumers (Customer Needs) to a matrix of variables in determining the specifications of the products or services to be designed, so that consumers desire to product development this treker can be clearly structured.

Product development processes with QFD (Quality Function Deployment), we got the technical characteristics of products that have a bearing treker largest absolute value that is equal to 12,21% of the driving shaft system suppressor mechanism. Forming functions, technical characteristics, is developed by using morphological tables which generate alternative solutions to as many as 243 pieces of alternative combinations of solutions. Alternative solutions-forming functions are prioritized technical characteristics, the results of selection based Concept Selection Pugh method gives the conclusion that the technical characteristics of the shaft drive system suppressor mechanisms using the working principle of the pneumatic pressure is between 75-150 psi. Treker bearing concept of this new standard is expected to meet the desires and needs of consumers for such products in the form of technical aids treker bearings.

***Keywords**: Quality Function Deployment (QFD), Morphological Tables, Pugh Concept Selection Method, The Best Product Concept.*