

CONNECTOR-BASED MODULAR RESEARCH FOR THE MECHANICAL PRODUCTS.

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ABSTRACT

TRADITIONS MODULAR RESEARCH IS USED THE LIAISON GRAPH TO REPRESENT THE CONNECTED OF PART -S. THIS METHODOLOGY THAT ONLY HAS A RELATION OF PARTS DOES NOT HAVE ENOUGH INFORMATION TO HANDLE THE MANUFACTURING. IN ORDER TO ACHIEVE THE OBJECTIVE OF MANUFACTURING, THIS STUDY AD -OPTS CONNECTOR-BASE CONCEPT TO REPRESENT A PRODUCT IN A FUNCTION VIEWPOINT. THE STRUCTURE ATTRIBUTE OF A CONNECTOR WHICH CONTAINS FASTENER, DIRECTION, DISASSEMBLY TOOL AND PARTS IS ADOPTED IN THIS STUDY. IN THE OTHER HAND, THIS STUDY ALSO ADOPTS A CONCEPT WHICH IS DESIGN FOR VARIETY TO RESPECT THE REQUIREMENT OF CUSTOMERS IN A VARIETY VIEWPOINT. THIS VARIETY INFORMATION IS THE MAJOR CRITERION OF MODULAR RESEARCH FOR MANUFACTURING PRODUCTS. THE ALG -ORITHM OF MODULAR PRODUCT IS GOMORY&HU ALGORITHM WHICH CONSIDERS THE VARIETY INFORMATION. FINALLY, USING THE MANUFACTURING INFORMATION ASSIGN THE PARTS TO THE CONNECTORS. THE MAJOR CHARACTERISTIC OF THIS STUDY IS CONSIDERING FUNCTION, VARIATION AND MANUFACTURING VIEWPOINT IN A MODULAR PROCESS. THE FACTORS OF THIS STUDY COULD YIELD THE MODULAR RESULT TO APPLY IN MANUFACTURING PRODUCTS.

Keywords : MODULARITY, LIAISON GRAPH, CONNECTOR, PRODUCT VARIETY, GOMORY&HU ALGORITHM

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