

ABSTRACT

Manufacturing Process Laboratory is one of laboratories in Industrial Engineering Study Program, Industrial Engineering Faculty Telkom University. Manufacturing Process Laboratory has CNC Turning / Lathe to support laboratory activities. CNC Turning Machine type that available in laboratory is ST-20 manufactured by the company HAAS Automation, Inc. This machine is used for produce part. Part XYZ is manufactured using dural material which are available on the market with a length around 2-4 meters. Part XYZ is produced in large quantities (mass production), so it needs to be produced continuously. To perform continuous production on CNC Turning machines, need an additional feeder. In the previous study, entitled "Design Concept Feeder HAAS CNC Turning Machine ST-20 Using Generic Product Design stages in Manufacturing Process Laboratory Telkom University" generate the target specifications, product architecture and selected product concepts that can solve existing problems, by using the stages of machine design in general that consist the introduction stage needs, mechanism stage, analysis forces, material selection stage, design of elements, modification, detailed drawing, and production. Output of the results of this research is detailed design of the product feeder that consist material, size, and engineering drawing with dimensions of 2300 x 700 mm which can support and carry stock on CNC Turning Haas ST-20.

Keywords : detail design , feeder HAAS turning ST-20, machine design method