

ABSTRACT

The development of archery first began at the national sports week (PON) in 1948. With the rapid development of archery sports, in 1953 the united organization was formed. Archery sports have several accessories that support skills in archery one of them is damper barebow. Damper barebow is a ballast mounted on the end of the riser to reduce the vibration effect that occurs when releasing arrows. Barebow's damper affects the accuracy of the target stipulated in archery sports. By not using a damper barebow it can reduce the level of accuracy when sporting archery. There is a shortage in the existing barebow damper which is the containment of rust. The rust appears due to the selection of materials in existing products that have easily rusty properties. The material used in existing products is iron. Based on the importance of function and the lack of damper barebow existing then researchers conduct research to produce the best design. The study used reverse engineering methods to design the damper barebow design. The result of this study is the new design with a diameter of 35mm and thickness of 40mm with the material used is stainless steel.