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Analysis a harvesting mechanism of swiftlets nest using finite element analysis

Abstract

For this project, it is focused on the harvesting swiftlets nest process to design and analysis new mechanism of harvest equipment. Industry swiftlets nest is not a new industry in Malaysia. It gets very high demand from China. Harvesting swiftlets nest is one of the processes to produce any products that made from swiftlets nest. Currently, they are using manual harvesting equipment to harvest swiftlets nest without using any auxiliary equipment. It is the first step in process flow and very important role before cleaning process. The objectives of this project are to design mechanism harvesting equipment to harvest swiftlets nest and to decrease the time of harvesting swiftlets nest process in a swiftlets house in a day. The design of harvesting equipment is using CAD software and then transfer to Finite Element Analysis (FEA) to analyses the capabilities of part design. At the end of this project, this research will give understanding about design using CAD software and do analysis that improved the harvesting equipment.