

ABSTRACT

PT. Perkebunan Nusantara VIII is a company that produce orthodox black tea in Indonesia with a land area of less than 400 hectares. In the production section, especially the sorting room in sorting machine, which produces dust contaminants are very disturbing operators who are working. For the maintenance process is scheduled for 2 hours on working hours every 1 month, if maintenance takes more than 2 hours it will cause the production process is delayed. To support the maintenance process on dust collector, Design of dust collector using design for assembly (DFA) aproachp using Boothroyd and Dewhurst method. DFA approach is chosen to simplify the process of maintenance dust collector, which required unloading dust collector every maintenance. There are 2 dust collector designs proposed to get the best assembly design. The design of dust collector with optimal assembly time, with the application of Boothroyd and Dewhurst is design 2 with total component of 80 pieces with assembly time of 515.52 sec with assembling efficiency of 24.44%. It is hoped that by using design 2, the dust collector maintenance process does not interfere with the production process and the shorter time of assembly.

Keywords – Dust collector, Design for Assembly, Boothroyd dan Dewhurst, Maintenance, Efficiency of Assembly.