

## **ABSTRACT**

*PT Perkebunan Nusantara VIII Ciater is a company produce black tea orthodox ready for sale more or less 4 tons every day. At the production section, PT PN VIII will use local exhaust ventilation specially at sortation area on sieving machine, for maintenance process is scheduled 2 hours in workhours every once a month, if maintenance takes time more than 2 hours, it will caused production process delayed. To support maintenance process on LEV, LEV design using DFA approach with Boothroyd and Dewhurst method, DFA approach is choosen to simplify maintenance process which required assembly process. There are 2 LEV designs for this research. Design 1 with 94 components, assembly time 647.88 seconds and assembly efficiency level 23.62%. Design 2 with 82 components, assembly time 567.84 seconds and assembly efficiency level 24.83%. Design 2 is choosen for this research based on DFA goals, minimum total part that use, optimization assembly time , and assembly efficiency level.*

*Keywords: Sieving Manchine, Local Exhaust Ventilation, Design for Assembly, Boothroyd and Dewhurst.*