

ABSTRACT

Indonesian Aerospace (PT. Dirgantara Indonesia) is a manufacturing company. In general, aircraft production process includes several stages, namely, material testing, pre-cutting, fabrication, and assembling. In fabrication stages, there are some treatments applied on aircraft components such as, heat treatment, surface treatment, and primary painting. In chemical milling process which has a complexity level, including in surface treatment. The problem which occurs in the process is that the target of work completion cannot be achieved on schedule because of the long term cycle time. Thus, it leads to delay of completion of the next process unit.

In order to overcome the problem, therefore, an improvement needed to be done and one of the methods that can be used is Business Process Improvement. The stages that should be done in designing recommended improvement are process comprehension, cycle time measurement, identification of human resources, information, facilities, and technology, customers' need, as well as errors in the current process. The plan of improvement chemical milling process is arranged based on activities analyses and cycle time improvement with further studying elements in the current process which have been identified.

From the improved design, there is a better recommended process than the current process. In the recommended improvement process, generally activity's cycle time efficiencies are increasing. According to the simulation modeling output, it can be found out that the processing time of 8 D-nose components in recommended process reduced in the amount of 1,252.23 minutes or 20.87 hours out of the whole current processing time. Besides that, the improvement that has been done also has impacts to inclining location utilization and an even distribution of the resource utilization level.

Keywords: improving process, Business Process Improvement, cycle time improvement.