ABSTRACT

Time and Motion Study according to Barnes (1976) is the systematic study of work systems with the purposes of developing the preferred system and method usually the one with the lowest cost, standardizing this system and method, determining the time required by a qualified and properly trained person working at a normal pace to a specific task or operation, and assisting in training the worker in the preferred method. This activity had done from November 2010 until February 2011 at PT. Cosma Cipta Sejahtera, Cangkurawok Village, Dramaga, Bogor.

Based on calculation, writers get the standard time is 4775.53 seconds or 79.59 minutes or 1.33 hours. From this result, production target that can achieved by operators is 187 units/day. This result only different 7 units/day from production target that given by company, is 180 units/day. The total line efficiency score before repairing is 13.98% and after repairing with Helgson-Birnie methods is 82.01%. Line efficiency get increase after repairing with Helgson-Birnie methods. It looked at smoothness index and balance delay, that have decrease significantly from 7245.80 until 626.48, and for balance delay from 21.05% until 4.39%. This result showed that the writer’s idea condition have a better line balancing than first condition. Besides that, repairing of work condition are more important for operator to make them work comfortably, so it can minimize the late of achievement production target that can make an extra time for operator.

Keywords: time, motion, line, balancing, iron, table.