

# **Application of Work Study to process improvement: Fruit nectar case**

Macías-Jiménez, Mayra A.; Romero-Conrado, Alfonso R.; Acosta-Fontalvo, Luis C.; Coronado-Hernández, Jairo R.

## **Abstract**

Work study is an extensively used technique for examining the methods to carry out activities in a company and proposing actions for productivity improvement. This paper presents a work-study application to a fruit nectar process inside a food company using 5W1H and ECRS techniques. A critical analysis was conducted in three previously selected activities, according to its improvement potential. Results allowed optimizing distances along the process and improving ergonomic conditions for workers. Savings included a total distance of 10.2 m, two transportation activities and two delays activities per production cycle. Also, the standard time was determined in one of the prioritized activities. Our results demonstrated that work study techniques are tools suitable to be implemented in most economic sectors for productivity improvements. However, the technique itself will not be effective without a commitment from top-level management for implementing the corrective actions proposed.

**Keywords:** Work study, productivity improvement, fruit nectar process, food industry, 5W1H, ECRS.