

Time and motion study of mango pulp industry (Shree Samarth Foods, Palgad, Tal Dapoli, Dist Ratnagiri)

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■ **ABSTRACT** : Konkan region of Maharashtra is the leading producer of Alphonso mango. The Alphonso mango is having highest market value during the season. But as the season passes near to the onset of monsoon season, the market rate of the mango falls down drastically as rains affects the taste and quality of the mango fruit. Hence, the mango growers in this area prefer to sale mango to the processing industries in this region. The mango processing industries for the mango pulp production are having good demand. The mango pulp production process is divided in few distinct operations like procurement, ripening, cleaning, peeling, pulp extraction, stone removal, pulp boiling, can filling, sealing, labelling etc. If the process line for these operations is set properly and maintained, then the time and motion required for doing these operations can be optimum one. But the pulp processing industries in this area are setup mostly as per the convenience of the owner and availability of space. Hence, it was felt necessary to study the time and motion required for producing mango pulp in a mango pulp industry M/s Shree Samarth Foods, Palgad, Tal Dapoli, Dist Ratnagiri. In the study, the time required for each operation was studied. According o the observations, som recommendations were made. Though the factory layout was conventional, there was considerable synchronization in the processing activities. It was observed that the manual peeling operation takes most of the process time and labours, hence use of modified pulper cum refiner was recommended instead of old pulper. The cost of processing mango pulp was found to be 99.47/kg. The body part discomfort faced by the workers due to working in the industry was found out by interviewing them personally. The shoulder, neck and mid back pain is observed in the women workers only who are doing the manual sorting. The arm and palm pain was observed in women workers doing peeling operation. In general, it is observed that the body part discomfort starts with ageing as young labours don't show any body part discomfort.

■ **KEY WORDS** : Mango pulp industry, Time, Motion study, Layout, Palgad

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