



Automated Kokis Making Machine

A.G.A. Sandakalum, M.P.U. Isuranga ^{a*}

Department of Engineering Technology, Faculty of Technology, University of Ruhuna, Kamburupitiya, Matara, Sri Lanka

*Corresponding author: uditha@fot.ruh.ac.lk

ABSTRACT

"Kokis" plays a significant part in Sri Lankan household at all special occasions. Nowadays, as a result of their hectic lifestyles, people frequently purchase "Kokis" from the market for special occasions. Traditionally, Kokis are made by hand, which requires a higher level of ability and expertise. Commercial production of Kokis is extremely challenging due to the handcrafted nature of the procedure. This study suggests a more cost-effective, user-friendly, and hygienic automated system for small and medium-sized businesses. The machine is composed of the following essential subsystems, including a kokis mold moving system, a liquid mixture inlet mechanism, an oil inflow system, an oil heating system, a temperature control system, and a conveyer system for removing kokis. A resistive heating element is utilized to deliver heat to the frying oil. Further, this procedure is monitored by temperature sensors to ensure that the appropriate warmth is maintained to correctly cook the kokis. The device undergoes a three-minute preparatory process to ensure a flawless kokis-making operation. It is capable of producing kokis at a pace of two kokis every 90 seconds. However, it can be expanded to four kokis per sequence by increasing the number of integrated kokis modules to four. When manufactured using this technology, a single kokis weighs approximately 20g. This proposed machine could be used to change the perception of commercial kokis manufacturing among small-scale enterprises.

Keywords: *Automation, cooking, food processing, kokis*