Implementation of RFID tags in food containers in catering business.

Researcher, Beatriz Bordetas Bravo, Zaragoza Logistics Center, Zaragoza, Spain.
Technician, Javier Cuadrat Fernández, ARAVEN, Zaragoza, Spain
Researcher, Mario Monsreal Barrera, Zaragoza Logistics Center, Zaragoza, Spain.
DC. Jesús Royo Sánchez, Zaragoza Logistics Center, Zaragoza, Spain.

Abstract

This article describes the design and manufacturing development of food containers, whose use has been enhanced through the incorporation of an UHF RFID Tag. The primary use of these containers was to store fresh products, such as sauces or fruits, in industrial kitchens at restaurants and hotels. Due to the addition of the RFID tags in these containers, more accurate and historic information about product and usage can be gathered. Hence, this new information RFID-based system helps to achieve better inventory control, improve events management such as cold-storage room replenishment, or reduce products close to expiration date. The importance of this project is in the fact that, according to a previous review, there is no an initiative similar to develop this RFID application anywhere else. The project was an initiative of the plastic in-moulding factory ARAVEN with the collaboration of LOG.ID Lab (Identification Laboratory, for the supply chain) at Zaragoza Logistics Center.