

SENSOR SPOT

TITLE	Avoiding food waste through accurate monitoring of oxygen level in packaged products with Sensor Spot's MAP packaging indicator
COMPANY / ORGANIZATION	
FOOD CHAIN AREA	3. Warehousing / storage 4. Finished goods transportation 5. Point of purchase – Retail or Food Service
KEYWORDS	MAP, oxygen indicator, monitoring
ISSUE ADDRESSED	<p>The food industry destroys significant quantities of pre-packaged batches of cold cuts, cheese and other chilled products annually. The packaging of these products is filled with nitrogen to prevent the food products from coming into contact with oxygen. If the packaging is not airtight, because of faulty sealing or punctures, the products will spoil. If a package is found to contain too much oxygen because of a leaky sealing or a puncture, the entire batch is destroyed. Around 2-10% of MAP packages are destroyed based on random checks, which can lead to unnecessary food waste and cost to businesses.</p>
SOLUTION¹	<p>Sensor Spot has developed a smart control system for Modified Atmosphere Packaging (MAP), consisting of a luminescent dot that lights up when exposed to oxygen. With the help of a special electronic reader, it can determine whether the packaging is still airtight.</p> <p>A new printing technology is used to place the sensor - luminescent spot - on the inside of the packaging foil, which is then laminated to ensure that the sensor is not in direct contact with the food product. The bottom layer is permeable so oxygen molecules in the packaging can reach the sensor. The sensor material cannot permeate the foil in the other direction.</p> <p>The packaged products pass a read-out system that includes a camera. The read-out system's software is set to recognize whether an acceptable oxygen level has been exceeded. The cameras can be installed at the end of the packaging line, at a distribution center or a point of sale.</p> 
EXPECTED BENEFITS	<p>Avoiding unnecessary waste: More accurate monitoring of food product quality throughout the supply chain can help prevent unnecessary loss of packaged products. Adding a oxygen indicator like the Sensor Spot makes it possible to check each individual package for quality and destroy only spoiled products. The technology is simple, reliable and affordable.</p>

CASE LINK	http://www.foodvalleyupdate.com/trends/smart-packaging-can-help-reduce-food-waste/
CONTACT INFORMATION	Mail: Sensor Spot B.V. Bijsterhuizen 24-17, 6604 LK Wijchen, Netherlands Telephone: +31 24 378 1536 E-mail: info@sensorspot.nl