

FOOD MANUFACTURING & SUPPLY CHAIN

Coca-Cola & McDonald's

Monitoring impact within The McDonald's Division supply chain

CLIENT	PARENT	SOLUTION	RESULT
The McDonald's Division (TMD)	Coca-Cola Europe	RFID & SAMs Impact Monitoring	75% impact reduction

The UK McDonald's Division (TMD) within Coca-Cola needed to monitor 5,000 Arca Boxes carrying 250 litres of Coke syrup. Costing €150 per box with an estimated shelf life of 40 trips, significant damage was being caused during the supply chain — costing nearly £80,000 in the first year alone in replacement parts.

Key challenges

- ✓ Identifying exactly where in the supply chain damage was occurring across 1,200 McDonald's restaurants
- ✓ Distinguishing individual damaged boxes among 500 identical units in the storage facility
- ✓ Reducing £80,000 annual repair and replacement costs without data to prove root cause
- ✓ Enabling data-based conversations with distribution partners to change working practices

The solution — RFID & Smart Asset Monitoring

TraceAll Global deployed RFID tags and readers alongside Battery-powered Smart Asset Monitoring Solutions (SAMs) installed within specific boxes to monitor impact forces. The system monitored any impacts sustained over 14G — confirmed through field testing as the threshold at which damage occurred. Data was collected over 12 months across the full supply chain covering collection from CCE Milton Keynes, three Martin Brower distribution centres and 1,200 McDonald's restaurants.

What the data revealed

- ✓ All significant impacts were being recorded in one specific distribution centre
- ✓ The damage was occurring exclusively on night shifts at that DC
- ✓ Root cause was confirmed as incorrect lifting technique by forklift operators
- ✓ RFID tracking enabled identification of specific damaged boxes among 500 identical units

75%+**Impact reduction**

Impacts reduced by over 75% after retraining the

£80k**Annual saving**

Near-elimination of annual repair and replacement costs

1**DC identified**

Analytics pinpointed the single distribution centre

12mo**Data period**

One year of impact data collected to build an

How the solution worked

- ✓ **RFID deployment**
RFID tags and readers placed in boxes enabled identification of specific damaged units among 500 identical boxes in the storage facility.
- ✓ **Impact monitoring**
SAMs installed in boxes monitored and recorded all impacts over 14G — the confirmed damage threshold — throughout the entire supply chain journey.
- ✓ **Data analysis**
Twelve months of impact data was analysed by TraceAll Global, identifying the specific distribution centre and shift pattern responsible.
- ✓ **Working practice change**
With irrefutable data in hand, TMD retrained the specific DC involved — reducing impacts by over 75% and effectively eliminating the repair cost.

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Having identified and spent a significant amount of money on the Arca boxes, it was crucial that we identified the source of the damage and rectify it as quickly as possible. Traceall Global's RFID and SAMs monitoring and data analytics solutions enabled us to identify exactly when and where the problem was occurring and by changing our working practices we rectified it immediately.

Paul Jekyll

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