



# Case Study

## Nye Success Stories

# Coca-Cola

**Industry:** Food & Beverage

**Application:** Shrink Film Heat Tunnel

**Component:** Oven Chains

**Location:** Taiwan

## BACKGROUND

Nye's Channel Partner in Taiwan, Dulub, was approached by a Coca-Cola plant in Chungli to help solve a lubrication problem within the wrapping machine of can trays. The shrink film heat tunnel that wraps 24 can trays continuously was experiencing smoking of the oven chains. The machine uses a continuous drip oiler system that is set to drip onto the chain as it moves through the oven every 20-30 seconds. Two different competitor high temperature chain oils were smoking at 180°C and carbonizing on the chain, contaminating the work place. This carbonization shortened the life cycle of the chain and increased downtime & the cost of maintenance.



## CHALLENGES

- Which H1 lubricant from Nye can withstand the 180°C temperature requirements without smoking?
- Can this lubricant reduce maintenance intervals and downtime by exhibiting excellent oxidation stability?

## SOLUTION: Nye Synthetic Oil 250

Lubricant Properties	Synthetic Oil 250	Test Method
Base Oil	Ester	
Temperature Range	-40°C to 280°C	
Kinematic Viscosity	40°C 216 cS	ASTM D-7042
Density	0.96	ASTM D-7042
Evaporation	24 hrs, 150°C 0.10%	CTM-1
	24 hrs, 200°C 1.54%	
4 Ball Wear (1hr, 1200RPM)	40 kg Load 0.66 mm	ASTM D-4172
Copper Corrosion	24 hrs, 100°C 1B	ASTM D-4048

- Outstanding high temperature performance up to 280°C
- Exceptional thermo-oxidation stability
- Low deposit formation of carbon residue
- NSF H-1 registered for incidental food contact & Halal certified and registered

## RESULTS

After being testing in the application environment, Nye Synthetic Oil 250 met all temperature requirements with no smoke present at 180°C. The chain was very clean after all testing and left no carbon residue. Synthetic Oil 250 will reduce maintenance costs and downtime for the company, as they do not have to clean and replace the chains as often as they did with the competitor lubricant.

