

## **Case Study: Abi Ovens Located in Multi-State, East Coast Bakery**

**December, 2012**

**by B. Leverich and B. Eager**

### **Industrial Lubricants**

**WearGuard D-A SYN High Temperature Chain Oil (HTC) ISO-220**

**Abi Oven**

**Product: Flat Bread / Pita**

**5 Tier**

**360° F Oven Chain Temperature**

**Lubricator: Drip**

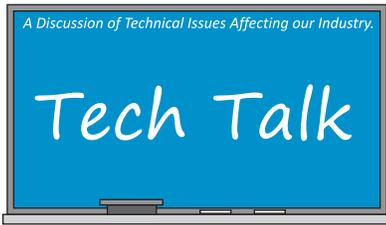
A bakery was having problems with oil consumption and carbon build-up with their oven chain. Their lubricant supplier, Bel-Ray, was selling them blended high temperature chain oil. Using their chain oil, the maintenance department had to replace the oven chain twice in four years. The oven chain was always saturated with oil on all 5 tiers and had to be cleaned daily. This was a serious sanitation concern for the bakery. Several attempts had been made to lessen the oil consumption but they never could dial the chain oil back without smoking and drying out the chain channels. Maintenance had spent many hours above and beyond in maintaining their bread oven. In addition, the OEM: ABI LTD ovens, replaced the chain on both sides once before at their cost. As years went by, the bakery had very little luck finding a lubricant solution to cut down on expensive repairs, labor and over-use of oven chain lubricant.

D-A was asked to review the operation and suggest an alternative for this application. We found the oven floor had substantial excess oil from over-lubricating the chains. We also witnessed rollers not rolling and the chain returning too wet that indicated the current lubricant was not working for this application. We took temperatures and speeds and concluded that the use of a full POE base oil would be required for this oven. We did however find that the automatic lubricator was adequate for the application. We ultimately recommended our WearGuard™ D-A SYN High-Temp Chain 220.

*Presented by D-A Technical Services Department; offering training, product recommendations and problem analysis to help you keep your equipment running longer and more efficiently.*

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We knew it was going to be a challenge to free up the rollers and reduce the oil consumption. We recommended keeping the same drip rate for about a month. After which, the rollers started to free up and maintenance was able to dial back the drip rate. Two problems solved. Still, we needed time for evaluation. The maintenance department watched carefully to determine at what point the chain became too dry and adjusted the drip rate accordingly.

## Case Study:

### Abi Ovens (cont.)

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This was an over 6 month time trail. We have reviewed this with the bakery management and to date the chain shows no sign of needing to be replaced and the oil consumption is down 20%. Management is recommending our product be installed on the roll oven and in two other bakeries.

- Savings of \$70,000 to replace the chain
- Lubricant saving per year \$6,300
- Labor – Sanitation/Maintenance saving per year \$2,550
- No figures on product loss while oven is down for changing the chain

For more information/videos on ABI LTD bakery products, please visit <http://www.abilttd.com/>

*A Discussion of Technical Issues Affecting our Industry. Presented by D-A Technical Services Department; offering training, product recommendations and problem analysis to help you keep your equipment running longer and more efficiently.*

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