SEPARATOR REMOVES CARBON FROM FRY OIL, SAVING MONEY, OIL & ENERGY IN FRENCH FRY PLANTS

PROBLEM

French frying potatoes in oil, ranging in temperatures from 360°F to 380°F, leads to carbon reside, which can build up in circulators, heat exchangers and fryers, reducing their efficiency and causing actual damage to the machinery. Also, the dark carbon particles discolor the frying oil and adversely affect FFA readings.

To solve the carbon problem, six Western states food processing plants opted to try single indexing paper filters, at an annual cost of $5,000 to $8,000 per fryer.

Plant executives, however, soon became dissatisfied with these filters as a solution. Not only were paper filters costly, but they also created waste disposal problems, were messy, posed potential fire hazards, and exposed employees to the possibility of being burned while handling the hot, used paper.

SOLUTION

Hansen Filtration Specialists, a Utah based LAKOS dealer in the food industry, was asked to lend assistance in finding a more effective and cost-efficient solution to the problem of carbon residue. They responded by installing eleven LAKOS AXL Series Separators (one per fryer) with full port automatic ball valve purging systems in the six plants. Fry oil is now circulated through the separators and then returned, free of carbon particles, to the front of the fryer. The separated carbon is automatically purged from the collection chamber into a bag filter, and the excess of oil seeps through the bag is returned to the fryer, eliminating waste.

OUTCOMES

With these LAKOS installations, the need for paper filters was eliminated, and this savings alone paid for the separators in less than a year:

- **Decrease in amounts of oil lost**
- through saturation
- **Doubled gallon per minute** processing rate, & **reduced chance of carbon build up**
- **Minimal maintenance costs** and **reduced utility costs**
- **Enhanced oil color** & **improved FFA readings**

Adding a LAKOS system costs less than you think
To get one customized to your needs, contact your local representative