# **Case Study**

## Custom Die-Cut Filters for Commercial Fryers in the Food & Beverage Industry

### **Needs Assessment & Solutions Summary**

Filpaco collaborated with a leading OEM in the Food & Beverage industry to design and manufacture custom-sized fryer filters for their commercial fryers. The project leveraged precision die-cutting and private label manufacturing to meet the client's unique requirements.

By utilizing Filpaco Textiles, known for their exceptional filtration properties and industry versatility, the project successfully addressed the client's needs. These solutions enabled the client to establish a profitable aftermarket replacement filter program by matching production with specific demands, reducing inventory and packaging costs, and streamlining operations.

## **Project Specifications**

- Client: OEM in the Food & Beverage industry
- **Application:** Custom-sized fryer filters for commercial fryer units
- **key Challenges:** 
  - Unique die-cut dimensions
  - Inventory and packaging cost reduction
  - Establishing a turn-key private label program
- Certifications: FDA and NSF compliance



## **Solution Design**

- **Customized Filtration Solution:** Filpaco developed and implemented a comprehensive solution, including:
- **Die-Cutting:** Filters were precision die-cut to meet the unique size specifications required for the client's fryer units. Filpaco Textiles were ideal for this process due to their adaptability to custom-cut designs, ensuring a
- units. Filpaco Textiles were ideal for this process due to their adaptability to custom-cut designs, ensuring a precise fit and efficient filtration.
- **Private Label Manufacturing:** Packaging was customized with the client's branding for seamless aftermarket integration.
- **Inventory Management:** A just-in-time inventory system minimized storage costs and ensured timely delivery.

## **Applications & Capacity**

- **Primary Applications:** Filpaco Textiles enabled superior oil filtration, enhancing fryer performance, extending oil life, and maintaining food quality. These filters are specifically designed for use in high-volume commercial fryers, where maintaining equipment functionality and food safety is critical.
- **Capacity:** The solution scaled with the client's aftermarket sales, providing a steady supply of replacement filters without excess inventory.

### **Potential Industries**



#### **FAST FOOD CHAINS**

High-capacity fryer filtration to maintain oil quality and reduce operating costs.



### FOOD PROCESSING PLANTS

Ensuring compliance with health regulations and enhancing production efficiency.



#### HOSPITALITY INDUSTRY

Restaurants and caterers benefit from efficient filtration systems for extended oil usage.



### **SNACK FOOD MANUFACTURING**

Filtration for fryers used in producing chips and other snack foods.



### **INDUSTRIAL KITCHENS**

Large-scale meal preparation facilities, including schools, hospitals, and corporate dining halls.

## **Manufacturing Details**

### **MATERIAL SELECTION:**

Filters were manufactured using highquality Filpaco Textiles. These filter papers are recognized for their ability to handle fine particulate removal and liquid clarification, making them ideal for oil filtration in commercial fryers. Their compliance with FDA and NSF standards ensures they meet stringent safety and quality requirements for food industry applications as well.

#### **DIE-CUTTING PROCESS:**

Custom tooling ensured accurate and efficient production of uniquely sized filters. Filpaco Textiles' versatility and multiple grades allowed us to optimize the filter properties for efficient oil filtration and extended fryer performance.

## PRIVATE LABEL PACKAGING:

Packaging solutions were tailored to the client's branding and optimized to reduce material and shipping costs.

## **Quality Control Measures**

- Material Testing:
  - Ensured all Filpaco Textiles met FDA and NSF standards for food industry applications.
- Precision Inspection:
  - Verified die-cut dimensions and fitment for fryer units.
- Performance Validation:
  - Leveraged Filpaco's advanced filtration properties to ensure consistent oil clarity and extended product life.



## Batch Testing:

Monitored filtration performance and durability to maintain consistent quality.

### Value Delivered

## Cost Savings:

- Reduced inventory and packaging costs.
- Minimized waste through efficient inventory management.

## Quality Improvements:

- Filpaco Textiles ensured effective oil filtration, extending oil life and improving food quality.
- ✓ High-performance filters reduced operational inefficiencies and enhanced fryer performance.

## Productivity Gains:

- Streamlined aftermarket filter production enabled the client to focus on their core business.
- ✓ The private label program strengthened the client's brand and opened new revenue streams.

This project demonstrates Great Lakes Filters' ability to deliver tailored filtration and packaging solutions for the Food & Beverage industry. By combining precision die-cutting with the advanced properties of Filpaco Textiles and turn-key private label manufacturing, we empowered the client to achieve cost efficiencies, operational improvements, and a profitable aftermarket program.

### **Contact Great Lakes Filters**

Need assistance in maximizing manufacturing efficiencies to ensure quality and optimize costs? Call or email us today and one of our skilled team members will lead the way. (800) 521-8565  $\sim$  info@acmemills.com