

# BC Automation

## AI-Optimized Olive Oil Extraction

### Tech Primer - 03/07/25

Your time, money, and product quality are under pressure.

- Production inefficiencies - Yield loss, energy waste, and operational variability.
- Quality challenges - Variability in olive batches affects oil consistency.
- High maintenance costs - Unplanned downtime and aging motor control systems.

Staying competitive means overcoming these bottlenecks with intelligent, scalable solutions—and that’s where BC Automation leads.



### PROBLEM: Olive Oil Processing Needs Precision & Intelligence

Traditional extraction methods create inefficiencies:

- Limited yield optimization - Manual adjustments and fixed-speed centrifuges restrict efficiency.
- Energy waste - Legacy motor controls consume excess power.
- Quality variability - Inconsistent polyphenol retention affects oil grade.
- High maintenance costs - Aging systems increase downtime and repairs.

### SOLUTION: AI-Driven Optimization & SiC Motor Control

BC Automation integrates AI-driven centrifuge optimization, advanced spectrometry, and SiC motor control to transform olive oil processing.

- SiC Motor Control – High-precision modulation reduces power consumption by up to 50%.
- AI-Powered Yield Optimization – Dynamic centrifuge speed and feed rate control maximize oil separation.
- Advanced Spectrometry – NIR/SWIR imaging classifies olives before processing for optimal batch consistency.
- Predictive Maintenance & Digital Twin Analytics – AI-driven failure detection prevents costly downtime.
- Edge-to-Cloud Data Insights – Real-time dashboards and analytics improve process visibility.

### OUR IMPACT: Real Solutions. Real ROI.

- 3–7% Higher Oil Yield
- Up to 50% Energy Savings
- Improved EVOO Quality & Polyphenol Retention
- Lower Maintenance Costs & Increased Uptime

BC Automation delivers next-generation AI-driven intelligence to maximize yield, reduce costs, and ensure premium quality olive oil production.



95+

clients served

625+

unique processes automated

\$3.8B+

client dollars saved

**“A huge asset to any company looking to improve their cost and reliability.”**

Chris Whitehair  
SVP Global Operations at SunOpta

**“[BC Automation’s] solutions are most thorough and comprehensive.”**

Ned Mitenius  
Founder & Sr Consultant at Periscope Consulting

**Let’s Transform Your Manufacturing Together.**



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