

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.

89+

clients served

610+

unique processes automated

\$2.9B+

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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