



The Future of Clean-Label Oilseed Processing is Here.



Safe. Scalable. Sustainable.

Hexane-free.

With **Monarc**, our revolutionary extraction technology, the Impossible is now **Possible**.

CPM | Crown, the global leader in oilseed processing for 75+ years, is leading the way with the next evolution in clean-label technology. **Monarc Clean Oilseed Processing™** is a proven, patent-pending, alcohol-based process that enables companies to replace current solvents in their extraction supply chains, deliver high-value, clean-label ingredients and products (including organic), create an overall safer working environment and meet sustainability goals—all at the scale and economics of current solvent technology.

With **Monarc**, companies have the choice to future-proof their production of meal, oil and protein concentrates while seizing the opportunity to meet growing public demand for clean-label products. CPM | Crown helps you scale at your own pace as you supplement and/or replace hexane in your current processes and supports you at every step, from facility retrofits of existing plants to greenfield construction. CPM | Crown is the industry's trusted partner who delivers innovative processing solutions, robust technology and superior support.

Monarc is your opportunity to adopt the **cleanest oilseed processing technology for humans, animals and biofuels** that is safe, cost-aligned and ready to scale.



2024 clean-label valuation:
\$50.2 Billion;
projected to reach
\$69.3 Billion
by 2029¹



"The world increasingly wants food to be manufactured in a safe, responsible and sustainable way... that's why Monarc™ is such a remarkable innovation and is going to be game-changing for the industry."

– Dave MacLennan
FORMER CARGILL CEO



Why Monarc?

Converging Market Forces Reward Oilseed Processing Innovation

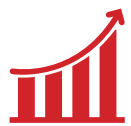
The oilseed processing industry faces pressures from converging market forces, creating powerful incentives for hexane alternatives. Rising consumer demand for clean-label products, regulatory momentum in major markets, workplace safety concerns, sustainability targets and social media trends all create challenges for traditional processing. Monarc transforms these market dynamics into competitive advantages, enabling companies to capture premium market segments, strengthen partnerships and lead industry evolution while maintaining operational flexibility across their broader portfolio.

Consumer Demand for Cleaner Ingredients

The conscious consumer movement represents one of the fastest-growing segments in food processing, with consumers actively seeking transparency and recognizable ingredients. Monarc positions companies to capture this market opportunity by enabling authentic clean labeling that resonates with consumer values. Monarc opens doors to new product lines and market segments where transparency commands higher margins and stronger brand loyalty.

ESG Leadership and Supply Value Chain

Modern operational success increasingly depends on environmental and social impact metrics that influence everything from investor relations to B2B partnerships. Monarc enables companies to strengthen their ESG profile by replacing hexane with an alcohol-based, clean-label, non-toxic compound. This positions companies as preferred partners for downstream businesses under their own sustainability pressures, creating new relationship opportunities and potentially unlocking ESG-focused investment and financing options.



Companies converting to clean-label processes report

gains of 15%

in overall revenue,
11% in margins, 18%
in product pricing²

Proactive Safety Excellence

Monarc provides companies an opportunity to improve employee safety in their facilities. Because the alcohol-based solvent used in Monarc is non-toxic, negative side effects caused by inhalation exposure are substantially reduced. By choosing to implement Monarc, companies can demonstrate proactive workforce protection that exceeds current requirements and anticipates future standards. This approach not only safeguards employee wellbeing but also positions companies as employers of choice and reduces potential liability exposure.

Regulatory Resilience

With regulatory agencies worldwide reassessing traditional processing methods using modern scientific standards, Monarc provides operational resilience against evolving compliance requirements. Companies investing in this technology position themselves ahead of potential regulatory changes, ensuring continued market access and avoiding costly retrofits in the future. This forward-thinking approach also demonstrates industry leadership to regulators and stakeholders.

Brand Narrative Derisking

Online influencers are reshaping how consumers understand food processing, creating opportunities for companies that can tell compelling transparency stories. Monarc enables customers to control their narrative with authentic claims about innovation and clean processing methods. Rather than defending traditional approaches, companies can lead conversations about next-generation food processing that aligns with consumer values and social media trends.



2024: European Food Safety Authority initiates a **reassessment of hexane**

as a safe food extraction solvent.



Meet Monarc: Clean Label at Scale, at Your Own Pace

Monarc utilizes alcohol as a solvent, giving you the flexibility to meet growing clean-label, regulatory, sustainability and safety demands competitively and without abandoning traditional systems you rely on. Whether you're building a new plant, retrofitting an existing line or exploring premium product claims, Monarc enables you to evolve at your own pace. Clean label, cost-aligned and performance-proven: it's an option on your own terms.

Meet customer requirements with clean-label products

Monarc bridges proven systems into the next evolution of oilseed processing with a hexane-free solution delivering cleaner products for people and the environment. Create and differentiate products with clean-label solutions, up to and including organic, for protein meals, oils, lecithin, protein concentrates, white flakes and molasses.

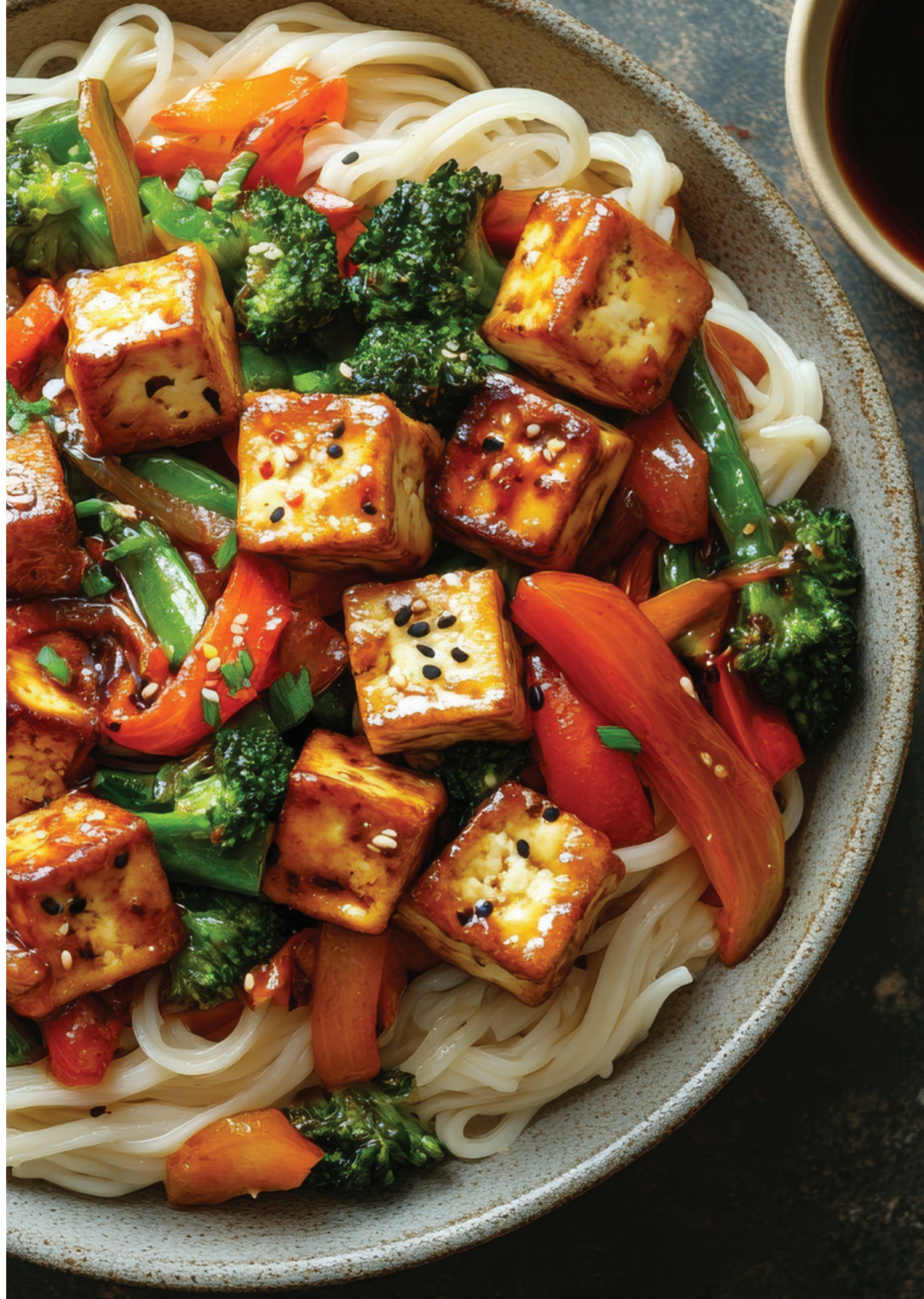
Clean-label at competitive CAPEX and OPEX

Monarc is projected to provide economic viability comparable to traditional extraction technologies while producing clean-label products, providing safer working environments for employees and safeguarding the environment.

Products made with Monarc show superior characteristics: lighter color and lower gums content in oils; higher-protein meal; higher protein content, lighter color, and more bland taste in protein concentrate.

Technology designed to support your clean-label ambitions at scale

Monarc is a proven industrial-scale, alcohol-based extraction process engineered to meet the real-world demands of commercial production. Whether you're serving emerging consumer trends and specialty SKUs, or preparing for regulatory changes, Monarc enables you to scale and plan with confidence.



Reduce operational risks and limit exposure with a less hazardous solvent

Monarc eliminates hexane exposure, creating safer operations while delivering industrial performance. From permitting to insurance to workforce retention, this next-generation extraction technology improves the environment for your people while enhancing your operations and your brand.

Meet sustainability goals

By replacing hexane with alcohol as a solvent, Monarc eliminates petroleum-derived air emissions. This future-proofs your operations against regulatory actions while boosting your company's sustainability profile.

Tested and Proven, Not Hyped

Our experts spent over 5 years developing this revolutionary technology and comprehensive IP portfolio. To create Monarc, we utilized cutting-edge process simulation software, the best R&D resources in the industry and dozens of continuous, steady-state runs at our state-of-the-art Innovation Center. Our demonstrated know-how led to our first commercial sale in 2025.

Not only can CPM | Crown confidently provide this clean-label oilseed processing solution, we can support you throughout the process—testing and samples, design engineering, delivery, retrofitting or new construction support, start-up and commissioning—with our comprehensive Lifecycle360™ support services. We are the industry leader in the oilseed extraction market and your trusted partner at every step.

The Impossible Is Now Truly Possible

With **Monarc**, CPM | Crown enables you to expand your clean-label options without abandoning legacy oilseed processing. Take advantage of this proven, patent-pending technology to derisk your operations in the face of consumer and regulatory demands. The industry can now feed and fuel the world while keeping employees safer and meeting sustainability goals, all at competitive OPEX and CAPEX.



Learn More About Monarc

To learn more about this revolutionary processing solution, contact CPM | Crown at **crownsales@cpm.net** or **+1-651-639-8900**. We invite customers to test and sample their products using Monarc technology at our Global Innovation Center.

Footnotes

¹ Markets and Markets (May 2024) "Clean Label Ingredients Market" <https://www.marketsandmarkets.com/Market-Reports/clean-label-ingredients-market-99427189.html>

² Ingredion (2022) "Uncovering the Clean Label Connection to Business Growth" <https://www.ingredion.com/na/en-us/be-whats-next/growth-with-clean-label>

Lifecycle360™
Your Single-Source Support Services



CPM | Crown's Lifecycle360 is a comprehensive suite of support services designed to help you and your team streamline and optimize the full lifecycle of your facility, from pre-engineering to long-term maintenance needs. Our global team of field service specialists has assessed, supported, installed, commissioned and started up thousands of projects and facilities worldwide. Our experience enables you to take control of your operations and:

- increase efficiencies
- reduce costs
- predict maintenance needs and equipment updates

- develop, test, scale and commercialize innovative ideas
- build employee knowledge and confidence
- avoid costly hassles, including unplanned shutdowns

Services:

- Innovation Services at the Global Innovation Center
- Pre-Engineering
- Construction Support
- Automation
- Training
- Maintenance Support
- Optimizing
- Plant Operations

Working together for **a better world.**



From risk management to environmental management, Crown applies a global lens to your operations. Count on our problem-solving expertise to help fulfill your sustainability commitments.

Partner with Crown on your key initiatives:

- Carbon footprint reductions
- Emissions and energy reductions
- Operational performance

- Renewable resources
- Social responsibility
- Supply chain resiliency
- Sustainability
- Zero waste targets

Gain the competitive advantage with Crown's expertise, equipment and world-class Global Innovation Center.

Feeding, Fueling and Building **a Better World.**



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