



FIRM OVERVIEW



SAFE, HIGH-QUALITY, VALUE-DRIVEN

facilities that fuel
your growth and success.

EST. 1984

20 OFFICES

1100+ EMPLOYEES

Atlanta, Georgia
Basel, Switzerland
Boston, Massachusetts
Dallas, Texas
Denver, Colorado
Kalamazoo, Michigan
Kansas City, Missouri
Los Angeles, California
Marshfield, Wisconsin
Oakland, California
Omaha, Nebraska
Orange County, California
Philadelphia, Pennsylvania
Raleigh, North Carolina
Rockville, Maryland
Saint Louis, Missouri
San Diego, California
San Juan, Puerto Rico
Stuttgart, Germany
Toronto, Canada



ONEsolution™



ENGINEERING

- Sustainability and LEED
- Facility Design
- Process Design
- Utilities/Process Utilities
- Packaging Design
- Equipment Planning
- Automation and Controls

ARCHITECTURE

- Master Planning
- Site Planning
- Programming
- Facility Design
- Lean Design
- Sustainability and LEED
- Interior Design

CONSTRUCTION

Pre-Construction Services

- Target Cost
- Pull Planning
- Interactive Scheduling
- Lean Contractor Selection
- Life Cycle Cost Analysis

Procurement

- Equipment and Material Procurement

Construction Management

CONSULTING

- Planning
- Strategic Facility Planning
- Operations Improvement
- Food Safety/FSMA Readiness Program

CRB has cultivated a dedicated roster of experts focused on your markets.

FOOD + BEVERAGE

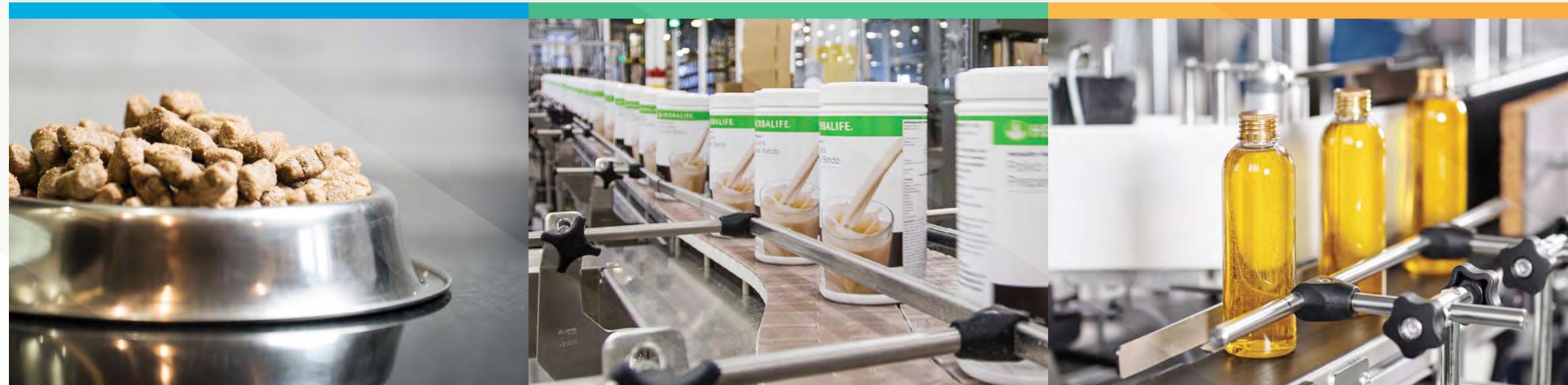
baking
 beverage - brewed, distilled
 bio-based/cell-based meats
 confectionery
 dairy
 dressings, sauces, dips, condiments
 frozen
 fruits & vegetables
 indoor agriculture, vertical farming
 ingredients, seasonings, additives
 meat, poultry & seafood
 pet food & animal nutrition
 plant-based foods
 ready-to-eat
 snacks, cookies, crackers

NUTRITIONAL

OTC products
 vitamins and gummies
 supplements & additives
 fortified drinks
 probiotics
 baby formula

CONSUMER PRODUCTS

personal care
 cosmetics
 eye care
 allergy relief
 household
 industrial



THOUGHT LEADERS

Our team is comprised of some of the brightest minds in the industry, all of whom offer a comprehensive understanding of the intricacies of your operating environment and the complexity of your industry. This team's sole focus is bringing the right solutions to every stage of every project.



Niranjan Kulkarni, Ph.D.
Director, Operations
Improvement



Renee Benson
Packaging Engineer



Pablo Coronel, Ph.D.
Director, Food Processing
& Food Safety



Tammi McAllister
Core Team Leader



Ben Rucker
Director, Process
Technology



Jeff Matis, P.E.
Sr. Project Manager,
Process Engineer



Dennis Collins, AIA
Sr. Architect



Larry Klein
Regional Leader,
Construction Services



Design and construction for safe, high-quality, value-driven facilities that fuel your growth and success.

Scale up a small process or expand and improve a large-scale operation. No matter your size or goals, you need an adaptable facility that quickly responds to consumers' constantly changing tastes and meets increasingly strict regulatory standards.

We'll design, construct, consult or provide a solution that integrates all three to help you:

- Increase production rates.
- Optimize energy efficiency.
- Improve speed to market.
- Achieve food safety compliance.

ONEsolution™: **DELIVERED.**

ONEsolution™ combines our in-house planning, design and construction expertise into a comprehensive, single-source solution that provides bundled services for the complete life cycle of your project – from concept to completion.

YOUR SUCCESS

- Complete confidence that your project will be tailored to meet your unique budget, timing and facility needs
- Scope and cost alignment
- Improved speed to market
- Optimized facility and processes
- Early, dependable pricing
- Safety and quality assurance

ONEsolution™ – YOUR SINGLE SOURCE FROM CONCEPT TO COMPLETION



TUFFY'S PET FOODS PET TREAT FACILITY

Delano, Minnesota

Through a ONEsolution™ delivery model, we provided Tuffy's Pet Foods with design and construction services for the greenfield construction of a 173,500-square-foot facility to manufacture pet treats. The facility will feature two extrusion lines producing 9,000 lbs. of semi-moist pet treats each hour and six packaging lines producing stand-up re-sealable pouches.

With a focus on flexibility, the plant is designed to accommodate a large variety of products with a varying array of packaging.

The facility is designed to meet and exceed the stringent requirements of today's pet food market using sustainable operations that reduce the plant's environmental footprint and waste.

The facility will be designed and constructed to achieve Green Globe Certification for sustainability.

CLEAN FACILITY DESIGN: **DELIVERED.**

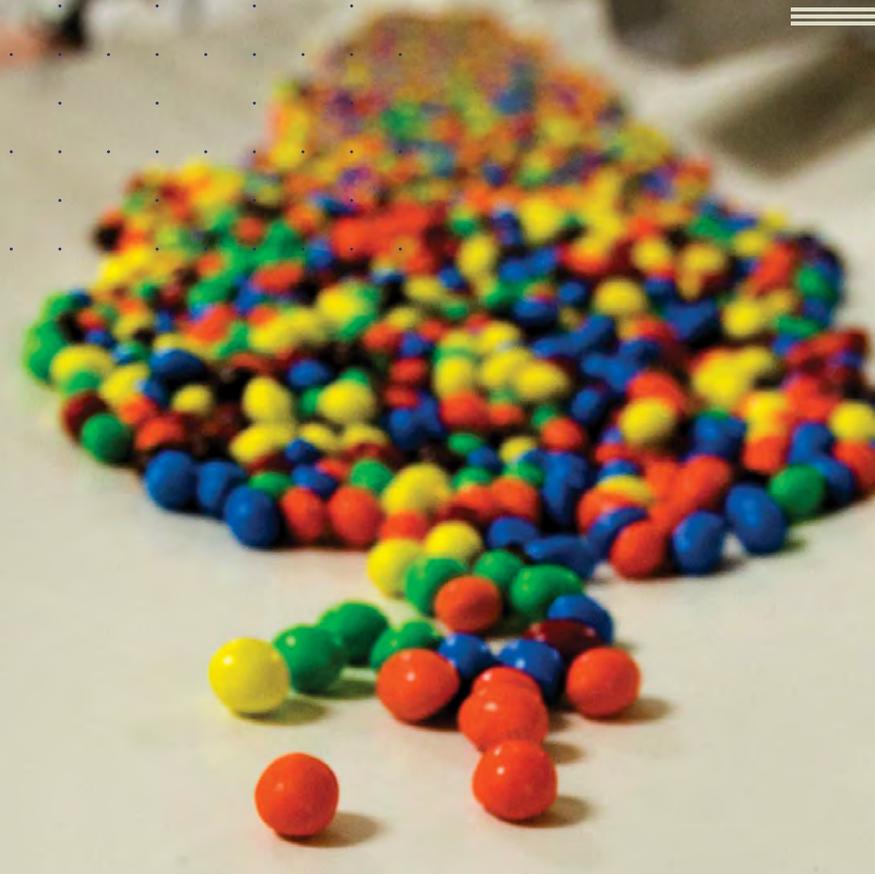
In an industry that is moving toward better and more comprehensive consumer protection, the concept of cleanliness must be foundational – and there's no better place to set that expectation than the facility where your products are created.

OUR SOLUTIONS

- Over 30 years of experience in clean process and facility design
- Extensive expertise in sustainable design, including LEED accreditation
- Integrated, in-house architects and engineers who can design, procure and deliver customized solutions all the way from design to construction
- Complete understanding of and adherence to HACCP and SQF principles, design and mechanical implications
- Design solutions that fully consider how people, processes and products move throughout the entire facility

YOUR SUCCESS

- Cross-discipline clean design that covers a complete spectrum of your facility requirements, including architecture, electrical, mechanical, plumbing, process engineering and more
- Clean design expertise that supports new product lines, increasing capacity, changing ingredient mix, automating processes, improving quality, speed or throughput, and more
- A holistic approach that works to ensure every component of your facility meets the highest standards of cleanliness



MARS CHOCOLATE NORTH AMERICA, LLC

Topeka, Kansas

CRB completed all phases of architectural and engineering design for the greenfield confectionery manufacturing facility. While Mars Chocolate North America (MCNA) is a global organization, the new facility is the first MCNA site built in North America in 35 years. Working with MCNA, CRB designed a state-of-the-art facility to meet sustainability goals and achieve LEED Gold certification.

In the completion of this project, we focused on delivering exceptional clean design solutions across every discipline and every aspect of this project. From the piping of liquid processes and handling of dry ingredients to open product conveyance and air handling, **every aspect of the plant was designed to be lean and clean.** Most tanks, hoppers, storage bins and processing skids were suspended. Where skids could not be supported from above, they were rested on smooth, stainless steel legs.

FOOD SAFETY & REGULATORY: **DELIVERED.**

As new regulations put greater responsibility for food safety and quality on manufacturers, it's critical to have an experienced, knowledgeable partner that can help you seamlessly navigate every important detail of every regulation.

OUR SOLUTIONS

- Dedicated teams with operating environment experience that focus on food safety, sanitary design and regulatory compliance
- Food safety engineering that embeds safety into every step of every project – regardless of size or scope
- Over 30 years of experience in clean environments, offering valuable expertise in the design of regulated facilities
- Expertise in requirements for organic, non-GMO, allergen segregation and cross-contamination prevention
- Facility audits
- FSMA Readiness Program
We offer expert pre-audit assessment to help identify risks to FSMA compliance and develop a plan to prioritize your needs and scheduling. Our design and construction professionals will help you implement the plan to bring you into compliance.

YOUR SUCCESS

- Holistic approach that promotes food safety and compliance across all disciplines and all stages of a project – from planning to construction
- Clean design approach that can be right-sized for your budget and requirements
- Comprehensive regulatory expertise and support to ensure your facility is designed, constructed and operated to satisfy or surpass requirements
- Facility designed to minimize contamination risk



CONFIDENTIAL CLIENT

BAKERY FACILITY

For this ONEsolution™ project, we focused our efforts on bringing an aged facility up to modern production requirements. Our goal was to increase production while ensuring the highest level of food safety and regulatory compliance. To do so, we performed a comprehensive analysis of the operating environment and food safety status. This analysis allowed our teams to identify and close the gaps that were found to help the client meet desired production goals and update the facility to comply with current standards.

CRB was responsible for managing every aspect of the project – from planning to completion. As a result of this project, our client was able to quadruple their capacity while maintaining existing production throughout construction. **And this increase in capacity was achieved while providing the highest level of food safety, quality and compliance.**

SUPPLIER INTEGRATION: **DELIVERED.**

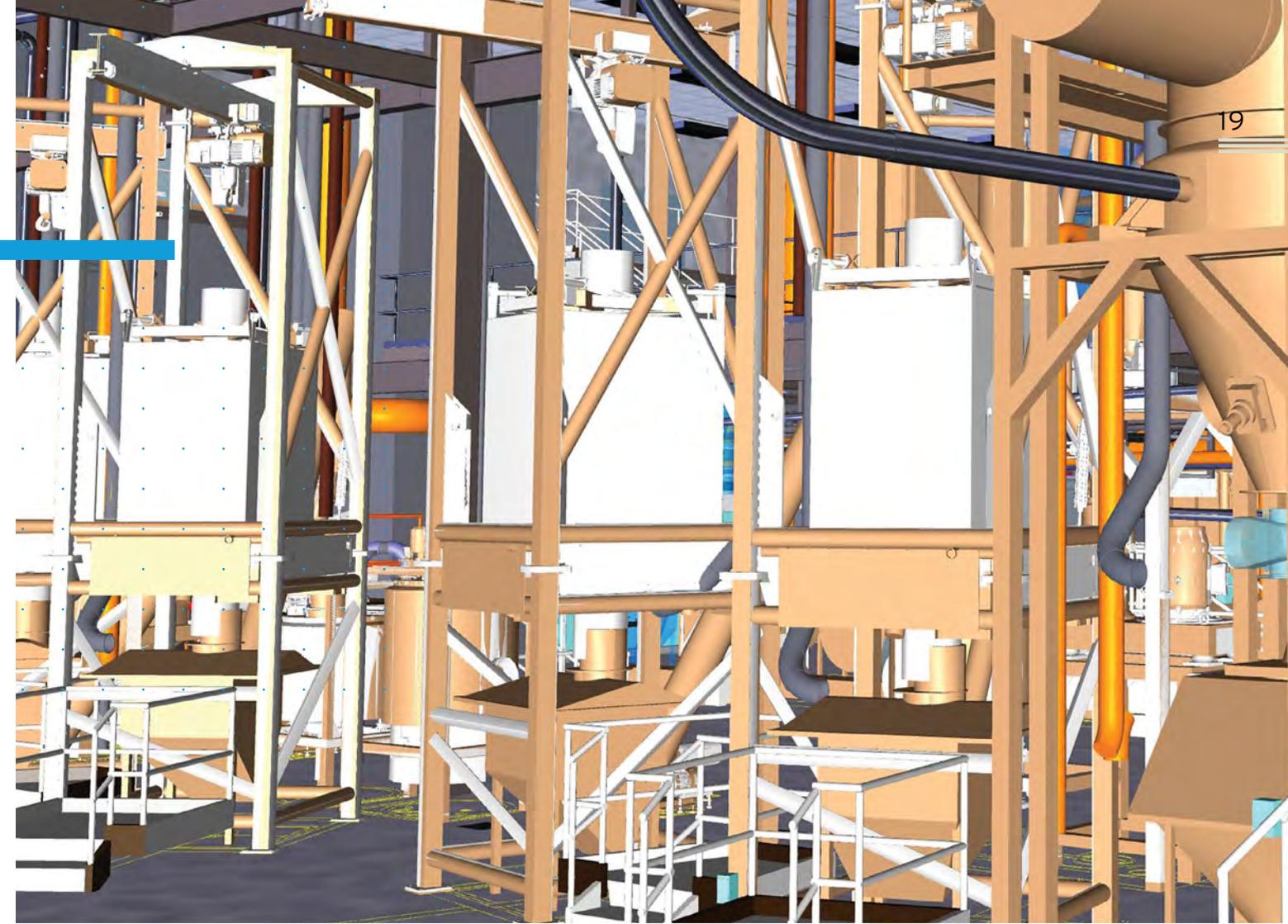
Every project is a different mix of different suppliers all working to accomplish different goals. For your project to succeed, precision coordination and integration is essential. Our team of specialists do just that, keeping your projects on time, on track and on budget.

OUR SOLUTIONS

- Complete program management that systematically coordinates every aspect of every project
- Seamless integration of key suppliers early on in the project life cycle
- Seasoned teams with global supplier integration experience and a true understanding of project drivers
- An approach that focuses on identifying and filling the gaps within supplier scope and between suppliers
- Cutting-edge 3D modeling techniques that provide a detailed analysis of facilities and projects for enhanced visualization and improved vendor coordination and integration

YOUR SUCCESS

- Complete system and supplier integration
- Control over schedule, budget, safety and quality
- Efficiencies across all aspects of each project
- Well-defined project scope and detailed documentation
- Improved speed of project delivery
- Optimized resources



CHURCH & DWIGHT CO., INC.

York, Pennsylvania

To meet growing demand, Church & Dwight needed to expand gummy vitamin production capacity through the addition of a new production line. CRB was contracted to provide design and construction management services for this project.

A key component in this project was the coordination and integration of suppliers. **We were able to successfully integrate five main suppliers from four different continents.** Doing so allowed us to identify and address any gaps, which was a key component in helping expand the company's gummy vitamin capacity by 75%.

SPEED TO MARKET: **DELIVERED.**

In a market dominated by constantly shifting consumer tastes and market trends, speed is everything. Success often means being first. But more important than being first is being right. We move you and your projects forward by helping you achieve that perfect balance between speed and quality.

OUR SOLUTIONS

ONEsolution™ – our comprehensive, single-source solution that:

- Delivers integrated engineering, architecture, construction and consulting services
- Facilitates early collaboration between our planning, design and construction teams
- Maximizes resources
- Optimizes schedules
- Eliminates redundancies
- Streamlines processes
- Reduces project delivery time

YOUR SUCCESS

- Increased revenue and market share
- Sustained competitive advantage over other manufacturers
- Enhanced ability to quickly meet the needs of consumers with new products
- Increased operating and financial efficiencies
- Improved reputation as an industry leader



CONFIDENTIAL CLIENT

BAKED GOODS FACILITY

A baked goods client came to us with the need to double their production capacity in an effort to meet a major, immovable deadline. They needed to achieve this while maintaining existing operations, meaning they could only afford complete shutdowns in no more than three- to four-hour increments.

For this ONEsolution™ project, we completed the design and managed equipment recommendations,

vendor coordination, equipment installation and construction. Our team developed and delivered creative solutions that fully considered our client's tight shutdown limits. As a result of this approach, **our client was able to meet their deadline and increase production while also maintaining existing operations throughout the entirety of the project.**

PACKAGING: DELIVERED.

Packaging is the most visible statement you make to your customers and your competition. Backed by our extensive experience with the ins and outs of packaging lines and packaging components, we work to ensure your vision is rapidly deployed in the market.

OUR SOLUTIONS

- Experience with a broad spectrum of packaging line design projects
- Specialized focus on packaging line layout, with complete support for every input, output and utility
- Packaging line design consultation services
- Network of vendor relationships that can lead to more tailored solutions
- Clear understanding of requirements for regulated industries
- Simulation teams that can develop comprehensive, customized models for identifying the most effective solutions

YOUR SUCCESS

- The ability to introduce new packaging with efficiency and reliability
- Improved speed to market, operating efficiencies and labor costs
- Packaging line solutions that fit your budget and facility requirements
- A packaging approach that makes best use of your facility and the way products and people flow through it



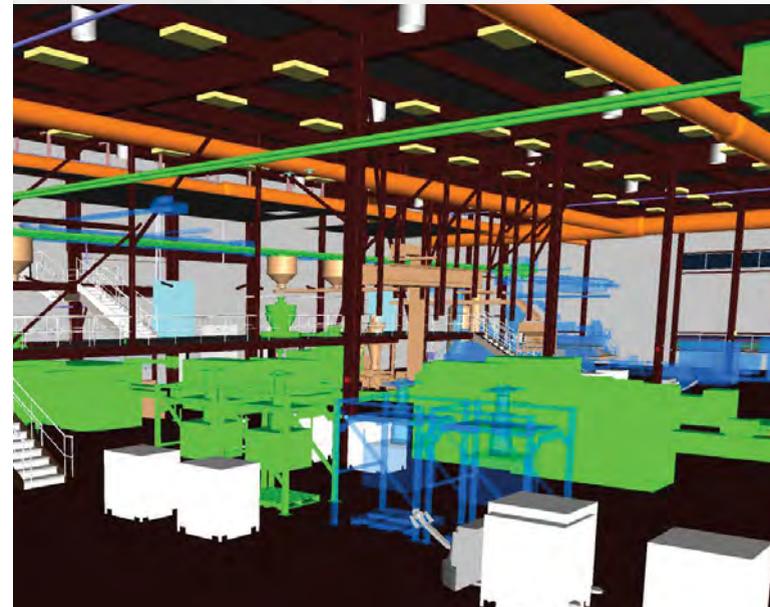
HERBALIFE

Winston-Salem, North Carolina



MARS CHOCOLATE NORTH AMERICA, LLC

Topeka, Kansas



WM. WRIGLEY JR. COMPANY

Yorkville, Illinois



ST. LOUIS BREWERY | SCHLAFLY BEER

Maplewood, Missouri

ROI + IMPROVED OPERATING EFFICIENCIES: **DELIVERED.**

In the food and beverage market, every resource matters. It's why we deploy teams comprised of market experts who specialize in driving continued growth and success by optimizing every step of every process.

OUR SOLUTIONS

- Metrics-based decision-making focused on maximizing all resources
- Data-driven approach to facility design
- A comprehensive understanding of your operating environment
- Expertise across an extensive range of disciplines
- Unique approach and toolset to analyze operations and cost structure, identify savings opportunities and develop specific plans with forecasted, quantifiable ROI

YOUR SUCCESS

- Facility tailored to your exact budget and requirements
- Maximized ROI
- Improved flexibility
- Reduced operating costs
- Reduced cost of goods to the consumer
- Process improvements
- Manpower utilization





CONFIDENTIAL CLIENT

PET NUTRITION CENTER

REDUCING ANNUAL TRAVEL DISTANCE BY 350+ LABOR HOURS

When a pet nutrition center wanted to improve efficiency and optimize work processes and flows, CRB's operations improvement specialists provided data-driven analysis, which resulted in:

- 80+ improvement opportunities identified
- 350+ hours of aggregate travel time reduced per year
- Capacity model to help schedule resources and focus on value-added activities
- New layouts for benches to reduce wasted motion and time while improving ergonomics



CONFIDENTIAL CLIENT

SPECIALTY INGREDIENTS MANUFACTURING

PROVIDING A DATA-DRIVEN PLAN TO ACCOMMODATE INCREASED DEMANDS

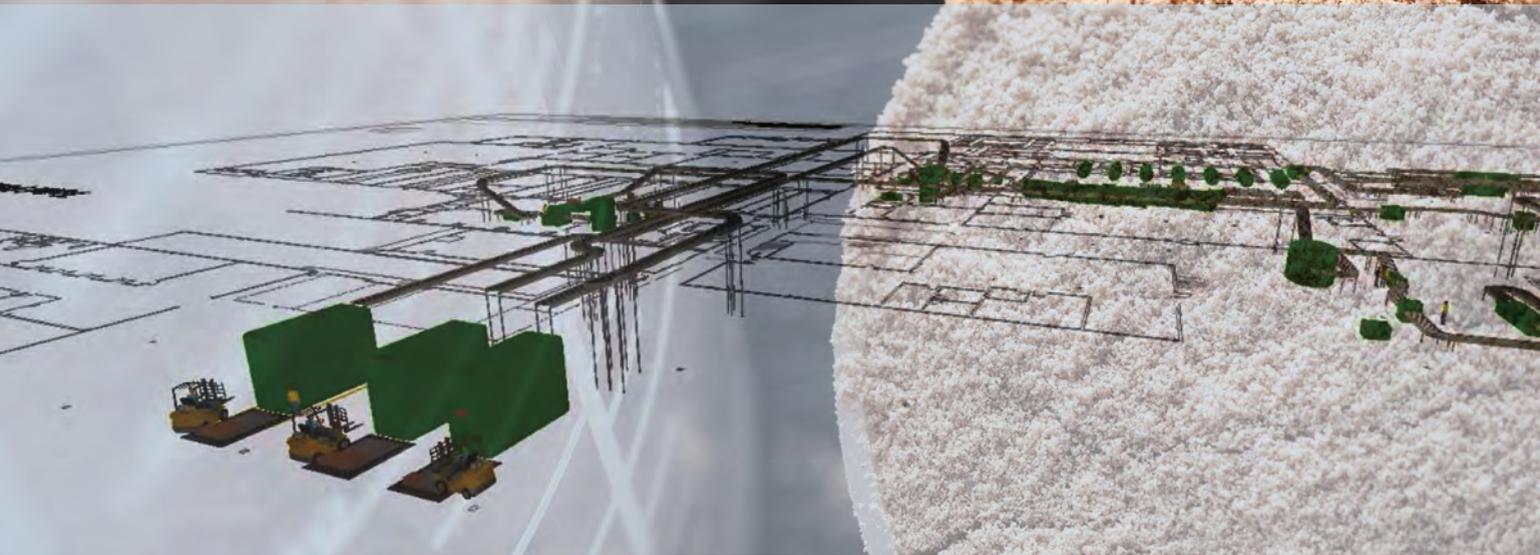
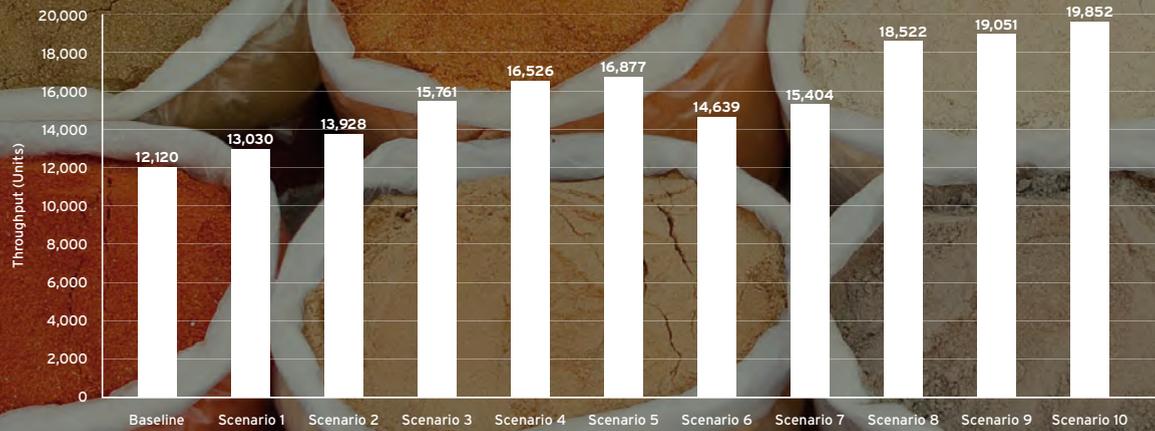
CRB was asked by a food additive manufacturing company to provide a strategic plan to meet increased demands, which included dock-to-dock modeling, a manpower utilization plan and sizing the warehouse to accommodate increased production needs. The operations improvement plan drove the warehouse design, which the client ultimately asked CRB to design and build.

This resulted in:

- Increased revenue by \$9.7MM annually
- Repurposed manufacturing headcount that helped avoid \$150K in operating costs
- Added pallet spaces that were quantified to meet increase demands



THROUGHPUT ANALYSIS



CONFIDENTIAL CLIENT

SPICE AND SEASONING FACILITY

QUANTIFYING PRODUCTION PROCESSES TO OPTIMIZE THROUGHOUT

A spice and seasoning manufacturing company called on CRB operations improvement specialists to look at its entire throughput – from blending to bagging operations. By quantifying the impact of increasing blender size on batches, the total cubic capacity of product blended, relevant activities performed and operator utilization, CRB provided:

- Optimized throughput by performed scenario analysis
- Reduction of 1.6 hours/shift/operator by implementing select opportunities
- Recommendations on operation sequence and operator roles/responsibilities

CONFIDENTIAL CLIENT

NUTRITION MANUFACTURING

IMPROVING PRODUCTION OPERATIONS, OPTIMIZING LABOR EFFICIENCIES AND REDUCING OPERATING EXPENSES

A nutrition manufacturing company that produces and packages liquid and powder nutritional products asked CRB for a study to improve production efficiencies and reduce operating expenses. Our operations improvement team conducted a dock-to-dock modeling study, resulting in:

- Site-wide savings of \$3.8MM annually
- Headcount reduction for the entire site by 40%
- Cycle time reduction in MH&D procedures by more than 50%

CLIENTS

Abbott Nutrition
 Arbor Brewing Company
 Bausch & Lomb Inc.
 Bayer AG
 Boulevard Brewing Co.
 Bridgestone Corp.
 Capstone Nutrition
 Cereal Ingredients Inc.
 Chiquita Brands LLC
 Church & Dwight Co., Inc.
 Conagra Brands
 Corbion
 doTERRA International
 DSM
 DuPont Nutrition & Health
 E. & J. Gallo Winery
 Fareva Group
 The Folger Coffee Company
 Freshpet
 Frito-Lay North America, Inc.
 General Mills Inc.
 Gerber Products Company
 Glanbia plc
 GlaxoSmithKline plc
 Golding Farms Foods, Inc.
 Gordon Food Service
 Harlan Bakeries, LLC

Herbalife International
 of America, Inc.
 The Hershey Company
 Hill's Pet Nutrition, Inc.
 Illume Candles
 Independent Stave Company
 J&J Snack Foods Corp.
 Johnson & Johnson
 Services Inc.
 Kalsec Inc.
 Kemin Industries, Inc.
 Kerry Group plc
 Klondike Cheese Co.
 The Kraft Heinz Company
 Land O'Lakes, Inc.
 Litehouse Inc.
 Mars Chocolate
 North America, LLC
 Mars Symbioscience
 Mary Kay Inc.
 Mead Johnson
 & Company, LLC
 Mondelez International, Inc.
 Monsanto Company
 Mother Murphy's
 Laboratories, Inc.
 McCormick & Company
 Mountaire Farms
 MycoTechnology, Inc.

Nature's Way Products, LLC
 Nestlé Waters North America
 Neways International
 North Carolina Food
 Innovation Center
 Ocean Spray
 Pearl Valley Farms, Inc.
 Pharmavite LLC
 Polykon Manufacturing LLC
 Post Holdings, Inc.
 The Procter & Gamble Co.
 Reckitt Benckiser Group plc
 The Republic of Tea
 Rust-Oleum
 The Saint Louis Brewery
 Simmons Foods, Inc.
 Smithfield Foods, Inc.
 Synergy Labs
 Tuffy's Pet Foods, Inc.
 Unilever
 Uptown Bakeries
 USANA Health Sciences
 Visalia Dairy Company
 Walden Farms LLC
 WellPet LLC
 Wixon, Inc.
 Wm. Wrigley Jr. Company
 Yamco LLC

WHAT OUR CLIENTS ARE SAYING

"The team at CRB delivered a facility design that met all of our expectations. The ease of collaboration with CRB enabled us to overcome difficult requirements that resulted in setting industry benchmarks in clean manufacturing design."

– **Site Engineering Manager** | Mars Chocolate North America

"This was a 'non-standard' application, and CRB's thought process was innovative in terms of material handling and dealing with multiple equipment vendors in a concerted fashion."

– **Director of Operations** | Kemin

"Our selection and use of CRB has proven to be the key element of success in our basis of design project. The CRB group is a unique blend of talents in academic knowledge, experience and creativity. Each team member is resourceful and qualified, yet at the same time highly participative in soliciting ideas and inputs on project elements and alternatives. Their approach has been to provide extensive knowledge and experience overlaid with a very strong customer service mentality. It has been refreshing to work with a group of such capacity, responsiveness and professionalism."

– **Vice President, Quality Systems/Project Director** | Confidential Client



THE RELENTLESS PURSUIT
OF SUCCESS. **YOURS.**TM

crbusa.com

