

Pushing the Limits

Many of today's lubricants and systems allow customers to operate around the clock with efficiency, flexibility and ease.

Marina Mayer, Executive Editor

It used to be that bakers and snack manufacturers ran their production lines on a routine, five-day schedule, shutting down for two days of cleaning, sanitation and maintenance. And if a part broke down or a line became inoperable, companies would just replace them and move on.

That was then—this is now.

Today, companies are aiming to stretch the limits and operate around the clock in an efficient, flexible and sanitary manner in order to produce more product and fulfill more orders. Now, the stakes are raised and every minute counts.

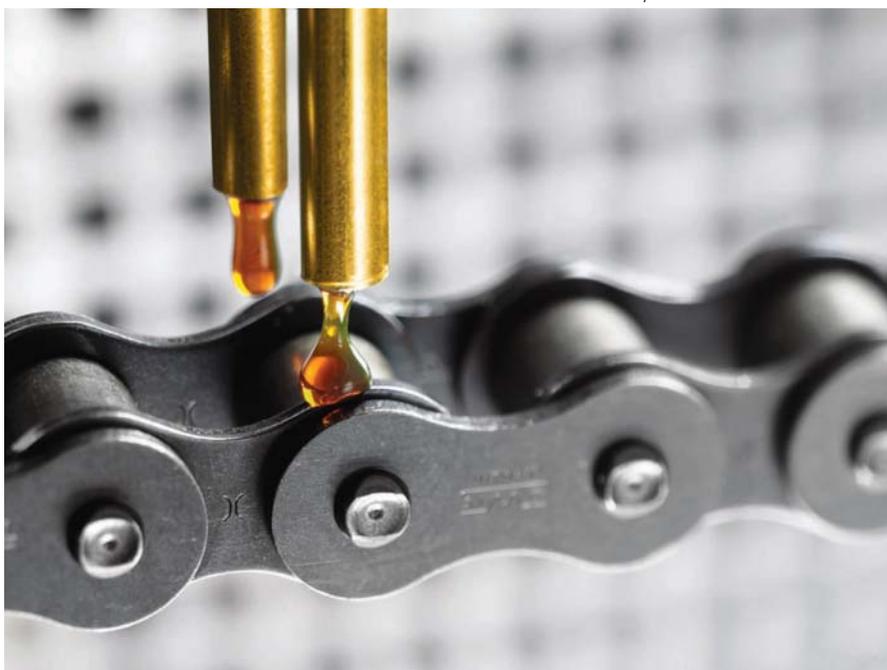
That's why suppliers are developing dependable lubricants to help their customers do the job right the first time.

Choosing the correct lubricant is only half the battle, says Kimberly Eldridge, North American market manager, food, beverage and pharmaceutical industry, for Klüber Lubrication North America L.P.—using the lubricant correctly is the other half.

That's why the Londonderry, N.H., company offers guidance to those sorting through the method behind the madness, so-to-speak.

“How a lubricant is applied can be a key indicator in predicting how well the lubricant will perform,” Eldridge says. “How can the user best apply the product to ensure that it achieves the performance and protection they expect? And how can they do it safely?”

Klüber's lubricants allow for the use of single-point applicators in hard-to-reach areas, which helps reduce potential safety risks for operators, Eldridge adds. In addition, a lubricant reservoir that pumps



Photos courtesy of Klüber Lubrication North America L.P.

product through lines to various application points can be viewed as a safety measure. “It may allow the lubrication of points that would otherwise require a machine shutdown to be performed safely,” she adds.

Another key factor is being able to lubricate without contaminating food, says Don Schaefer, regional sales manager for Bijur Delimon International (BDI), a partner of Lubrication Engineers, Inc., Morrisville, N.C.

“Due to the nature of the food plant, we often supply a ‘lube-in-a-lockbox’ solution,” he adds. “This approach allows only qualified people to make adjustments to the program. Only the person with the



key can change volume and frequency. Replenishing the reservoir is accomplished with an external fill coupler to ensure the mating fill pump has the correct oil or grease and is clean. Central systems can be automatically filled to keep flour, gluten

Continued on page 50

Production Technology



Photo courtesy of Lubrication Engineers, Inc.

machinery, Schaefer notes, and the system itself consists of a central pump, reservoir and metering devices.

“In a food plant, systems are remotely-mounted in an enclosure with a clear plastic viewing window. The lube system includes an alarm for low-level, low-pressure or monitored performance. A beacon to alert the operator and automatic refilling from central storage are popular options,” he adds.

BDI’s lubrication systems also reduce contamination and save money by eliminating the traditional oil can and grease gun. “Most manual devices are not kept clean and dedicated to the lubricant; the result is debris and mixed lubricants that are injected into the bearing,” Schaefer says.

Attaining higher standards

“Much like the surface of your skin, a very low volume of oil applied evenly to a sticky surface can provide adequate lubrication,”



Photos courtesy of JAX, Inc.

says Shaun Beauchamp, director of operation for XACT Fluid Solutions, a wholly-owned subsidiary of JAX, Inc. That’s why the Menomonee Falls, Wis.-based companies jointly created JAX food-grade mold release, a NSF 3H-registered release agent that promotes release and product separation by modifying the interface between the food and grills, loaf pans, boning

Continued on page 52

Continued from page 49

and debris out of the lubricant.”

BDI provides uptime solutions using centralized lubrication equipment to automatically lubricate food processing

Discover a treasure better than gold.

When you insist on baking with the best, our superior line of flours will help you outshine the rest.

Call 1-800-538-7721
to discover the difference.
www.ndmill.com

Production Technology

Continued from page 50

benches, chopping blocks and other hard surfaces.

“Sanitation processes are becoming more aggressive to handle cleanliness during increased production schedules,” Beauchamp says. “Stainless-steel systems [such as the food-grade mold release] with solid-state components and a long cycle life are imperative in this environment. You want to reduce downtime, which implies ensuring the automated solution does not become a maintenance concern. We pride ourselves on innovative, reliable, flexible solutions that solve problems.”

In addition, XACT concocted the flat-pattern spray-bar system, which is a turnkey spray system that sprays onto conveying surfaces such as molds, belts and conveyors. It comes with a control cabinet, pumps, solenoids, logic controls, a low-level switched reservoir, a system stand and status light. The system is designed to last a minimum of 100 million cycles.

Photo courtesy of Dayton Progress Corp.



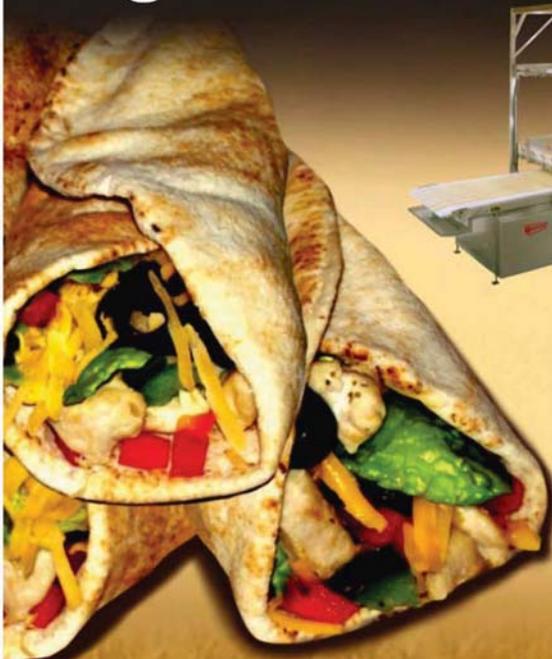
“Our systems micro dose lubricants into all applications, which is specifically critical in oven applications,” Beauchamp says. “JAX supplies lubricants for baking with a significant margin of safety for flash point. XACT produces our systems for longevity in high-temperature applications. If a typical oven runs at 550°F, we have no concern, as our fluids operate well at these temps, and we build our dispensing systems to handle 900°F. The combination

of a fluid with low volatility and a positive displacement dispensing system that accurately controls lubricant volumes provides protection against typical baking fears.”

Meanwhile, Dayton Progress Corp., Dayton, Ohio, launched *DAYLube*, a high-performance lubricant that uses nanoceramic particles to provide continuous lubrication to steel surfaces. Available in 5-gal. pails, *DayLube* is NSF-H1 food-grade certified, provides 10 times the normal life and features high load-bearing properties, such as water, steam, acid and chemical resistance. Plus, it is ideal for high-volume applications and protects bearings, bushings cables, cams, chains, conveyors, gears, lifters, machine parts, robotics, slides, wear plates and more.

Pushing the limits is what many of today’s companies do to stay in the game, and they do so with the help of some flexible and dependable lubricants and systems. **SF&WB**

High Volume Flatbread Production

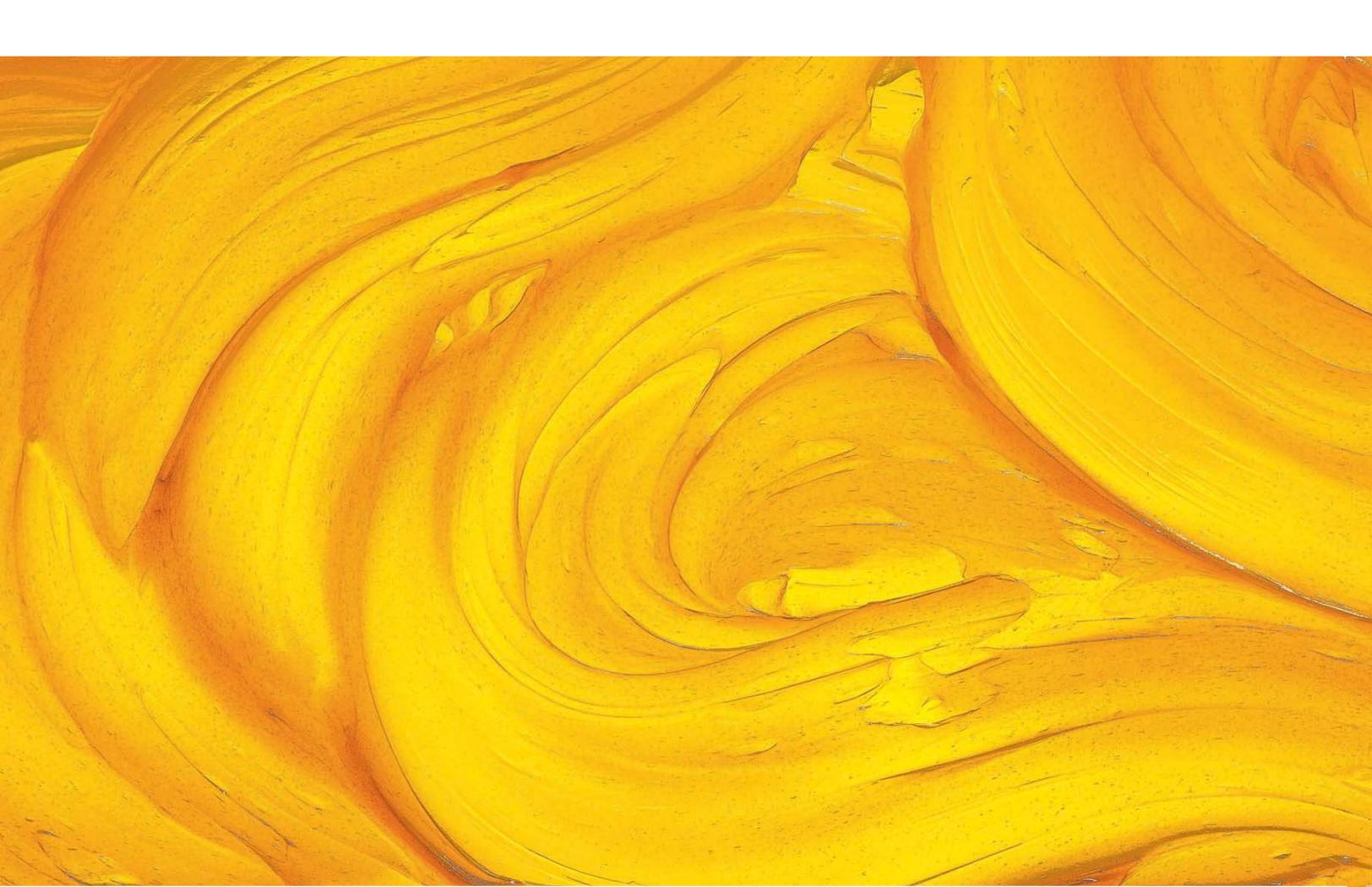


- **Sheeting and Make-up Lines for Soft, Whole Grain and High Fiber Formulations**
- **The Profitable Solution for Wraps, Pita, Low Calorie and Flavored Breads, Chips, Pizza and More...**
- **65 Years of Reliable Service to the Baking and Food Processing Industry**

Your North American Sheeting Line Partner



Moline Machinery LLC
www.moline.com



Lubrication: The secret ingredient in your recipe for productivity

Partner with Klüber Lubrication to get more from your operation. We've developed a broad line of kosher, halal and ISO 21469 certified lubricants to meet the extreme demands of the food industry.

Our NSF H1 lubricants boost efficiency, save energy, reduce lubricant waste and extend relubrication intervals—all while meeting your food-grade requirements. Klüber Lubrication promotes a healthy production line and a healthy bottom line.

Talk to one of our specialists to find your secret ingredient.

Klüber Lubrication North America L.P.
info@us.klueber.com / www.klueber.com

your global specialist

KLÜBER
LUBRICATION