The Challenge
A major plastic packaging manufacturer is an industry leader in the design and manufacturing of plastic rigid containers of the highest quality including many food products such as cheeses, dressing, sauces and beverage containers. The company supports manufacturing operations throughout the United States, South America and Europe. Their top priority is to ensure the injection molding equipment is operating at maximum capacity with minimal downtime. In 2017, the manufacturer was looking for ways to improve their reliability program. During a meeting between the manufacturer’s Regional Operations Manager and Chevron Industrial Specialist, Ron Boffa, it was identified that utilizing the Chevron RBL™ program could help identify these opportunities.

Investigation and Site Assessment
The first step was to implement the Chevron RBL Best-In-Class site assessment tool at one of their U.S. plants. Ron Boffa met with the plastic packaging manufacturer to review current maintenance practices and begin the assessment process. Maintenance procedures and practices were documented with samples of the lubricants captured and sent for analysis. A key piece of information identified was the current cleanliness of the hydraulic fluid they were currently using did not meet the ISO Cleanliness specification set by the injection molding manufacturer. The ISO Cleanliness level specified for hydraulic fluid was 14/12/10. The brand of hydraulic fluid currently in use measured 17/15/11, which was 8X above the contamination level required by the manufacturer. Even with the onsite kidney loop filtration it was difficult for the plant to consistently meet the specification required by the injection molding manufacturer.

Solution – Start Clean & Stay Clean
Based on the results of the RBL cost analysis to pre-filter oil onsite, as well as the risk of not meeting the manufacturer’s ISO Cleanliness specifications, the plastic packaging manufacturer implemented the Chevron ISO CLEAN™ Certified Lubricants program. They are now starting with Chevron Rando® HD 46 – ISO CLEAN Certified delivered at 14/12/10 which meets both the lubrication performance and ISO Cleanliness level required by all of their injection molding equipment company-wide. Their maintenance personnel is no longer concerned about pre-filtering oil which has freed up their time to focus on routine maintenance.

Results – Extended Equipment Lifecycles and Improved System Performance
The company is in the process of implementing the Chevron ISO CLEAN Certified Lubricants Program at all of their plants with direct support from Chevron and the local network of ISO CLEAN Certified Lubricant Marketers. It is estimated they could see a hydraulic system life extension of 2X by implementing the new program.* The program includes continual monitoring of the systems and tracking performance and processes. The maintenance budget is projected to decrease another 3-5% based on the previous years budget with the increased machine uptime and reduced rejection rates.

*According to Noria Life Extension Table.