

▣ **Rabbi Hillel Royde**
Kosher Certification Services, Manchester Beth Din

Kosher certification for food grade lubricants

Ever since the 1920's kosher certification has played a major part of the food industry. Today there are well over 1,500 kosher certifying agencies around the world certifying millions of food products, be it raw ingredients, enzymes, or indeed the finished product. The term 'kosher' translated into English means 'pure and proper' and is used to describe the status of food sought after by Jews throughout the world, which practically means that it complies with the Jewish Dietary Laws.

Any processed food material needs kosher certification to ascertain it does not fall short of the requirements set out by Jewish law. The laws concerning ingredients go right back to the original source of the food and the manufacturing procedures including the blending, heating, storage and transportation both of the raw materials and the finished items.

To be very brief, all vegetables are automatically kosher but anything from animal (meat, milk or fish) needs to be from a suitable source. Milk and its derivatives may only be from cows, sheep or goats and similarly meat may only be from those three species of animals. Kosher certification for dairy products would require supervision from the milking, through the pasteurisation, homogenising, to packing.

The added ingredients in cheese or yoghurts, such as starters and cultures would also need to be kosher sourced. Meat or its derivatives from kosher animals require slaughtering, various internal and external

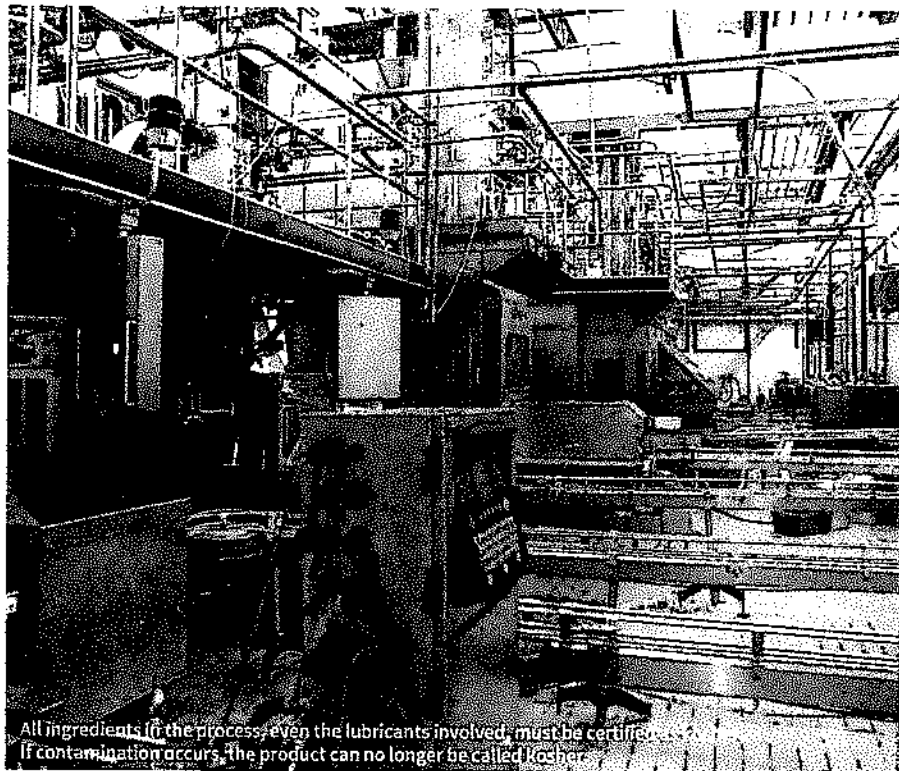
examinations of the animal to ensure that it is healthy. It then needs to be processed in a rigorous manner, thereby ensuring right through the process that the Jewish Law has been maintained in its detail. Fish and its derivatives are only permissible if the fish have fins and scales on them. That includes cod, salmon, tuna and herring but excludes shell fish, crabs, oysters and eels.

With the topic of this article being 'kosher certified food grade lubricants' let me first give a brief outline of kosher and its concerns. As mentioned earlier any product that has a



The Manchester Beth Din logo, signifying that the product is kosher certified

non-kosher ingredient poses a problem for the kosher consumer. That being the case all the components of a food grade lubricant will have to come with transparency that they have not originated from an animal source or been processed on machinery which shares any product of animal origin. Jewish Dietary Laws require that not only has one to be concerned about consuming a non-kosher ingredient, it also requires that the utensils used to manufacture, store or transport ingredients or finished goods should be suitable and in no way become cross contaminated through the previous use of non-kosher items. This is more applicable in the case of liquids but occasionally also with solid foods. As such even if the actual product contains only kosher ingredients, we have to examine the equipment. Even shared utilities such as joint heating, heat exchanges or pasteurisation systems could be a kosher issue. If the equipment had been previously used for non-kosher products, in many cases



All ingredients (in the process, even the lubricants involved, must be certified. If contamination occurs, the product can no longer be called Kosher.

it will have to be kosherised, however that particular procedure is quite detailed and outside the remit of this article.

Coming back to food grade lubricants, although the actual product par se is not a consumable product, the concern arises when the lubricant consists of inappropriate ingredients that do not conform to kosher laws and might inadvertently come into contact with food products which are in the process of kosher certification. Similar to the legal requirement that lubricants in food factories need to be suitable for that purpose because of the possibility, however slight, that they might inadvertently come into direct contact with the food being manufactured, there is also the kosher concern that they might come into contact with the kosher food or ingredient being processed or

packed at that particular time. It is for this reason that there are many lubricant companies worldwide who chose to become kosher certified giving added peace of mind to companies who wish to manufacture kosher products that the lubricants they use in their processing are indeed also kosher certified.

All the components of a food grade lubricant will have to come with transparency that they have not originated from an animal source

At Manchester Beth Din (MBD) we are proud to be such a kosher certifying agency who, as well as certifying thousands of retail products and raw materials, also kosher certify a food grade lubricant plant. In November 2010 Mr. Ranjit Panesar of Proventus (Leeds)

contacted the MBD to determine whether we can guide him to obtain kosher certification for his lubricants. This would increase his sales and also allow him entry into the larger markets of Israel and USA. Since then, Proventus has returned every year for renewal of their kosher certificate.

Kosher certification is a very thorough process; when our Rabbi visits a factory he will firstly go through all the ingredients being used in the factory, as well as the detailed ingredients in the particular products being kosher certified. We insist that all processed ingredients, and indeed even the lubricants involved in production, come with reliable kosher certification. This is often certified by ourselves or from the many other reliable kosher certifying agencies worldwide. Once all of the ingredients have been confirmed that they are up to our own kosher standards the manufacturing process is discussed.

One of the main concerns besides the ingredients themselves would be the heating system of the tanks. As mentioned previously, Jewish Law prohibits cross-contamination and therefore if the factory has or is producing various products at the same time but sharing the same boiler system or sharing common piping this will play a major concern if some of the products being produced in the factory contain non-kosher ingredients, even if they all have segregated utensils. It is for this reason that checking the heating system and temperature of the manufacturing

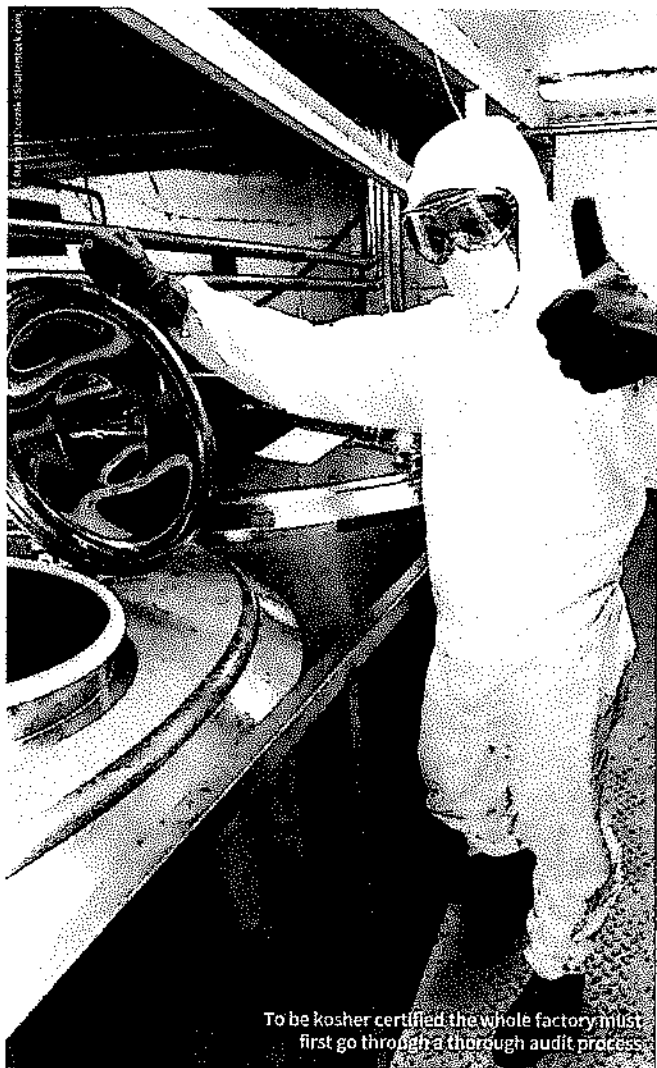
PURITY™ FG lubricants



Petro-Canada PURITY™ FG lubricants are designed for many applications in food processing plants. These specially formulated food-grade lubricants are effective under severe food processing operating conditions - from food acids and juices to by-products and temperature swings. Our food-grade lubricants and

greases fit perfectly into a Hazard Analysis Critical Control Point (HACCP) and carry a full set of food-grade lubricant and grease credentials including NSF H1 lubricants with incidental contact requirements. PURITY FG greases provide outstanding lubrications and pumpability over a wide range of temperatures, superior equipment protection under shock loading conditions, and exceptional resistance to water washout, water jet spray and most sterilising chemicals used in cleaning, better than many competitive food-grade greases. PURITY FG Greases also provides excellent protection of gears, bearings and equipment from wear and corrosion. All of these products work to reduce the downtime needed for re-greasing, saving time and money. For information, visit www.PURITYFG.com.

process is important for kosher certification, ensuring there is no cross contamination from other non-kosher products. It is common that companies implement separate heating systems to accommodate kosher requirements to avoid such problems.



To be kosher certified the whole factory must first go through a thorough audit process.

During an audit the Rabbi will also ensure that the holding tanks have been thoroughly cleaned and if necessary kosherised. The finished goods can only be dispensed into brand new IBC's or drums, ensuring that no previous non-kosher products have been stored in them which can be of kosher concern. The Rabbi will then often watch the manufacturing process, confirming that all adheres to the kosher standards of the MBD and process the kosher certificate allowing them access to the many benefits of kosher certification.

To find out more about kosher certification please don't hesitate to contact our office on 0161 740 9711, email info@mbd.org.uk or visit our site www.mbd.org.uk

About the Author

Rabbi Royde has been working in the Kosher Certification Department of the Manchester Beth Din for over 30 years and has gained respect worldwide through his knowledge in areas of kosher certification, starting with sourcing kosher approved ingredients, through to the manufacturing procedures and packaging. He is assisted by a dedicated team both in the offices of the Manchester Beth Din and out in the field



Closer to you.

To meet your production challenges you need a strong partner.

Being closer to you as a trusted specialist with extensive experience, we support you with your food safety and sustainability initiatives, and we offer you added value with our KlüberEfficiencySupport service programme.

Experience our experts' dedication to your cause as they will go to great lengths to ensure your machines run trouble-free.

www.klueber.com/newfood

Meet our tribology experts at hall B1, stand 500

your global specialist

a brand of **KLÜBER**

■ Ashlee Breitner

Business Unit Manager: Non-food Compounds, Consumer Products
& Food Contact Regulatory Compliance, NSF International

360° of safety

The use of complicated chemical compounds in food production today is becoming more prominent as machinery and equipment become more technologically advanced. As these compounds become more complex so do the risks associated with them. The food grade lubricants industry used to be a niche market for many large industrial lubricant manufacturers but as the focus on food safety grows so does the need for safer chemical compounds to be used in their production process. The growing focus on food safety to protect consumers today from food borne illnesses has led to the increased demand, for what the industry has deemed 'food grade lubricants', 'H1' or lubricants that may have incidental food contact.

Safety can be an all-around concern in the industry of food production but this article will take an in depth look at the degrees of safety associated with food grade or 'H1' lubricants from product design to distribution.

Formulating

The life cycle of a lubricant, as with most products, begins at design and conception. In this stage the formulation of the product is designed to meet the needs of the particular application in which it will be intended to be applied. In the case of food grade lubricants the focus is not only on designing a formulation that will meet the performance needs of the application but there is also an additional focus on designing the formula to meet regulatory requirements. This added focus is necessary to meet the needs of producing a safe product specific for the food industry. The formation, in order to be regulatory compliant for sale or use in the United States must be formulated in compliance with Title 21 CFR, Section 178.3570 for Lubricants with incidental food contact and other applicable sections referenced therein. Today most other countries have adopted compliance with this Code of Federal Registrar for Food and Drugs from the United States or something similar in lieu of creating their own regulations for their country.

Production

Once the research and development teams have formulated and tested their pre-production lubricant to ensure it meets all physical and performance aspects necessary to create a viable product, the next critical step is manufacturing the product in a manner that all elements of safety are considered. The food grade lubricants industry saw there was a need to establish a voluntary ISO standard for lubricants used in the manufacturing and processing of food and similar products. Once published this document was titled, "ISO 21469: 2006(E) – *Safety of machinery – Lubricants with Incidental Product Contact*", and was produced by the Technical Committee ISO/TC 199, Safety of Machinery. This standard specifies the hygiene requirements for the formulation, manufacture and use of lubricants which may come into contact with food products during processing.

The scope of this international standard goes beyond lubricants used in food applications to also cover lubricants used for processing high risk products including cosmetics, pharmaceuticals and animal feed. The intention behind the broadened scope of ISO 21469 is to provide additional risk mitigation solutions for other product categories where hygiene standards in manufacturing are of particular concern.

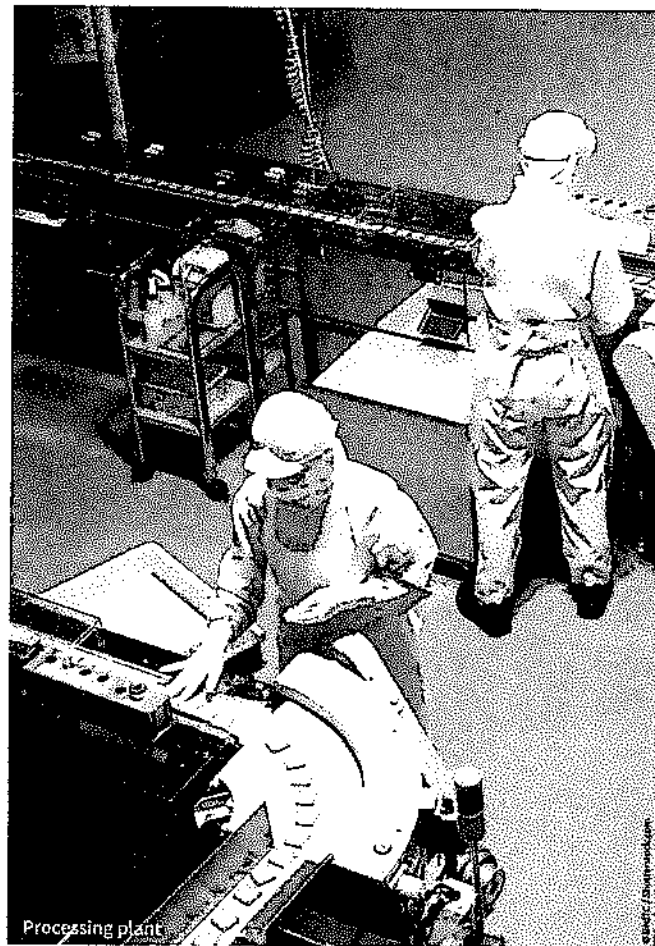
Companies leading the way in food grade lubricant production indicate that ISO 21469 goes beyond the requirements of H1 and covers the whole life cycle of the lubricant. Today, it is assumed that the lubricant manufacturer is required to analyse the hygiene aspects that arise from handling a lubrication product, and to advise the user accordingly. This way a food and beverage producer can be assured that every effort has been made to take their safe usage and hygiene requirements into account all whilst delivering long-term lubricant performance and equipment protection.

Companies seeking to demonstrate their commitment to quality by applying for ISO 21469 certification are thoroughly evaluated to ensure that their products meet particular hygiene requirements for the formulation, manufacture, and use and handling processes of lubricants that may have incidental product contact. ISO 21469 certification requires lubricant manufacturers to develop a hygiene strategy and to consider chemical, physical and biological hazards in the context of the lubricant end use.

In terms of the production process itself and ensuring a safe product is manufactured each and every time production is run, the risk assessment evaluation of the ISO 21469 certification process is critical in identifying potential hazards, the risk estimation of those hazards, and the risk evaluation of the current process controls. The hazard identification process that these manufacturers go through should include the potential for chemical, biological and physical contamination of the lubricant. Further, when determining the hazards, all of the phases of a lubricant's lifespan should be considered.

Potential points in the production process for these hazards typically include:

- Manufacture (Formulation or ingredients (including material sources), compounding, blending, processing, pre-packaging containment / bulk holding, packaging materials, process and equipment)
- Handling/Transport (Transfer, transport or shipping, shelf - life, repackaging)
- Use/Replenishment (Lubricant use/application, service age/range, contamination of lubricant by the product, environmental conditions/exposure, foreseeable misuse of the lubricant)



Once the hazards are identified a manufacturer is not done there. Just identifying the hazard will not produce a safe product. For each hazard identified, then determining the level of risk associated with that hazard should lead the manufacturer to the level of controls that need to be put in place to avoid that hazard from occurring. Information on the risk estimation is typically based on data collected over time such as accident histories, risk comparisons, and statistical data.

The final and most critical step in the risk assessment process would be for manufacturers to indicate what steps have been taken to eliminate the risk, or reduce it to an acceptable level. Putting into place control measures specific to the hazard identified and the risk level associated with it ultimately will determine just how comprehensively safe the final product sold to food producers today will be.

Designing the packaging and labels

Once the product is formulated and produced taking into consideration incidental food contact safety, food grade lubricants need to then consider designing the packaging of the final product in a manner that will prevent contamination from outside sources. Environmental conditions in the packaging process of these lubricants often is a major point of contamination from either outside factors, such as pest contamination, dust and debris buildup, or from introduced points of cross-contamination from other industrial lubricants not formulated in a manner that would be in compliance with applicable food safety regulations and requirements.

With increasing demand for safer products also comes an increased demand for safer and more accurate product labelling. Companies

today use just about any marketing tactic they can to sell their products, so seeing through what is purely a sales tactic versus what is a valid performance claim for a product is critical in sourcing safe lubricants into a food production facility. Registration bodies such as NSF International, review product labels before granting registrations of food grade lubricants, for accuracy of the applicable end use and false claims in terms of the products use in food production. Therefore one easy way to ensure the product you are sourcing is making valid safety claims is to source only registered or ISO 21469 certified products, as this label claims compliance is a base line requirement.

So with all of these safety elements to consider you may be asking yourself what to ask of food grade lubricant manufacturers before you will buy their products, to make sure the lubricants you buy have 360 degrees of safety. My suggestions would be:

1. Is your product formulated to meet applicable regulations for use in a food production facility?
2. Is your product formulated specifically for incidental food contact use?
3. Have you evaluated your production process for potential hazards and what measures have you taken to mitigate these risks?
4. Are your products ISO 21469 certified? (visit www.nsf.org to access the most current list of ISO 21469 certified products)
5. How are your products packaged to prevent contamination?
6. How do I know the marketing claims you make on this product are valid? Show me testing or compliance data.

Food adulteration due to contamination by traditional lubricants can result in product recalls and be costly, both to the bottom line and a

company's reputation. The benchmarks the lubricants industry is striving towards: "increased efficiency, cost reduction, streamlined processes, and risk mitigation", can be synonymous with making a safer lubricant product. For companies focused on protecting and improving the integrity of the food supply chain, ISO 21469 is the standard that helps bring both worlds together.

In conclusion, quality food grade lubricant manufacturers have a lot to consider when producing a safe product. From formulation to labelling, food grade lubricants today are becoming more and more key in producing safe food for today's billions of consumers. However, not only does the risk of producing a quality lubricant lie with the lubricant manufacturers, but even more so with the food producer, so asking the critical questions is key to creating 360° of safer food. ☺

About the Author

Ashlee Breitner is Business Unit Manager of the NSF Nonfood Compounds Registration program. Ashlee has worked at NSF International for five years serving in positions with NSF International, including Group Leader for the NSF Consumer Products program. Her expertise in the NSF certification process enriches the Nonfood Compounds Registration program and continues NSF's mission to deliver a program that provides product manufacturers, food producers and regulatory/inspector groups with a proven method to determine product acceptability.



Ashlee oversees all aspects of NSF's Nonfood Compounds Registration program. She leads the Nonfood Compounds team in developing new service offerings, improving existing processes, enhancing their customer service skills and representing NSF International at industry events and conferences.

Ashlee also works closely with NSF Registered companies and regulators, assuring that the NSF Nonfood Compounds Registration program continues to utilise the most up-to-date regulatory requirements and industry best practices.

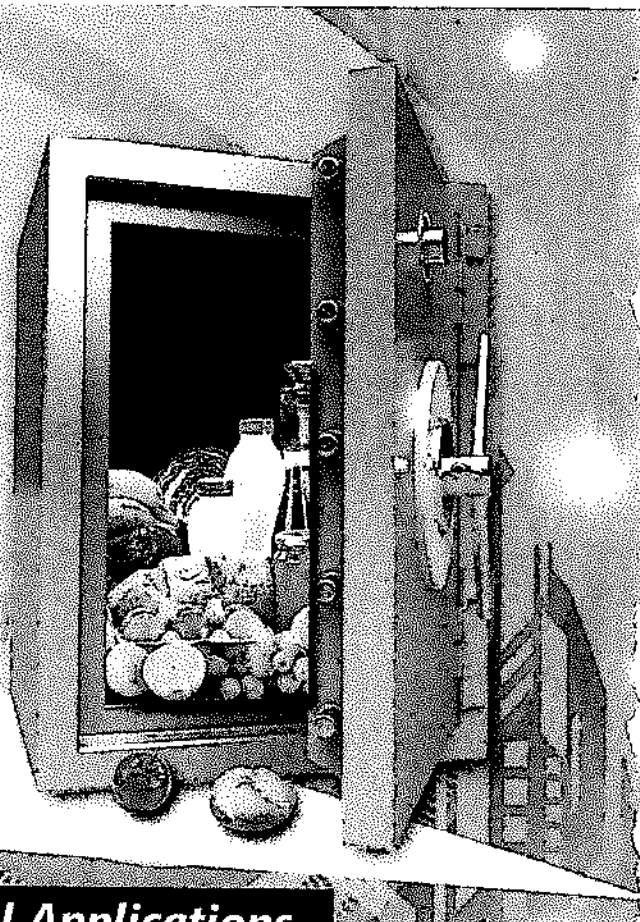


ANDEROL
Specialty Lubricants

- **More than 60 H1-registered Lubricants**
- **Full Regulatory Safety Compliances**
- **Optimum Performance**
- **Superior Protection of Equipment**

Keep your food safe

Tailored Solutions for Critical Applications



Moderator:
Ashlee Breitner
Business Unit Manager, NSF

ROUNDTABLE



Huba Hazos
European Sales
Manager,
FOODLUBE[®],
ITW ROCOL



Jim Girard
Vice President and
Chief Marketing Officer,
LUBRIPLATE
Lubricants Company



Rainer Lange
Mobil SHC Brand
Advisor – Europe,
Africa and Middle East,
ExxonMobil



Michael Colquhoun
Category
Portfolio Manager,
Petro-Canada
Lubricants



Aldemir Oliveira
Global Business
Development Market
Manager – Food Industry,
Klüber

What is being done today to mitigate contamination risks in the Food Grade Lubricants industry?

Huba: The food industry has developed sufficiently to understand the necessity of using NSF and ISO 21469 registered and certified food grade lubricants. Therefore the largest risk of contamination is often not associated with the food grade lubricants themselves, but with the storage, handling and use of the lubricants in the food processing areas. What the food industry now requires is even greater levels of protection, for instance the ROCOL[®] DETEX[™] metal (and x-ray) detectable plastic components on our food grade aerosols and grease cartridges. Our ROCOLcare[™] lubrication management package also ensures that the storage and handling of the lubricants is world-class, with minimal risk of using the wrong lubricant in the wrong place. Alongside our tailored lubrication training packages for everyone from a technical operative to a lubrication technician to chief engineer, we ensure that all functions fully understand the responsibility that they have to ensure that contamination risks are avoided.

Jim: It is essential that H1 lubricants manufacturers become ISO 21460 certified. There is no better third party monitoring standard.

Rainer: Contamination risks can be mitigated by switching operations to food-grade lubricants which are registered NSF-H1, an industry-

recognised standard award by NSF International, a global independent public health and environmental organisation. It is recommended that H1 food-grade lubricants be used in all equipment that comes into direct contact with food products or packaging. In 2012, ExxonMobil achieved ISO 22000:2005 certification for the manufacture of its NSF H1-registered Mobil SHC[™] Cibus family of high performance synthetic lubricants, which are formulated to deliver exceptional equipment protection even under demanding operating conditions. Certification to ISO 22000 indicates compliance with one of the worlds most recognised, stringent and comprehensive food safety management systems, which is just one of a few things that ExxonMobil is doing to help mitigate contamination risks in the food grade lubricants industry.

Michael: Both food processing facilities and manufacturers of food grade lubricants play a role. While in many countries there are government-imposed regulations that cover non-food compounds, it is important for companies to understand the risks associated with chemical contamination and to incorporate this into their HACCP programs. Lubricant providers are challenged with achieving the performance level of a conventional lubricant, while manufacturing in a food-safe environment with products that are registered H1 for incidental contact. In addition, the lubricant company needs to have processes and

procedures in place to understand and help eliminate important risk factors for the customer such as allergens, cross-contamination and cleanliness. We provide services such as conducting lubricant surveys at the customer site, identifying at-risk areas and providing food grade lubricant alternatives to achieve equipment performance and production goals.

Aldemir: Lubricants for incidental contact with food, classified as H1, follow strict regulations concerning the authorised ingredients for their formulation. Nevertheless, ensuring thorough hygiene requirements in the manufacturing process is not covered by the H1 regulation. Mitigating lubricant contamination risks is one of the objectives of the ISO 21469 certification. ISO 21469 is the international standard applied for manufacturing lubricants used in the production of food and beverage products.

As distribution of Food Grade Lubricants becomes more and more global, how are manufacturer's today staying ahead of changing regulations?

Huba: Working together with global food manufacturers that strive for the highest standards themselves keeps Rocol[®] at the forefront of changing regulations. Additionally by working in partnership with global bodies such as NSF we are able to understand the implications of current regulations and potential changes within the food safety arena and how they impact upon the lubricants sector. An example of this is, the newly implemented US initiative, the Food Safety Modernization Act (FSMA) and what this means to a food grade lubricant manufacturer.

Jim: Being members of industry trade associations such as the ELGI; NLGI; EHEDG; and working closely with the NSF to keep current with the changes in food grade lubricant ingredient requirements provide methods to stay current. It is vital that H1 lubricants suppliers provide training to their customers.

Rainer: As a company, we are interested in keeping up with the latest trends and are becoming increasingly global – our close relationships with a number of key Original Equipment Manufacturers within the food and beverage sector help to ensure that we develop products that continually meet the needs of food and beverage processors. We are staying ahead of changing regulations by collaborating with Bavaria-based energy and business consultancy Energy Consulting Allgäu. Both our businesses have agreed to jointly offer advice and expertise to companies throughout the food processing and production industries. We will also support firms in their efforts to achieve ISO 50001 energy management certification, which specifies requirements in relation to companies' energy efficiency policies.

Michael: With global awareness of food safe practices improving, it's important for lubricant manufacturers to employ regulatory advisors, have good relationships with government regulators and communicate frequently with regional distributors and customers.

Although changes in legislation will work to benefit the industry, they can present challenges. Regulatory requirements are often country/region specific with respect to where and when food grade lubricants are necessary. We need to meet regulations on a global scale and be aware of both existing and developing regulations. Petro-Canada Lubricants is always working to ensure our products meet the regulatory needs of all our customers worldwide.

Setting the bar high when it comes to performance and meeting recognised food safety regulations enables you to provide plant tough, food safe lubricants, even to those countries where the regulations are evolving.

Aldemir: Food and beverage manufacturers operating globally require food grade lubricants to be available and closer to them, without compromising on the quality of the lubricants. Since the adoption of the ISO 21469 standard, Klüber Lubrication has made efforts to stay ahead of regulations. Despite the fact that ISO 21469 is not mandatory, we have finalised the certification of five production plants around the world. This is the biggest number of lubricant facilities among food grade lubricant producers, according to NSF International. These plants are strategically located in America, Europe and Asia to serve customers worldwide.

In the past the focus on use of the appropriate lubricants formulated for incidental product contact has mainly been in the food production industry. As the focus is now growing in pharmaceutical, cosmetics, tobacco and animal feed production, how is this expansion affecting your business?

Huba: This expansion was not a surprise to us, in fact we had anticipated it and developed products that would perform and deliver benefits across the range of 'clean' industries. With regards to the service

Access New Markets Protect Your Brand



Product safety assurance for:

- ISO 21469 hygienic lubricants
- Food grade lubricants
- Cleaners, degreasers, water treatment chemicals
- And much more...



www.nsfwhitebook.org | nonfood@nsf.org

level requirements for all these industry segments, the ethos is exactly the same – premium performance products (FOODLUBE®) supported by premium service (ROCOLcare™) to ensure that the customer is legislatively compliant whilst optimising their plant uptime, maximising plant efficiencies and minimising contamination risks.

Jim: It is making H1 lubricants manufacturers increase research and development and an on-going monitoring of OEM's lubrication specifications.

Rainer: To minimise the risk of contamination of the end product, food grade lubricants are being used through the manufacturing process for pharmaceuticals, cosmetics and animal feed production. Our range of food-grade lubricants and greases has been engineered using a 'balanced formulation approach' that leverages ExxonMobil's technology and application expertise. We will continue to remain committed to anticipating the needs of the market, embracing the transformation, and delivering innovative, secure products that meet industry standards. As an example, we see common demands in terms of requests for kosher/halal certified lubricants, which we are happy to meet.

Michael: While we are seeing more wide-scale growth across the sectors, Petro-Canada Lubricants is already actively participating in these industries through our PURITY™ FG and PURETOL™ portfolios. The full line of lubricants is supported by a state-of-the-art Research and Development facility and team. Standing behind these products is a full team of experienced Technical Service Advisors ready to support efforts to improve equipment performance and efficiency. By adapting our expertise with our conventional lubricant applications and our food grade formulations, we are able to effectively expand to new industries.

Aldemir: Klüber Lubrication has been cooperating with these segments for several years, especially when it comes to machine manufacturers. We have been quite actively supporting customers to replace former H2 by H1 and ISO 21469 approved lubricants, without compromising on performance. In numerous companies from the animal feed production and tobacco and also food packaging industries have been using these H1 lubricants from Klüber Lubrication for many years. This expansion coming from new growing segments associated with the increase of food safety awareness in the food production industry highlights the attractiveness of the food grade lubricants market, where we feel very much prepared to respond to the demands accordingly.

As the global food safety initiative gains focus on elements of lubricant production such as their allergen content, how can compliance with the ISO 21469, Safety of Machinery-Lubricants with Incidental Product Contact-Hygiene Requirements help ensure compliance with these new focuses?

Huba: Today there are almost 800 suppliers of NSF H1 lubricants globally giving customers a wide choice; however the manufacturing process of these products is not formally audited unless they are from one of only

approximately 15 registered ISO 21469 manufacturing sites. Compliance with ISO 21469 provides the food industry and its' auditors with assurance that checks have been carried out throughout the sourcing, supply and manufacturing processes for food grade lubricants. These checks cover items such as cross-contamination of food grade lubricants with non-food grade lubricants and also auditing of raw material manufacturers. In other words, if you select a food grade lubricant manufacturer who has ISO 21469 registration for their food grade lubricants then you have assurance that your lubricants are as 'suitable for use in the food and associated industries' as they can possibly be.

Jim: As I wrote in my answer to question 1, ISO 21469 certification delivers this.

Rainer: Compliance with the ISO 21469 standard demonstrates that a lubricant which, during manufacture and processing can come into incidental contact with food, is manufactured according to the therein defined requirements. This standard also involves looking at the manufacturing process and quality control that goes into the creation and storage of the lubricants, which indicates a more stringent approach to focusing on previously unexamined elements, such as allergen content. Mobil SHC Cibus Series lubricants – manufactured in facilities with ISO 22000 certification – are formulated to meet nut-, wheat- and gluten free requirements and are suitable under Halal and Kosher dietary law.

Michael: Standards are rising and consumers are demanding more information and knowledge around the source of their food, its nutritional value and how it's manufactured and packaged. As such, processing facilities must adapt to these demands.

Petro-Canada Lubricants works closely with our suppliers, ensuring we are aware of any allergens that may be in their additives or present in their manufacturing facilities. Vendor surveys and audits allow us to identify, mitigate and communicate to our customers the presence of allergens.

Through ISO 21469 certification, equipment and processes are audited by a third party to ensure compliance. It gives customers peace of mind to know they are purchasing a lubricant manufactured with quality-controlled formulation, manufacturing, distribution and storage.

Aldemir: Under ISO 21469, the lubrication issue is considered in its entirety: not only the lubricant and its ingredients are taken into account, but also the way the lubricant is made, handled, packed and stored. This ensures that the lubricant, for example, does not come into contact with other substances such as cleaning agents or other foreign materials containing allergens. Additionally, allergens are not used at Klüber Lubrication production sites or at our suppliers. Klüber Lubrication has been managing raw materials beyond H1 standards, as we also aim at Halal certification. That prohibits the use of animal sourced raw materials. Allergen free lubricants is a complementary topic for us. 🍷

To minimise the risk of contamination of the end product, food grade lubricants are being used through the manufacturing process for pharmaceuticals, cosmetics and animal feed production 🍷