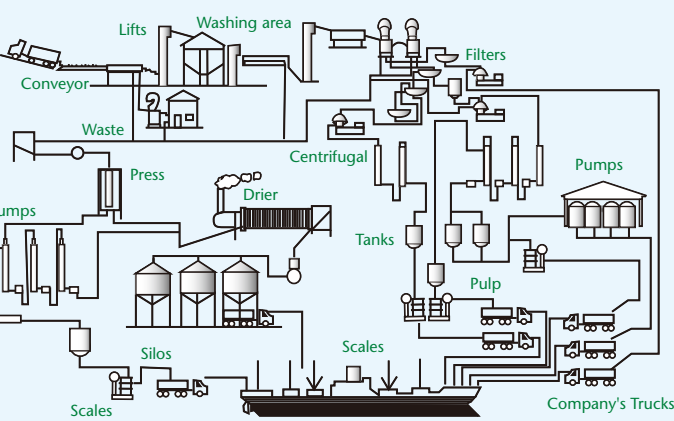


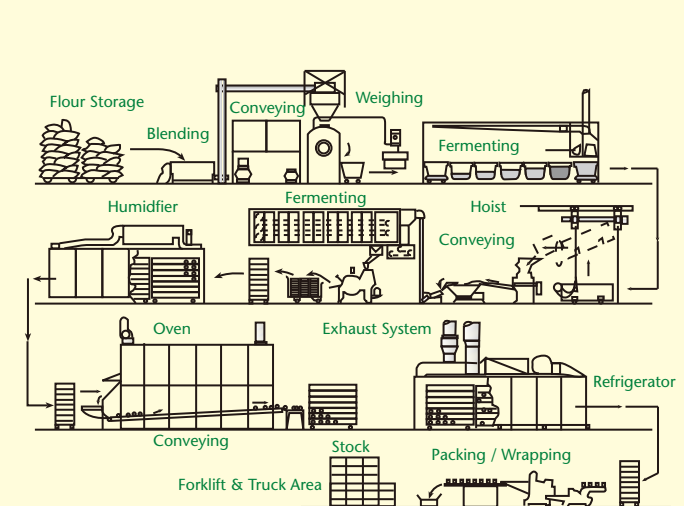
### OMEGA LUBE CHART OF A TYPICAL BEVERAGE PROCESSING PLANT (Please contact ITW PP & F Korea Limited for Omega solutions not listed below)

LOCATION	APPLICATION POINTS	OMEGA PRODUCT	COMPETITIVE ADVANTAGE
Inside a Beverage Processing Plant	Grease lubricated bearings, guides & joints of cleaning / rinsing, filling, can seaming equipment	O58	Food grade universal non-staining grease that withstands steam & water wash and offers excellent load carrying properties.
		O68	NSF H1-listed and Halal & Kosher certified, O68 can be applied in virtually all food and food-related industries.
		O78	Food grade grease with outstanding EP/AW properties, mechanical stability, and resistance against oxidation, water spray-off & washout.
Air line system	Pneumatic tools & air lines	O609	A food grade lubricant that will not curd or foam thus no blockage or corrosion will occur.
Refrigerators	Compressors	O615	Synthetic oil with outstanding low-temperature fluidity.
Hydraulic system	Hydraulics	O580, O588 & O615	Superior "Food Grade" oils engineered for the food industry. O588 is also Halal & Kosher quality certified.
		O917	Stops all leaks without harmful additives.
Chains	Drives, conveyors & pulleys	O641 & O642	Synthetic food grade lubricant designed for chain systems frequently exposed to high-temperatures. O642 is also Halal & Kosher quality certified.
		O646	A lubricant that will hold tenaciously onto any metal surfaces.
Centrifugal pumps	Bolts & nuts	O99FG	Food grade, multi-purpose anti-seize and assembly lubricant with excellent resistance against water wash-off, rust, acid & corrosion.
		O580	Superior food grade machinery oil that outlasts and outperforms any ordinary pure grade oil.
Gear Boxes	Lubrication of enclosed gears	O585 & 588	Synthetic food grade oils that will ultimately extend re-lubrication interval. O588 is also Halal and Kosher quality certified.
		O638	Completely safe for incidental food contact. For general maintenance lubrication & provides excellent corrosion protection & lubricity.
Silos, Scales, Press	Surface areas Studs & fittings	O690	Extreme-pressure gear oil that withstands high & shock loading.
		O917	Stops leaks while equipment is operating.
Company's trucks	Enclosed gears Engine oil	O690	
		O917	

### TYPICAL PROCESS FLOW OF A CITRUS PROCESSING PLANT



### TYPICAL PROCESS FLOW OF A MODERN BAKERY



### OMEGA LUBE CHART OF A MODERN BAKERY PLANT (Please contact ITW PP & F Korea Limited for Omega solutions to other types of food plants – e.g. dairy, fruit & vegetable, etc.)

LOCATION	EQUIPMENT POINTS	OMEGA PRODUCT	COMPETITIVE ADVANTAGE
Inside a Bakery Plant	Grease lubricated bearings, guides & joints of food equipment operating below 150°C	O58	Non-toxic & non-staining grease for plain & anti-friction bearings in food machinery. It offers excellent water resistance, load carrying properties & long re-lubrication intervals.
		O68	NSF H1-listed and Halal & Kosher certified, O68 can be applied in virtually all food and food-related industries.
		O78	Food grade grease with outstanding EP/AW properties, mechanical stability, and resistance against oxidation, water spray-off & washout.
Gear Boxes	Lubrication of enclosed gears	O580, O585 & O588	Food grade oils that stay tenaciously in place and provide excellent resistance to oxidation. O588 is also Halal and Kosher quality certified.
		O58	Universal food grade grease that withstands steam & water wash.
Cooling area	Conveyors	O68	NSF H1-listed and Halal & Kosher certified, O68 performs well at extreme temperature conditions down to -40°C.
		O638	Highly refined multipurpose oil with anti-wear characteristics & excellent corrosion protection.
Ovens	Oven external hinges Oven conveyor bearings Oven conveyor chains	O33	A grease designed to withstand temperatures up to 315°C.
		O26	Synthetic (PFPE) food grade grease with exceptional resistance to aggressive chemicals, water & steam, corrosion and oxidation at elevated temperatures up to 280°C.
		O641 & O642	Synthetic food grade oil that clings tenaciously to applied parts exposed to elevated operating temperatures up to 280°C and 250°C respectively. O642 is also Halal & Kosher quality certified.
Pneumatic system	Pneumatic tools & air line system Air compressors	O609	Food grade lubricant that will not curd or foam. Has excellent corrosion protection & good compatibility with plastics and sealing material.
		O615	Synthetic oils formulated with special additives for air compressors.
Refrigerators	Refrigeration compressors	O615	Synthetic oil with outstanding low-temperature fluidity.
Wrapping machine	Conveyor - studs, joints, lifters etc	O99FG	Food grade, multi-purpose anti-seize and assembly lubricant with excellent resistance against water wash-off, rust, acid & corrosion.
		O26	Synthetic food grade grease with exceptional resistance to aggressive chemicals, water & steam, corrosion and oxidation at elevated temperatures.
		O58	Universal grease excellent for the food & beverage industry
Forklifts	Gear boxes	O690	It is extreme pressure gear oil that is vibration resistant.
		O917	It lubricates, protects and prolongs the life of all types of seals.
Delivery Trucks	Gear boxes	O690	Always "stays put" in any position on any metal.
		O917	Stops leaks without any harmful additives.
Exhaust system	Gaskets, studs & nuts	O99	It is non-toxic and can be used in confined spaces.
		O99FG	Food grade anti-seize and assembly lubricant that can be applied to areas where incidental food contact is possible.



At ITW PP & F Korea Limited we are fully committed to a proactive approach to safety, health, environment and product improvement. Our commitment is well reflected in:

- Our continuous Research and Developments
- Our on-going in-house Training and our in-house Training Facilities
- Our comprehensive range of Quality Products
- Our many long-term Repeat Customers



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### About ITW

ITW (NYSE:ITW) is a Fortune 200 global multi-industrial manufacturing leader. The company's seven industry-leading segments leverage the unique ITW Business Model to drive solid growth with best-in-class margins and returns in markets where highly innovative, customer-focused solutions are required. ITW has nearly 50,000 dedicated colleagues in operations around the world who thrive in the company's unique decentralized and entrepreneurial culture. To learn more about the company and the ITW Business Model, visit [www.itw.com](http://www.itw.com).

To offer the best service to each market segment, ITW PP & F Korea Limited operates the following divisions that are branded uniquely for the most prominent recognition by users and customers:



**OMEGA Ultimate Lubricants**  
Specializing in lubrication solutions - greases, oils and additives



**MAGNA Welding Alloys**  
Specializing in gas and arc welding consumables for maintenance



**CORIUM Industrial Chemicals**  
Specializing in industrial & commercial chemicals and adhesives



**ZETALUBE Lubricants**  
A new lubricity dimension evolved from experience

We supply superior products that make maintenance:

- Faster
- Safer
- More reliable

Our products are engineered to:

- Lower costs
- Reduce downtime
- Cut wastage



[www.magnagroup.com](http://www.magnagroup.com)

## High Performance Lubricants for the Food, Beverage, Hospitality & Leisure Industry



We reserve the right to modify or change products for purposes of improving performance characteristics. © 2017 ITW PP & F Korea Limited

The OMEGA, MAGNA, CORIUM & ZETALUBE Trade Marks are the properties of ITW Inc., and are used under licence by ITW PP & F Korea Limited

The information contained in this publication supersedes all relevant information previously released and is to the best of our knowledge and accurate at the time of issue on August, 2017.



Lubricants are not normally products that come into contact with food and beverage during their manufacture. However there are situations within the food and beverage industry where it is almost impossible to prevent such contact with food products or even contact with packaging materials. Therefore, it is essential to use lubricants, which do not contaminate or alter the taste, colour and smell in food products or cause any threat to human health.

For these reasons, all **Omega Food Grade Products** are manufactured to meet and exceed the requirement set forth in the USDA regulation on lubricants for use in the food and beverage plants. Omega Food Grade Products are also registered for use with various internationally recognized authorities.

### How Omega Benefits You

Omega Manufacturing, a division of ITW PP & F Korea Lintied, is an ISO 9001 certified Quality System company that has supplied a range of high quality Omega Food Grade Products for the food processing & packaging, beverage and hospitality industries since 1965.

### Research and Development

Omega's Research team based in Hong Kong is continuously formulating products to meet the demands and changing trends of the food industry. Its team is dedicated to working in close partnership with its Distributors and Customers to provide complete lubrication solutions and services.

### Network of Distributors

Omega has developed a technically trained Distributor network that provides comprehensive support to Customers anywhere in the world.

### Environmental Policy

Omega recognizes environmental protection as an integral part of its business activities. Our company has an environmental policy to minimize impact on customers, employees and the community. Objectives are set within that policy to conserve natural resources, reduce waste and lessen impact on the environment.

### Internet / Intranet Site

Omega's Marketing Consultants located at various cities and its Distributors utilize an information system provided by the Internet / Intranet Technology to response almost immediately to Customer's queries.

### Personal Service from our Technical Specialist

Omega's highly trained Marketing Consultants, Distribution Representatives and Lubrication Consultants are available to provide a complete package (ask for details from your local representative) to determine your individual lubrication needs, beginning with a plant survey that includes:

#### Plant survey:

- Checking on machine parts like bearings, motors, gears, conveyors etc
- Visual check on lubrication oil level
- Lubrication time cycle
- Recommendation of Omega lubrication system
- Recommendation of stock level

#### In - house training program:

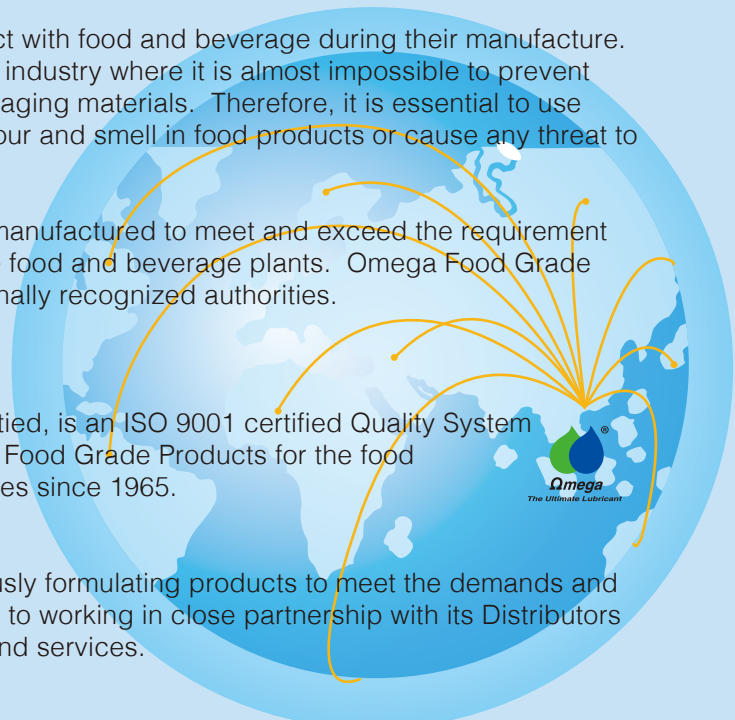
- We will provide seminars and presentations on a continuous basis covering topics such as product applications, health and safety requirements and cost control.
- In-house training programs for end users

#### Labelling of equipment:

- We offer special labels to record product used & operating maximum temperatures reached.
- Our sales representatives will conduct follow up to monitor progress

#### Lubrication schedules and analysis program:

- Oil and grease analysis report
- Failure analysis report
- Final recommendation



## Oils and Greases for Incidental Food Contact (NSF H-1 Listed)

### Omega 26 ThermaSyn FG Grease

Omega 26 is a white and smooth food grade EP grease formulated with Perfluorinated Polyether (PFPE) base fluid and Polytetrafluoroethylene (PTFE) thickener to be used in extreme-temperature conditions and for applications which require exceptional chemical and solvent resistance while incidental contact with food items is necessary.

### Omega 38 Crystal Clear FG Grease

Omega 38 is a colorless and clear synthetic food grade grease formulated to offer the highest aesthetic and sanitary value benefiting food & beverage processing, pharmaceutical, medical and many other high-end industries. It also provides excellent water washout resistance and virtually no oil separation.

### #Omega 58 Superior Food Machinery Grease

Omega 58 is a universal grease that withstands steam and water wash. It is non-staining, odorless and tasteless. It is ideal for use in steam bottle washing plants, hospitals, veterinary services, wineries & breweries, vegetable sorting, abattoirs, food packaging, bakeries and fish processing plants. It is also acceptable for use in cosmetic, pharmaceutical and sanitary products industries.

### Omega 68 Superior "FG Plus" Machinery Grease

Omega 68 is formulated with calcium sulfonate complex thickener and a well-balanced package of FDA approved additives and white oil to satisfy the stringent maintenance requirements demanded by the MRO professionals in the food & beverage industry. This product is HALAL & KOSHER quality certified.

### #Omega 78 Food Grade Anti-Corrosion Grease

Omega 78 is a revolutionary & genuine multipurpose grease that satisfies most major industries and abundant innovative applications. It is formulated to offer exceptional mechanical stability, high dropping point, high load carrying capacity, reduced wear, and excellent resistance to water, rust and corrosion.

### OMEGA 99 FG Food Grade "Seize-Stop"

Omega 99FG is a multi-purpose, white, smooth, and non-toxic, food grade anti-seize & assembly paste that can be also used for lubricating bushes, slides and small open gears operating in the food & beverage and pharmaceutical industries and clean environments where incidental food contact is possible.

### Omega 580 Superior Food Machinery Oil

Omega 580 contains anti-foaming, anti-bacterial and anti-wear agents, thus making this a far superior product than "pure" grade oil. It is specially blended for use in gear boxes, hooks, slides, conveyors, fillers, sealing machines and all types of equipment that demand the use of pure food grade oil.

### #Omega 585 Synthetic Food Grade Chain and Gear Oil

Omega 585 is 100% synthetic and does not contain any mineral oil or harmful constituents. It is suitable for high temperature bottling plants, canning plants as well as low temperature refrigerated rooms and ice making plants.

### Omega 588 Synthetic FG Machinery Oil

Omega 588 is formulated with synthetic polyalphaolefin (PAO) and a package of FDA approved additives to offer versatile applications on processing machineries and systems in the food & beverage and pharmaceutical industries. This product is HALAL & KOSHER quality certified.

### Omega 609 Food Grade Air Line Lubricant

Omega 609 is a food grade lubricant for workshop airlines powering pneumatic air tools and equipment. The lubricant will not curdle or foam, thus, no blockage or corrosion will occur in the pipeline. Omega 609 is ideal where clean air is a priority especially in the furniture manufacturing and food processing industry.

### Omega 615 Synthetic Air and Refrigeration Compressor Oil

Omega 615 is a synthetic oil containing anti-oxidant, rust inhibitor and anti-foam additives. It leaves no varnish or carbon deposits even in low temperatures thereby eliminating cleaning in refrigeration compressors.

### #Omega 638 " Four-in-One " Food Grade Oil

Omega 638 is a light lubricant that displaces water, prevents rust and penetrates to loosen "frozen" bolts and nuts. Omega 638 is blended from ingredients that have USDA-H1 approvals for incidental food contact. It is suitable for day-to-day maintenance lubrication in the food processing, pharmaceutical and beverage industry.

### Omega 641 Food-Grade HTLR Chain Oil

Omega 641 is a supreme specialty synthetic "high temperature low residue" lubricating solution designed for chain systems frequently exposed to high-temperatures in food & beverage industry.

### Omega 642 Synthetic FG HAL Hi-Temp Chain Oil

Omega 642 is a Halal-certified, synthetic food grade lubricant designed for chain systems frequently exposed to high-temperatures up to 250°C.

# Products are also registered for use by MAF.

## Oils, Greases and Industrial Specialties for non-food contact

### Omega 33 Extreme Heat Resistant

Omega 33 grease is formulated to withstand high temperatures of up to 315 degrees Centigrade. It is popularly used in kilns, baking operation, steam pumps, surgical sterilization and laboratory work where extreme temperature is common.

### \*Omega 77 EP Bearing Grease

Omega 77 is formulated with special additive package to provide excellent cohesive and EP properties to withstand extreme shock loadings and pounding-out. Omega 77 also forms its own seal against water, contaminants, and outside temperatures.

### \*Omega 95 Super Corrosion-Control Grease

Omega 95 is engineered to provide the highest possible lubricating and protection qualities ever, for severe water wash environments.

### Omega 99 " Seize-Stop" Grease

Omega 99 is a waterproof lubricant that prevents seizure of threaded parts. It is non-toxic and can be used in confined spaces. Recommended for use in fans, blowers, turbines, pumps, transmission shafts, etc

### Omega 612 Universal Lubrication and Hydraulic Oil

Omega 612 does not attract metallic dust and magnetic particles. It is formulated with special anti-wear additives and demulsifiers.

### Omega 646 Superior Chain Lubricant

Omega 646 is a lubricant that will hold on tenaciously to applied surfaces. It is ideal for lubricating chains on conveyors, gear drives and pulleys commonly found in bottling plants and abattoirs.

### Omega 647 "Carbon-Free" Hi-Temp Chain Lubricant

Omega 647 is 100% synthetic that produces no carbon residues and ultra low smoke emission at elevated operating temperatures. It offers high tackiness for "stay put" reliability and is fortified with special "Megalite" friction modifiers to provide lubrication even should vaporization of base fluid occurs.

### \*Omega 680 High-Performance Worm Gear Oil

Omega 680 improves operating efficiency, saves energy, lowers operating temperatures and provides superior operating life for worm gear sets.

### \*Omega 690 Super EP Gear Oil

Omega 690 is completely water and water wash resistant; controls heat build-up and retards catalytic oxidation caused by metal particles. Omega 690 is also formulated with superior cohesion and adhesive properties and provides high resistance to foam.

### Omega 904 Industrial Oil Concentrate

Omega 904 helps reduce friction, sludge, varnish and carbon build-up and can be used in all types of hydraulic fluid, transmission, reducers and all forms of manual gear boxes. It does not contain any additives harmful to humans, machinery or the environment.

### Omega 917 "Seal Saver"

Omega 917 lubricates, protects and prolongs the life of all types of seals. It prevents fluid loss caused by seal deterioration. Omega 917 contains no harmful solvents and is non-flammable. Omega 917 works while equipment is operating thus saving cost on downtime and material wastage.

\* Products are also registered for use by MAF.

