

JSG Product Range
Overview Brochure



JSG Industrial Systems
quality industry solutions

Lubrication
Management
Systems

Materials
Dispensing
Management
Systems

Hose & Cable
Management
Systems

Diesel & Fluid
Management
Systems

Fire
Suppression
Systems

Onboard
Weighing
Systems

Flow
Measurement
Systems

General
Lubrication
& Exhaust
Extraction



Automatic Lubrication Systems

A large percentage of machine downtime and maintenance cost is a direct result of bearing failures, due to too much grease resulting in high clean up wastage costs and too little grease resulting in early bearing failure. Whether the equipment requiring lubrication is stationary, such as in a manufacturing facility, or mobile such as trucks, mining or construction equipment. Technology shows that applying lubricant is often most effective when it is dispensed in small, measured amounts over short, frequent time intervals. The major benefit of automatic centralised lubrication is one of safety. It does not require operators to be near any moving parts when a grease cycle is being carried out therefore ensures no injuries.

However, time and human resource constraints or sometimes the physical location or type of machine often makes this approach to lubrication impossible. As a result, production cycles, machine availability, and manpower availability dictate the intervals at which machinery is lubricated which is not optimal for the point requiring lubrication. Auto lube systems are installed on machinery to address this problem, ensuring the continuous lubrication of the machine while operating. This reduces costly unplanned downtime and providing full machine availability for good productivity. Well maintained machinery also guarantees that the asset has a good resale value.

Proper lubrication is essential for effective preventative maintenance, the purpose of lubrication is to prevent metal-to-metal contact between two moving parts therefore reducing friction, removing heat, and flushing out contaminants.

JSG Industrial Systems has a full range of the high quality Lincoln lubrication system products that enable any MANUAL OR AUTOMATIC CENTRALISED GREASE SYSTEM to be built to meet all application requirements, thereby ensuring well lubricated bearings, bushes and joints.

For large equipment requiring large grease volumes the Lincoln parallel injector (Centromatic) system or the Dual Line (Twin Line) system will meet all the needs. For the mid to small range equipment the Lincoln Series (Quicklub SSV) system meets the grease demands and the price. All these metering devices can be run with Pneumatic, Hydraulic or Electric pumps controlled by either internal or external controllers that are built for price and functionality such as data logging and sending data & alarms via GSM. Accessories for lubrication system pump stations include Auto Shut off via RF.



Quicklub



Centromatic SLV Injectors



Modular lube



Dual Line

Bulk Material Pumping Systems

JSG Industrial Systems offer a wide range of Bulk Material Pumps and accessories that can eliminate problems such as contamination of lubricants which in itself is a prime cause of premature bearing failures. This range can also be used to dispense other forms of materials from light oils, to heavy grease, fuels, water, inks, paints, adhesives and even sludge over long distances. Time to fill reservoirs is also a cost factor. The bulk fill range of pumps are capable of delivering materials at high volume and low pressure.

In addressing these issues, JSG Industrial Systems can offer you a large range of material dispensing products that can readily be designed into an effective and efficient material dispensing system specifically for your needs. Sound material dispensing practice eliminates wastage and production quality issues such as contamination of materials.

JSG Industrial Systems range is capable of dispensing a vast range of materials from the transfer of lighter fluids (oils, solvents, adhesives etc) to the movement of medium-viscosity materials (RTV silicone, greases, coatings, plastisols, offset inks etc) to the tough job of pumping very heavy-viscosity materials (ink flushes, epoxies, mastics, etc).

Depending on the make and model JSG Industrial Systems have available pumps with pumping ratios from 0.2:1 through to 75:1. There is also available for the oil rig market a special Ultra High-Pressure pumps, with ratios up to 240:1, that is used in wireline and valve applications.

Available as an option for the series III air pumps, the Lincoln Air Brake shuts down the pump when excessive pump cycle speed occurs, especially when the product reservoir is empty.

Other Equipment in the Material Dispensing range include:

- Supply Line Booster Pump Tube
- Elevators
- Air Operated Ejectors
- Measuring Valves
- Control Valves
- Pressure Primers



Powermaster Pump with Hoist



Piledriver Pump

JSG Product Range Overview

Lubrication Pumps, Pump Stations & Controllers

Good Lubrication Management practice ensures the continuous lubrication of the machine while operating thereby reducing costly unplanned downtime and providing full machine availability for good productivity. Well maintained machinery also ensures that the asset has a good resale value.

A large percentage of machine downtime is a direct result of bearing failures. Where manual lubrication is carried out, the question is whether the bearings are getting too much or too little lubricant. Too much results in high wastage costs, too little, early bearing failure. Technology shows lubrication in small amounts more frequently is the best practice for managing your asset.

Proper lubrication is essential for effective preventative maintenance, the purpose of lubrication is to prevent metal-to-metal contact between two moving metals, reduce friction, remove heat, and flush out contaminants.

JSG Industrial Systems has a full range of high quality lubrication pumps, including the proven performer JSG High Chief Hydraulic Pump. Also pump stations and controllers that enable any AUTOMATIC CENTRALISED GREASE LUBRICATION SYSTEM to be built to meet all application requirements, thereby ensuring well lubricated bearings, bushes and joints.

The JSG range of pumps, pump stations and controllers are designed to suit any application and with grease overflow a major concern to the lubrication industry, JSG have the solution with a radio frequency (RF) Autofill Protection.

For large equipment JSG have kits using a 12kg or 40kg pump station available in air, electric or hydraulic operation. Combined with grease metering devices, this equipment creates a reliable automatic lubrication system suitable for all types mining and industrial applications.



Auto Fill (RF)



Timer/Controller



High Chief Pump



Pump Station 40kg

Diesel & Fluid Management Systems

Good Diesel and Hydrocarbon Management practice ensures maximum machine availability through short turn-around times for filling and the elimination of costly cross contamination or ingress of dirt into the fuel tanks & engines. Assists with cost savings through reduction in spillage and theft. Well maintained machinery ensures that the asset has a good resale value.

JSG Industrial Systems has a full range of Fast Fill Nozzles & Receivers that provides the user with cost effective solutions to service diesel fuel, coolant, crankcase, transmission and hydraulic oil fast filling needs. The new patented CHECK RECEIVER eliminates splash back and theft of fuel. A special evacuation tool aids a fast evacuation process. All in either steel or aluminium. The Fast Fill range also includes swivels, safety couplers, and vents to enable fuelling shut off systems to be designed either using internal tank pressure or via a Pressureless designed system. Suitable for all heavy equipment requirements for mining, construction, earthmoving, on-road and agricultural industries.

The introduction of the Fast Fill MATRIX nozzles & receivers now totally eliminates the possibility of cross contaminating oils in the refilling process. Comes in eight different colours. With a specially designed evacuation tool it enables the evacuation of the oils from all of the different Matrix receivers.

Fast Fill has a comprehensive range of Diesel fuel nozzles going up to 800LPM flow rates, diesel fuel nozzles designed for salt applications, full steel diesel fuel nozzles for under ground coal applications. The latest model, the TITAN diesel fuel nozzle, is lighter weight and can be serviced in the field.

With a continuing trend towards the fitting of lightweight or plastic diesel fuel tanks comes the heightened possibility of pressure damage. In conjunction with Fast Fill, JSG has acted to eliminate this problem by introducing a PRESSURELESS diesel fuelling system which does not rely on the build up of tank pressure to shut off the diesel flow whereas pressurized systems would otherwise distort or damage the diesel tanks. The final benefit is one of safety & the environment. Such product design prevents splash back on operators and by eliminating spillage, eliminates the highly expensive EPA problems.



Pressureless System



Diesel Nozzle



Matrix System

JSG Product Range Overview

Fire Suppression Systems

Good Risk Assessment & System Design criteria ensures the prime requirement of a fire suppression system will keep the fire damage of your asset to a minimum while simultaneously allowing the operator time to clear the vehicle and to avoid personal injury. Heavy mobile and stationary equipment represents a substantial investment so the correctly designed Fire Suppression system will give that protection to your asset. Well maintained machinery also ensures that the asset has good resale value.

While there are a few common causes of on-board fires, it is worthwhile considering the options available to protect your investment in the case of such an event. The JSG Fire Suppression system is a fully engineered system designed for environments where world leading performance is constantly demanded. Far too many machines catch fire, and consideration must be given to the costs of machine replacement or rebuild as well as lost production and these costs may be nothing compared to the loss of life.

The Risk Assessment program assists the owner/operator to identify potential risks and provides a complete range of options to correctly manage those risks.

The JSG Fire Suppression System provides:

- Full design program ensuring the correct system is designed for the area's requiring the protection
- A pre-engineered design system to ensure correct specification of product requirements
- Flexible siphon tubes to allow either vertical or horizontal mounting of stainless steel tanks
- Available in both Rise of Pressure or Loss of Pressure sensing systems
- Designed for ease of installation
- Live testing prior to commissioning
- Full Commission & Service Log book
- Systems are fully compliant to AS5062
- Fully supported by a design & Risk Assessment Program



Foam Test



Foam Cylinders

On-Board Weighing Systems

Good control of bearing loads and pay loads will allow you to optimize your cargo without overloading or under loading your truck or trailer. Overloading can result in premature damage to bearings and costly unplanned downtime, high fuel consumption and potential fines whereas under loading will result in loss of return from your asset. Well maintained machinery also ensures that the asset has a good resale value.

A common issue within the construction sector is the overloading of vehicles. Overloading is often a costly exercise which can incur unnecessary overload fines and cause premature failure of machinery due to exceeding specified loads on bearings. On the other hand, under loading is an equally expensive issue as the maximum load potential is not met and hence efficiency and productivity is compromised. Weigh bridges and scale houses help to avoid these issues but the inherent costs associated with their use and maintenance can be daunting.

JSG Industrial Systems has a full range of Outset ON-BOARD WEIGHING SYSTEMS. One type of system analyses bearing loads via a range of sensors for air, hydraulic or leaf suspension vehicles. Weight data from the sensors are translated into data on the control panel. This is performed all in real time avoiding delays in the operation. Asset management can be improved by including fleet monitoring via GPS communication. You will now know what your trucks are carrying at any given time allowing you to adjust routes to allow for extra pick ups. This increases efficiency and minimizes cost.

The second type covers payloads for loaders, excavators and fork lifts. Weight analysis is achieved by sensors monitoring the pressures of the lifting cylinder passing the sensor which detects lifting arm movement. Sensor data is translated into data on the control panel. This occurs in real time preventing the need to stop the lifting operation. This system allows you to know the exact weight of the material at the time of loading and optimizes the loading process by reducing unnecessary tip offs if overloaded. All the weighing data gathered for bearing load and payload systems can be confirmed by a third party by the addition of an optional printer.



Lanx Global Module

Vision Module



ET Installation

JSG Product Range Overview

Air Operated Diaphragm Pumps

JSG Industrial System's Transfer Chief Air operated diaphragm pumps (AODP), are powered by compressed air and are used in the pumping transfer of fluids with or without soft solid material at high volume, low pressure.

Air operated diaphragm pumps will self prime under most suction lift conditions or flooded suction conditions. The flow rate being adjustable by regulating the air pressure to the pump air valve. The pumps have very reliable stall free air valves which are positioned in the centre section of the pump so they can be worked on without disassembling the wet end of the pump.

The Transfer Chief AODP range is available in a variety of metallic and non metallic options, and with seat, ball and diaphragm materials to suit most applications. The AODP's are available in 6 (1/4") through to 80mm (3") with flows of 17 lpm for the 6mm (1/4") pump, to 1,000 lpm for the 80 mm (3") pump in various materials from polypropylene, aluminium, stainless steel and cast iron.

Typical Applications for an AODP are:

- Chemical dosing and transfer
- Dewatering
- Drum and bulk tank transfer
- Petroleum oil and diesel transfer
- Sump evacuation
- Varnishes, paint and primer transfer
- Water and coolant transfer
- Mine site service vehicles and workshops
- Adhesives
- Resins
- Ceramic glazes
- Inks
- Cleaning fluids and detergents
- Clean and waste oil transfer
- Slurries



AODP "Transfer Chief" Diaphragm Pump

Flow Meters

Correct and accurate monitoring of your diesel fuel and oils ensures optimum benefits making sure you are delivering the correct amount of fluid to your machinery and aiding a quick turnaround time during servicing.

JSG have a range of flow meters to suit most applications from Diesel, oil, coolant to high viscosity fluids. Among the many positive displacement (PD) flowmeter design principles available today, the oval gear still holds a top place both in simplicity and field proven performance.

The inside story reveals a robust positive displacement oval gear flowmeter range incorporating patented innovations and features that bring many benefits to the dispensing market.

The oval gear meters are positive displacement flow meters where the passage of liquid causes two oval gears to rotate within a precision measuring chamber and with each rotation a fixed volume of liquid passes through the meter. Magnets imbedded within the gears initiate a high resolution pulse train output. The pulse output can be wired directly to process control and monitoring equipment or can be used as an input to instruments supplied with or fitted directly onto the meter.

Both the Pulse and Mechanical meters 25mm (1") - 100mm (4") are approved to NMI.

JSG provides a range of oval gear meters which provide high levels of accuracy and repeatability for a wide range of clean fluids irrespective of viscosity and conductivity, ranging from the small 4mm (1/8") meter to the high flow 100mm (4") meter. The outer body of the flowmeters are available in Aluminium, 316 Stainless Steel, High pressure 316 stainless Steel and Ductile Iron



Mechanical Meter



Pulse Meter



Oval Gears



JSG Product Range Overview

Hose & Cable Management Products

Hoses and cables lying around shop floors or hanging from ceilings are potential problems not only affecting maintenance costs but also creating a potentially unsafe area. JSG Industrial Systems can offer you a wide range of Hose and Cable Management products that will ensure an extended life of hose and cables by preventing damage and wear and thus lowering costs.

JSG stock a wide range of Hose and Cable management products to suit every application and budget from inexpensive light duty reels for the smaller workshop, medium duty reels suitable for workshop use through to our heavy duty open style reels from Cobra with spring and motor driven rewinds and Gleason spring rewind or motor driven electric cable reels and static discharge spring return reels.

Hose Reels

Cobra Hose Reels are open style hose reels available in manual, spring retractable or direct drive configuration. The Cobra hose reels are designed for heavy duty use and their high strength frames and quality design make them the ideal reel to be used in rugged environments where the demand for a reliable hose reel with high flow rates, large hose capacity and a high duty cycle is a necessity.

JSG's medium duty range of hose reels are open style and are spring retractable and are designed for use in workshops and other less demanding environments. The reel has individually powder coated components for long life and scratch resistance.

JSG's light workshop range of reels include open and enclosed spring retractable styles hose reels designed for the work shop and other service environments where a compact and smaller style of hose reel that is light with a low duty cycle requirement. Also available are Dual Line hose reels for use in Gas or Hydraulic applications

Gleason Static Discharge Reels

Used extensively in the refueling market the static discharge reels are ideal for a wide variety of grounding applications. Available with your choice of cable length and connector, all reels include spring rewind, centrifugal brake and ratchet lock. The cable used in the reels is 7 x 7 stranded stainless steel with yellow polyester elastomer cover, 4mm o.d. Reel has safety orange baked polyester finish. The Open spool style has cables to 30 metres while the enclosed reel has cable to 15 metres.

Gleason Spring-Driven Electric Cable Reels

Gleason "C" & "S" spring rewind cable reels are designed to be on moving or stationary machinery. These spring driven cable reels enable the transfer of power from static to dynamic operation and vice versa. The reels range from 3 core to 36 core cable with availability of 30 amp to 600 amp slip ring assemblies.

Gleason PowerTrak

Protect cables and hoses on reciprocating machinery and increase safety by keeping cables and hoses together, away from moving components and operations. PowerTrack is available in a variety of styles and materials, including flip-open for easy access to cables and hoses. Available in Glass Reinforced Plastic (GRP), Steel & Stainless Steel with carriers & separators to suit every application.

Gleason Festoon Systems

Engineered to run on I Beams the Gleason Festoon Systems come in a wide range of trolley design are used to carry hose and cable of various diameters, widths and weights safely off the ground.



Air Rewind Hose Reel



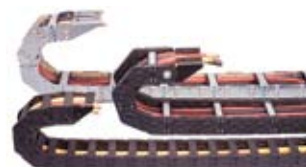
Spring Rewind Hose Reel



Static Reel



"S" Series Cable Reel



Power Track



Festoon System

Spray and Special Lubrication Systems

Railroad Wayside Lubricators

The Lincoln Industrial Railroad Wayside Lubricators are a high pressure, positive displacement, positive distribution lubricating system designed to dispense grease onto the gauge face of railroad track using pump-to-port technology. The Wayside units can be used for gauge face lubrication of Top Of Rail friction material application. It can do single, double or triple tracks from the one pump station. The lubrication pump runs on 24 VDC and is powered either with a 24 VDC solar panel and batteries, or an AC to DC power converter.



Lincoln Wayside

ORSCO Lubrication Systems

The ORSCO oil lubrication systems are capable of a continuous, ultra-fine, non-mist delivery of lubricant. The system can spray minute quantities of lubricant for a selected duration of time, resulting in significant cost savings by decreasing lubricant consumption, reducing product contamination and eliminating under/over lubrication while lubricating the chain. The ORSCO systems are capable of dispensing one drop of lubricant continuously for a period exceeding four minutes. In critical applications where cleanliness is a must, the ORSCO system achieves exceptional performance.

Lincoln Airless Grease Spray Systems

The Lincoln Airless Spray System is the only system of its kind on the market because no air is required to dispense the grease. The Airless Spray System means that mining, concrete, steel and other heavy industries can look forward to dependable high-pressure lubricant spraying that's low-maintenance and cost-effective. Lincoln's Airless Spray System eliminates freeze-ups because it works in a wide range of temperatures and the non-atomizing spray reduces lubricant consumption and fogging. The Lincoln Airless Spray system not only handles greases up to NLGI #2, it can spray some lubricants previously considered unsprayable.



Lincoln Airless Spray System

SAF Pump & HSA Nozzle Spray Lubrication Systems

These pneumatic barrel pumps, SAF1-YL with one outlet and SAF2-YL with two outlets, are designed for use in spray systems for the supply of adhesive lubricants (NLGI 0 and 00). SAF pumps are placed directly into 200 liter drums, they do not require a follower plate, thus the supply of lubricant is possible even if the drum is severely dented. Lincoln HSA spray nozzles are designed for the spraying of adhesive lubricants on pinions and open gears. The nozzles are available in several versions that cover a wide range of applications and functional features such as the SDLKR series are the only nozzles that can monitor both the flow of air and lubricant within the nozzle.

PMA Chain Lubrication Systems

The gravity-fed magnetically operated pump is signaled by a proximity switch. Then, fixed quantities of oil are supplied to the spray nozzles by the pumping elements, thus spraying a fine drop of oil on the chain. With this application, only those lubrication points which actually need it will be lubricated. The PMA2 solenoid pump is designed to be used as an oil supply pump, primarily in a chain lubrication system.



PMA Pump

ESILUB Oil Lubrication Systems

The EOS (electrical) & MOS (mechanical) ESILUB Chain Oil Lubrication Systems is an economically priced and uses direct operating injectors to dispense precisely metered amounts of oil on the chains of industrial & agricultural equipment to reduce chain and sprocket wear. Available as a 12- or 24-volt single-line, centralized lubrication package, the ESILUB pump is capable of dispensing accurately metered oil at a maximum pressure of 58 psi.

Ishan Lubrication Systems

The Ishan products are multi-functional micro-computer controlled oil lubrication systems. These can be either positive displacement, resistance or forced cycle lubrication systems. The Ishan pumps come in three styles Manual, Automatic Cyclic and Automatic Continuous. The ISHAN Lubrication Systems are ideally suited for punch presses, milling machines, printing presses, injection molding machines, textile machinery, and all types of machine tools.



Ishan

TRICO Lubrication Systems

The Trico range of lubrication equipment are used in a wide range of industrial lubricating applications with equipment and includes , grease dispensers, moisture removal units, monitoring devices, fluid handling units, chain oilers, spray coolant systems, and micro-dispensing units. The Trico MD-1200 Micro-Drop dispenser provides a cost effective solution when flood cooling is impractical or unavailable.



MD1200

Trico Constant Oil Level Lubrication

Constant level oilers are designed to maintain a predetermined oil level in a sump, which is necessary for proper lubrication. If the oil level were to drop below this point, the depleted oil would automatically be replenished by the lubricator, returning it to its original level. With the use of constant level oilers, maintenance efficiencies can be increased, while minimizing maintenance costs, and the loss of production time.



Constant Level oiler

Trico Oil Sampling Ports

Where and how oil samples are collected are two of the most important functions of the oil sampling process. Without a representative sample, further oil analysis efforts will be ineffective. That's why Trico sample ports are designed to draw samples from the most representative areas from industrial equipment. Trico sample ports are also designed to collect samples under the equipment's typical operating condition - another important factor.



Oil Sampling Port

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