



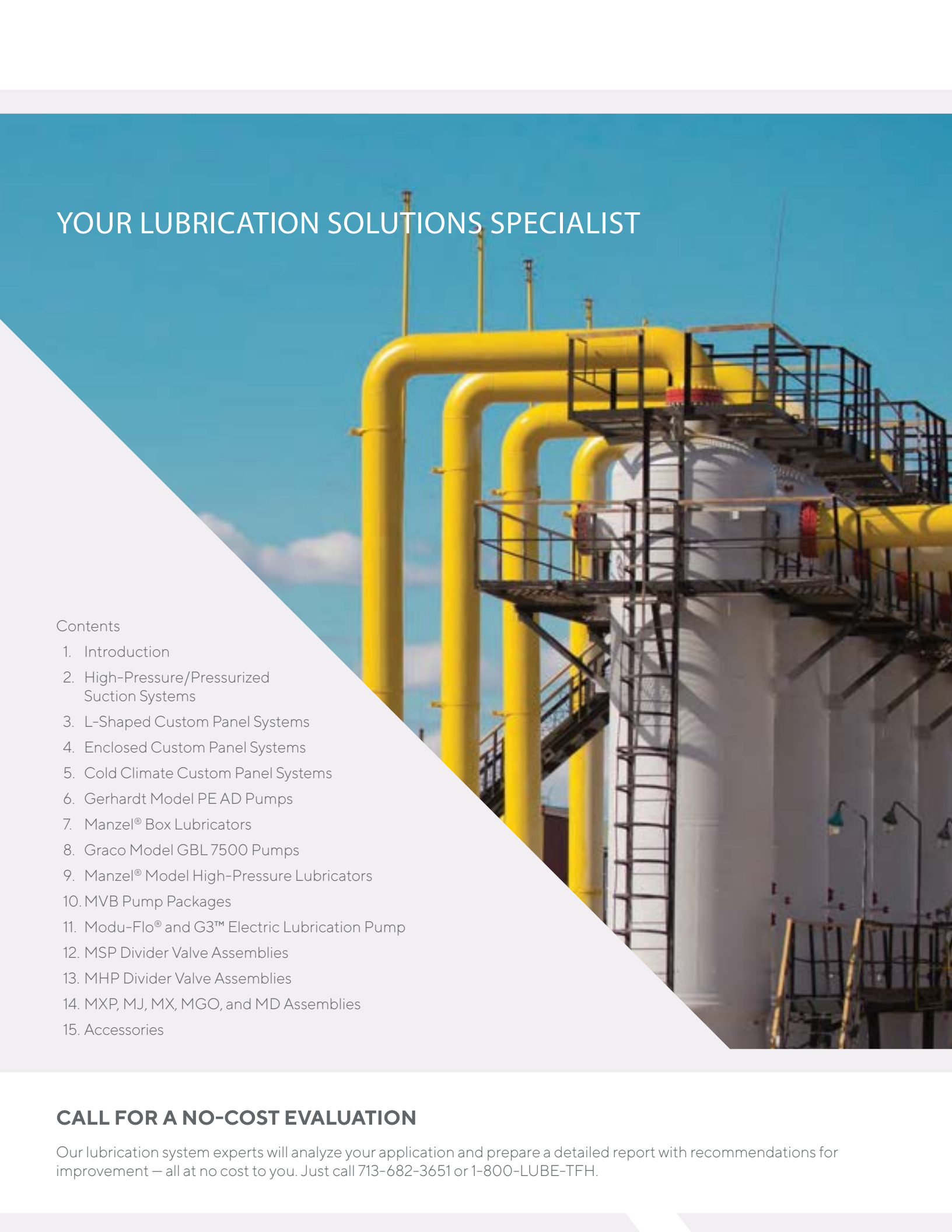
AUTOMATIC LUBRICATION SYSTEMS

Accurate, precise, reliable lubrication for any application, in any operating condition



T.F. HUDGINS[®]
INCORPORATED
an Allied Reliability brand

YOUR LUBRICATION SOLUTIONS SPECIALIST

A photograph of an industrial facility, likely a refinery or chemical plant. The image shows several large, white, cylindrical storage tanks in the background. In the foreground and middle ground, there are numerous bright yellow pipes that curve and run vertically. These pipes are connected to various pieces of equipment, including what appear to be pumps and valves. Black metal scaffolding and walkways with railings are visible, providing access to different levels of the equipment. The sky is a clear, bright blue with a few wispy clouds. The overall scene is well-lit, suggesting a sunny day.

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CALL FOR A NO-COST EVALUATION

Our lubrication system experts will analyze your application and prepare a detailed report with recommendations for improvement — all at no cost to you. Just call 713-682-3651 or 1-800-LUBE-TFH.

INTRODUCTION

T.F. Hudgins Lubrication Products designs, fabricates, installs and services a wide range of custom lubrication systems to meet your specific needs – for any compressor, engine, pump or machine application, in any working condition. For more than 60 years, we have helped maintenance professionals in a variety of industries achieve optimum lubrication for machines such as Ajax, Ariel, Clark, Cooper, Dresser-Rand, Ingersoll, Joy, Superior, Worthington and many more.

CUSTOMIZED LUBE SYSTEM DESIGN

Engineered for reliability, T.F. Hudgins lubrication systems are the industry standard in durability and performance. Each system is custom-designed to meet the exact requirements of your application.

- Built to meet any specification, in any environment
- Precise distribution of lubricant to all lube points
- Designed and built by highly trained experts
- Quality parts and materials
- Turnkey installation available

REPAIRS

T.F. Hudgins inspects, repairs and rebuilds an expansive range of lubrication system pumps, gear boxes, check valves, divider valves and other components for virtually all types of force feed and centralized automatic lubrication systems. Our rigorous standards and attention to detail ensure optimum performance for your most critical applications. Every component we rebuild must meet its specified pressure and flow ratings and pass leak and displacement testing (where applicable) before we return the component to you.

ULTRA-HIGH-PRESSURE SYSTEMS

One of the most critical and demanding lubrication applications is high-pressure lubrication delivery to LDPE compressors. T.F. Hudgins is the industry leader in high-pressure lubrication delivery, developing custom-designed systems that use proprietary technologies. T.F. Hudgins also performs Hyper System Upgrades and is the nation's only factory-approved high-pressure repair center, with test capabilities to 60,000 psig.



Comprehensive Service

- 24-Hour Emergency Support
- Fast Repair Turnaround
- Monthly, Quarterly and Annual Preventive Maintenance Programs
- System Performance Upgrades
- Turnkey Installation
- Lubrication System Training



PREVENTIVE MAINTENANCE PROGRAMS

To assure the integrity of your systems – and to avoid untimely and costly downtime – count on the experience of T.F. Hudgins for routine inspection and maintenance of your lubrication system investment. We offer services on monthly, quarterly and annual maintenance schedules.

Call for a No-Cost Evaluation

Our lube system experts will perform on-site audits, analyze your existing equipment and operations, and prepare a detailed report with recommendations for improvement – all at no cost to you.

Just call 1-800-LUBE-TFH (582-3834).

HIGH-PRESSURE/PRESSURIZED SUCTION SYSTEMS

Description. T.F. Hudgins offers custom lubrication systems designed specifically for high-pressure (“hyper”) gas compressors. These systems operate with minimal maintenance to help increase MTBF and eliminate unscheduled downtime in all types of hyper compressors.

Indicator/Shutdown Options. T.F. Hudgins lubrication systems can incorporate flow measurement capabilities to display the amount of oil each pump is displacing, as well as alarms to signal if a pump stops working. A wide range of shutdown equipment is also available to accommodate any operational requirements.

Features and Benefits

- Day tank is equipped with a sloped bottom to reduce the risk of oil contamination
- Pressurized system dramatically reduces wear by enabling the use of gear oil in the lube box
- Pump design prevents the entry of wear debris, significantly extending pump life
- Sight glass design accepts a threaded plug, ensuring a complete seal
- Sight glass is made from a durable plastic

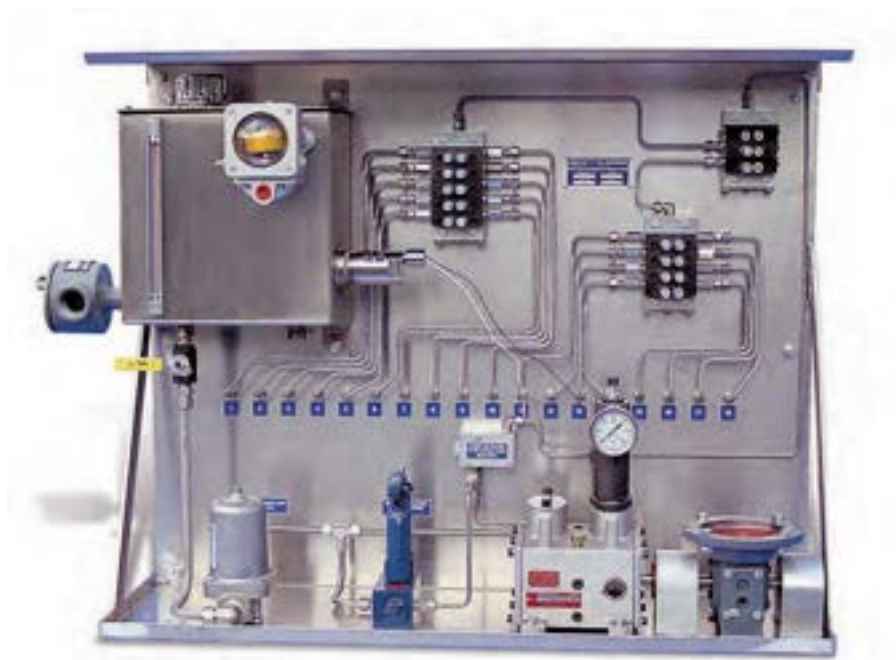


L-SHAPED PANEL SYSTEMS

Description. Custom L-shaped panels from T. F. Hudgins are designed with MVB or box lubricators to suit your application requirements. They are available in a wide range of materials and can be sized to fit any type of equipment.

Features and Benefits

- Offered with a wide range of shutdown equipment to meet the needs of any application, location and working conditions
- The panel design helps protect your equipment by eliminating the risk of oil contamination
- A variety of MVB pump designs can be used to achieve a broad spectrum of lubrication flow rates
- Custom hand-priming unit on every system enables manual priming and purging of the lube system



ENCLOSED PANEL SYSTEMS

Description. T.F. Hudgins provides custom lubrication systems with enclosed panels for harsh or hazardous conditions. Enclosed-panel designs help protect your valuable machinery by eliminating the risk of lubricant contamination from the surrounding environment.

Features and Benefits

- Available with locking cabinets to restrict access to system components
- Windows in the enclosure allow you to easily read monitors, pressure gauges and other equipment without opening doors and exposing the system to outside conditions
- Designed with MVB or box lubricators to suit any application
- A variety of MVB pump designs can be used to achieve a broad spectrum of lubrication flow rates
- Offered with a wide range of shutdown equipment to meet the needs of any application, location and working conditions
- Available in any material and may be sized to fit any piece of machinery
- Custom hand-priming unit enables manual priming and purging of the lube system



COLD CLIMATE SYSTEMS

Description. For reliable performance in low temperatures, T.F. Hudgins constructs custom, cold-climate lubrication panels. These systems are fully enclosed and insulated, with all necessary heaters and thermostats to control the temperature of the oil or grease being used in your system. These panels also deliver excellent protection against lubricant contamination from the surrounding environment.

Features and Benefits

- Windows in the enclosure allow you to easily read monitors, pressure gauges and other equipment without opening doors and exposing the system to outside conditions
- Optional locking cabinets restrict access to the system
- Available in any material and may be sized to fit any piece of machinery
- Designed with MVB or box lubricators to suit any application
- A variety of MVB and box pump designs can be used to achieve a broad spectrum of lubrication flow rates
- Offered with a wide range of shutdown equipment to meet the needs of any application, location and working conditions
- Custom hand-priming unit enables manual priming and purging of the lube system



GERHARDT MODEL PE AD PUMPS

Description. An in-line, positive displacement, plunger-type pump capable of delivering precisely metered quantities of fluid under high pressure for both lubricating and process requirements.

The pump accommodates a wide range of pressures and is especially suited for use with centralized lubricating systems.

Gerhardt pumps are widely utilized in industrial applications, especially in pipeline and gas transmission compressors, as well as in industrial mixers used for compounding rubber and plastics.

Versatility. The pump is furnished in one, two, three or four cylinder versions, each of which can deliver a different lubricant for either lube oil or process oil service. It can be driven from either the right or left hand side, in either clockwise or counterclockwise direction.

Durability. The pump housing is made of aircraft grade aluminum and all steel wear parts are hardened. The unit is ruggedly constructed for decades of reliable service.

Factory Service. T.F. Hudgins, Incorporated, is the exclusive source for Gerhardt lubricating pumps and provides manufacturing, sales, service and support.

Maximum Delivery Pressure		
Plunger Size (mm)	Constant Pressure (psig)	Intermittent Pressure (psig)
6	8,000	10,000
10	2,900	5,000



Features and Benefits

- Supplied with up to four cylinders
- Each cylinder can deliver a different lubricant
- High-volume, high-pressure operation
- Accurate fluid delivery at speeds up to 1,000 rpm
- Robust construction
- Low maintenance
- Factory repair and support from T.F. Hudgins

MANZEL® BOX LUBRICATORS

Description. This is a standard Pump-to-Point system in which pumps mounted on a common reservoir dispense oil to a single lube point operated by individual cams on a camshaft.

Reservoir sizes range from 4 pints to 40 pints and accommodate up to 24 pumps. Pumps are available with electric heaters and thermostats, automatic fill, low level switches and shaft rotation alarms. Manzel box lubricators are suitable for pressures up to 7,500 psi.

Drive Options. Options range from a 1:1 direct drive to a 400:1 high-ratio drive. Drives may be mounted on the left or right end of the reservoir, with both rotary or ratchet styles available. Motor packages may be custom-designed for your lubrication needs.

Durability. All working parts are totally enclosed and protected from dirt, water and impurities. Each moving part is self-lubricated at all times by the fluid in the reservoir.

Flexibility. Manzel box lubricators are designed to easily interchange with other makes and models of lubricators used in petrochemical refineries, gas transmission plants, food processing mixers, lumber, rubber and other applications.

Features and Benefits

- Cost-effective oil systems using standard components
- Rugged construction for durability
- Saves system design costs and decreases lead time
- Precise camshaft alignment insures accurate lubrication
- Can be used outdoors in harsh environments such as ammonia and sour gas
- Easy-to-service pumps can be added or replaced quickly
- Pump output is easily adjustable



BOX LUBRICATORS

GRACO MODEL GBL 7500 PUMPS

Description. The Model 7500 pump is a heavy-duty precision metering pump capable of accurately pumping small flows of either mineral or synthetic oil to machinery injection points. The single-piston pump is mechanically driven from a camshaft in the reservoir and is adjustable from 1 to 27 drops per stroke, depending on the piston size.

Pressures. The pump can develop pressures up to 7,500 psi, depending on the piston size (3/16, 1/4 or 3/8 inch).

Applications. Model 7500 Pumps are designed for use in MBL lubricators with 1/2-inch rise cams.

Durability. A hardened steel roller-rocker arm following a cam actuates the pump and reduces torque. The round sight glass is one-piece, injection-molded material that is impervious to ultraviolet rays and mineral and synthetic oils.

Features and Benefits

- Rugged construction for durability
- Suction and gravity/pressure feed models available
- Hardened cam rollers increase pump life
- Pump output is easily adjustable
- One-piece sight glass for fewer leak path and seal points



Model 7500 Vacuum Pump with Sight Glass and Suction Tube

Size (inches)	Max Pressure (psi)	Type
3/16	7,500	Vacuum Feed
1/4	6,000	Vacuum Feed
3/8	2,500	Vacuum Feed



Model 7500 Vacuum Pump with 7/8" Short Suction Tube & 1/8" NPTF Vertical Outlet Adapter

Size (inches)	Max Pressure (psi)	Type
3/16	7,500	Vacuum Feed w/ 7/8" Short Tube
1/4	6,000	Vacuum Feed w/ 7/8" Short Tube
3/8	2,500	Vacuum Feed w/ 7/8" Short Tube



Model 7500 Pressurized Supply Pump (without Sight Glass)

Size (inches)	Max Pressure (psi)	Type
3/16	7,500	Pressurized Suction
1/4	6,000	Pressurized Suction
3/8	2,500	Pressurized Suction

HIGH-PRESSURE LUBRICATORS

MANZEL® MODEL HIGH-PRESSURE LUBRICATORS

Description. Manzel® High-Pressure force feed lubricators have precision metering pumps operated by a single cam on a camshaft. They dispense lubricant from a rugged, cast-iron reservoir containing the lubricant to be dispensed.

Manzel® High-Pressure lubricators are specified by leading equipment builders in the chemical and petrochemical industries in the United States, Europe, Japan and South America.

Versatility. Manzel® High-Pressure lubricators are available with various drive arrangements to accommodate a broad range of lubricants, viscosities and required line pressures. Three pump options are available: HP-15, HP-50 and HP-60.

Easier Service & Operation. These “Dri-Vac” sealed units make it easier to remove pumps for service and replacement by eliminating the need to disassemble the complete lubricator assembly.

A single hand adjustment of the regulator knob regulates feed, from a fraction of a drop to full pump capacity.



Features and Benefits

- Rugged construction for durability
- Operating pressures up to 60,000 psi
- Pump output is easily adjustable
- All working parts are enclosed and self-lubricated
- Compatible with both mineral and synthetic-based lubricants

Model (inches)	Number of feeds	Maximum Pressure (psi)	Reservoir Capacity (quarts)	Plunger Diameter (inches)
HP-15	1 to 6	15,000	7	1/4
HP-50	1 to 4	50,000	9	1/4
HP-60	1 to 4	60,000	9	1/4

MVB PUMP PACKAGES

MVB PUMP PACKAGES

Description. The MVB lubrication system is a single line, series progressive system which divides pump output into predetermined proportional amounts and distributes these amounts to the progressive series of divider valves. MVB lubrication systems were developed to handle the higher operating pressures typically seen in the gas engine and compressor industry and to offer the advantages of a series progressive system over a box lubrication system.

Configurations. With two pump sizes, 10 final drive gear ratios and six drive configurations, any lube rate between 2-300 pints per day can be achieved. The MVB system provides lubricant at pressures up to 8,000 psi, among the highest in the industry.

Lubricant Cleanliness. A filter/primer assembly is available with a choice of a 10 or 25 micron filter element that prevents contaminants or particles from reaching the pump or the lubrication point. It has a unique self-scrubbing feature that lowers the frequency of filter changes.

Durability. All working parts are totally enclosed and protected from dirt, water and impurities. Each moving part is self-lubricated at all times by the fluid in the reservoir.

Pumps		
Size (inches)	Max Pressure (psi)	Type
1/4"	8,000*	Pump Only
3/8"	3,000*	Pump Only
1/4"	8,000*	Pump With System Fill
3/8"	3,000*	Pump With System Fill

**Pressures differ with double- and triple-lobe cams*

Filter/Primer Assembly	
Micron Rating	Description
10	For Single Pump Head
25	For Single Pump Head
10	For Dual Pump Head
25	For Dual Pump Head
10	Remote Filter, Metal Housing
25	Remote Filter, Metal Housing



Features and Benefits

- One main supply from a single pump
- Central monitoring of normal operation
- Automatic proportioning through positive displacement valves
- Quick indication of problem areas
- Rugged construction for durability
- Pump output is easily adjustable
- Easy serviceability: pumps can be added or replaced quickly
- Pump piston stroke has sufficient volume to handle "aerated oil" without risk of air-lock
- Replaces Premier® PLP and Lincoln® MCLP pump packages



MODU-FLO® PUMP PACKAGES

Description. The Modu-Flo® concept provides a proven, cost-effective way to assemble customized oil and grease lubrication systems that meet your specific requirements using standard, modular components.

Configurations. With a choice of 13 reservoir sizes, nine pumps, gauges, low level indicator and pressure indicator options, your system can be custom-designed to meet any lube rate in any working condition. Optional timers and controllers provide the necessary information to help control oil or grease consumption.

Pumps are available with pneumatic and hydraulic actuation, with a wide range of adjustability. Pumps can also be single- or double-acting.

Reservoirs are available in plastic or metal depending on your requirements.

Features and Benefits

- Adjustable displacement at the turn of a screw
- Suitable for grease and oil application
- Multiple reservoir sizes and materials
- Cost-effective oil systems using standard components
- Dependable operation, backed by factory trained personnel
- Saves system design costs and lead time



G3™ ELECTRIC LUBRICATION PUMPS

Description. The G3 electric pump is a rugged, cost-effective unit used in series progressive and injector-based systems. It offers three controller choices with multiple zone and feedback options.

Configurations. G3 electric pumps provide the flexibility to handle temperature changes, changing grease types and challenging installation requirements.

Versatile design options include five reservoir sizes, four controller options, three power types, an adjustable pump element and multiple cycle and pressure inputs.

Features and Benefits

- Advanced flow dynamics reduce stagnant flow areas
- Adjustable stroke pump eliminates the need for additional elements
- Load minimizing drive reduces stress on the motor and internal elements
- Reservoir stirring paddle with wiper arm to keep material from separating
- Auto-fill shutoff assures accurate filling of reservoir and eliminates spills
- Machine count input to manage equipment with unpredictable lubrication requirements
- Data Management System provides information on pump maintenance and lube system performance



DIVIDER VALVES

MSP ASSEMBLIES

Description. Designed for low-pressure grease or oil applications, the MSP divider valve assembly provides precise monitoring and positive feedback.

MSP assemblies are simple to install and operate. The modular design provides complete flexibility.

Components. Each assembly includes a minimum of three working valve sections and a base plate comprised of one inlet, one end and any number of intermediates, depending on the number of valve sections required (minimum of 3 and maximum of 8). This design provides from 1 to 16 working outlets with the use of crossport and singling plates. Each outlet is equipped with internal check valves. External check valves are available to keep the lines full and prevent lubricant from re-entering the assembly.

Options. SAE, NPT and BSP thread options on inlet and outlet connections allow installation on any equipment—domestic or international.

MSP assemblies are available in carbon steel with corrosion-resistant plating, as well as in stainless steel.

MSP assemblies can be provided with a zero-leak inlet shut-off. Either electrically or pneumatically actuated, this is a three-function valve:

1. allows lubricant to enter the divider valve,
2. bypasses lubricant to another divider valve, or
3. diverts lubricant back to the tank.

A zero-leak inlet shut-off replaces the standard inlet or can be mounted in-line with a remote manifold kit.



Features and Benefits

- Suitable for grease or oil applications
- Up to 16 lubrication points
- Inlets and outlets available in SAE, NPT and BSP threads
- Up to 3,500 psi
- Built-in check valves help keep lines full
- Replaces DropsA®, Lincoln®, SB® and CC Technology block valve assemblies
- Available in stainless steel
- Bypass section available to enable or eliminate lube points in the future

DIVIDER VALVES

TFH SERIES DIVIDER ASSEMBLIES

Description. Similar to MSP divider valves, TFH divider valves are designed for higher pressure applications up to 7,500 psi.

TFH divider valves precisely proportion a volume of oil to satisfy the different requirements of every point in a lube system. They operate in sequential fashion to ensure that no point is missed. Series-Progressive design provides ready monitoring capabilities.

Components. Each assembly includes a minimum of three working valve sections and a base plate comprised of one inlet, one end and any number of intermediates, depending on the number of valve sections required (minimum of 3 and maximum of 8). This design provides from 1 to 16 working outlets with the use of crossport and singling plates. Each outlet is equipped with internal check valves. External check valves are available to keep the lines full and prevent lubricant from re-entering the assembly.

Soft-seal O-ring construction and indicator ports minimize leakage and reduce maintenance.

Options. A modular, stackable sub-plate design provides maximum application flexibility and simplifies build-up, installation and maintenance. Accessory components are available for visual diagnostics and electrical monitoring.



Features and Benefits

- Suitable for petroleum or synthetic-based oil applications
- Up to 16 lubrication points
- Inlets and outlets available in SAE, NPT and BSP threads
- Up to 7,500 psi
- Built-in check valves help keep lines full
- Replaces DropsA®, Lincoln®, SB® and CC Technology block valve assemblies
- Available in stainless steel
- Bypass section available to enable or eliminate lube points in the future

DIVIDER VALVES

MXP, MJ, MX, MGO AND MD ASSEMBLIES

T.F. Hudgins offers additional divider valve assembly designs for effective lubrication in a wide variety of applications. Each offers modular, stackable subplate/valve design to simplify system planning, installation and maintenance.

Features and Benefits

- Suitable for grease or oil applications
- Up to 16 lubrication points
- Inlets and outlets available in SAE, NPT and BSP threads
- Up to 3,500 psi
- Built-in check valves help keep lines full
- Replaces DropsA®, Lincoln®, SB® and CC Technology block valve assemblies
- Available in stainless steel
- Bypass section available to enable or eliminate lube points in the future



Series MJ



Series MXP



Series MX



Series MGO



Series MD

ACCESSORIES

Lube-line Alert protects compressors, pumps and engines by indicating “flow” or “no flow” for a single line in any centralized lubrication system. Explosion-proof with multiple features.



Lube Sentry provides automatic warning and shutdown of compressors, pumps and engines when oil is not flowing properly.



TFH Proximity Switches provide a signal to a monitor, controller or PLC to indicate the number of cycles and cycle rate of a Series-Progressive divider valve.



Rupture Indicators are used in-line to identify blockages in the lube system.



Reset Type Pin Indicators help pinpoint the location of a blocked line.



TFH Magnetic Cycle Indicators provide a means of visually monitoring lube flow thru the system.



TFH Check Valves help maintain lubricant in the line and prevent lubricant from re-entering the valve assembly.



TFH Pressure Filters prevent solid contaminants from entering valves and downstream lubrication points.



ACCESSORIES

Trabon Manual Pumps provide a simple, cost-effective way to operate manual oil or grease systems, purge oil or grease systems and test the performance of divider valves. Supplied in this compact, protective case.



TFH Lubrication Monitor is a field-configurable, microprocessor-based monitor capable of detecting flow variations in any series-progressive lubrication system.



Graco Solid State Timer provides a total on and off cycle with "on" periods to meet specific lubrication system requirements.



TC-1000 solid-state timer/counter is a microprocessor-based, multi-use controller for centralized lubrication systems.



WMP III Maxi-Monitor® is a microprocessor-based controller designed to schedule lube intervals and monitor the operation of Trabon pumps and divider valves.



YOUR COMPREHENSIVE RESOURCE

T.F. Hudgins supplies a complete range of products and accessories for automatic lubrication systems, including:

1. Dual and Single Line Parallel Systems
2. Track Master® Railroad Lubrication Systems
3. Wheel Master® Solid Lubricant
4. Application Systems
5. Die Lube Systems
6. OP-4 and OP-8 Conveyor Lubrication Systems
7. Chain Master Conveyor Lubrication Systems
8. Beam and Channel Sweeps
9. Road Warrior® Mobile Lubrication Systems
10. Grease Jockey® Mobile Lubrication Systems
11. EZ Greaser® Mobile Lubrication Systems
12. Wear Master® Lubricants



FOR MORE INFORMATION, CONTACT US AT

1-800-582-3834 or 713-682-3651.



YOUR LUBRICATION SOLUTIONS SPECIALIST



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