



LUBRICATION SYSTEMS

Product Overview



About Us

Established in 1974 as a single bearing shop in Durban, South Africa; BMG's aggressive growth strategy has included acquisitions, supplemented by a steady organic growth discipline. BMG attracts best-of-breed talent resulting in technical expertise that differentiates BMG in the industry. Staff are truly part of the BMG family and its success.

BMG boasts an accredited in-house technical and commercial training academy which fosters a culture of staff development and career advancement; it's all about sustainability.

The net result, is a company that reliably supplies and supports 70 000 customers in 15 countries with the widest range of industrial engineered products and expert services in Africa via 140 branches.

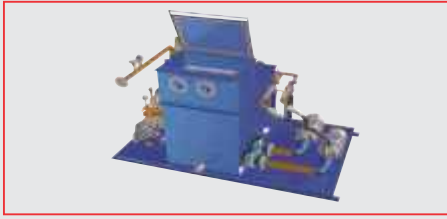
BMG is positioned to deliver bespoke 360 degree solutions to its customers, and subsequently return on investment to its investors and shareholders. BMG plays a pivotal role in supporting the productivity and production targets of all Industrial, Manufacturing, Mining and Agricultural sectors of the economies in the countries it serves. With an enviable reputation as Africa's largest distributor, manufacturer and service provider of the highest quality engineering consumables and components; including

- Bearings & Seals
- Power Transmission Components
- Drives, Motors and Controllers
- Hydraulics, Pneumatics and Filtration
- Heavy and Light Duty Materials Handling
- Valves and Lubrication
- Fasteners, Gaskets and Tools

BMG is a level 4 BEE contributor with ISO 9001 Quality Assurance certification. Health and safety of its employees and customers is a paramount focus and the company adheres to OHSAS 18001. BMG is also committed to environmental care and sustainability and strictly follows the ISO 14001 charter.

As a key contributor to the Invicta Holdings stable, BMG has played a major part in Invicta's unique achievement of being rated in South Africa's Top 100 Companies for 21 consecutive years.

Hydrodynamic Oil Circulation Systems



Applications:

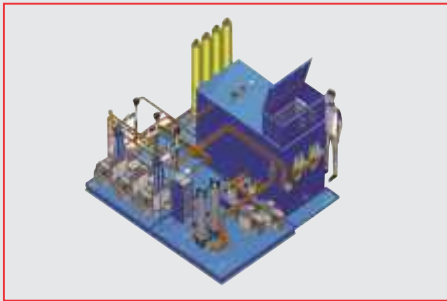
- Typical motor and mill bearings with white metal bearings
- Reduced operation time through high-efficiency motors
- Winder bearings with high capacity filters
- High pressure: For jacking (start-up only)

Custom-built for every application to ensure efficiency

Product Features:

- Duplex Filters
- Oil Coolers
- Full Instrumentation
- Duty and Standby Pumps
- Gear or Screw Pumps

Hydrostatic Oil Lubrication Systems



Applications:

- Large mills (phosphor/bronze bearings)
- Low pressure: Overflow conditioning circuits (continuous)
- High pressure: Hydrostatics (continuous)
- Custom-built for every application to ensure efficiency

Product Features:

- An emergency run-down oil supply from the accumulator banks
- A kidney filtration system (2µm)
- A water removal facility
- Turbidity sensors
- Analog instrumentation - 4 mA to 20 mA or bus
- Gear or screw pumps for positive displacement
- Reduced operation through high-efficiency motors
- High capacity filters
- Duplex filters for efficiency
- Water or air oil coolers
- Full instrumentation
- Duty and standby pumps

Low Pressure Circulating Systems



Applications:

- Gearboxes
- Reduced operation through high-efficiency motors
- Crushers (high capacity filters)
- Fan and motor bearings
- Custom-built for every application to ensure efficiency

Product Features:

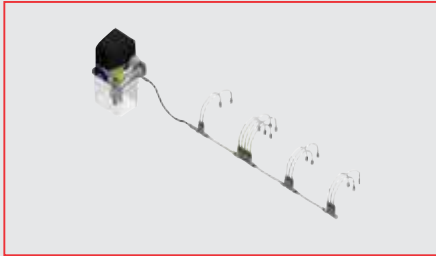
- Duplex Filters
- Oil Coolers
- Duty and Standby Pumps
- Full Instrumentation

Chain Lubrication Oil Systems



- Reliable and precise metering of the lubricants
- The lubricant is directly applied to the friction point
- A reduced lubricant consumption
- Easy to maintain and understand

Single-Line Lubrication Systems



Applications:

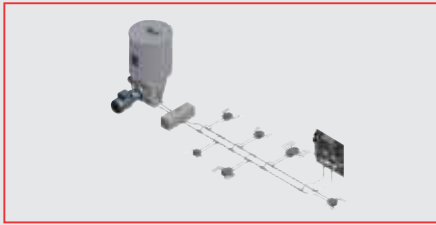
Single-line central lubrication systems are used mainly for the lubrication of machinery with the following specifications:

- Lubrication Points: Up to 100
- Pipe Length: Up to 30 m
- Pump Pressure: Up to 300 Bar

Product Features:

- The metered quantity can be adapted to the required lubrication point by hanging the metering screw in each injector segment.
- The system can be extended by connecting additional injectors, or reduced by disconnecting the injectors.
- During the intervals between the lubricating cycles, the pressure in the main line is released so that the lubricant fed into the injectors is supplied to the other side of the plunger for the next lubrication cycle. This also ensures that no lubricant reaches the lubrication points in an uncontrolled manner, during interval.
- The quantity of lubricant delivered to the lubrication points is largely independent of the back pressure.
- Systems with motor-driven pumps can be operated automatically with variable intervals between lubrication cycles.

Dual Line Lubrication Systems



Applications:

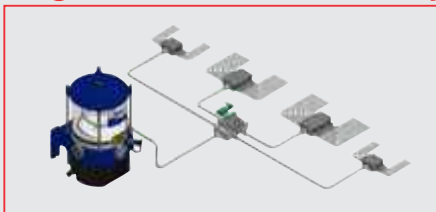
Centralised lubrication systems with two main feed lines are largely used for the lubrication of machines and plants with a vast number of lubrication points:

- Lubrication Points: Up to 1000
- Pipe Length: Up to 150 m
- Pump Pressure: Up to 400 Bar

Product Features:

- Metering can be adjusted to meet the requirements of the individual lubrication points;
 - by selecting the appropriate divider valve size,
 - by varying the metering setting, and/or
 - by varying the interval.
- The metered quantity is independent of the back pressure.
- The systems can, at any time, be extended by the connection of additional divider valves, or reduced by shutting down divider valves or outlets.
- Special monitoring of critical lubrication points is made possible for each pair of divider valve outlets by using limited switches.
- The system can be operated automatically with variable intervals.
- In all automatic systems, the patented switchgear SG-A, which initiates change-over (the pressure changes in the two main feed lines) as a function of the differential pressure at the line end is used. Depending on the temperature, lubricant and line dimensions, the optimum working pressure is adjusted automatically and (in comparison to systems where the switchgear is provided on the pump) as a result, the pump load is kept to a minimum.

Progressive Lubrication Systems



Applications:

Centralised lubrication systems with progressive divider valves primarily serve the lubrication of machinery. The systems are suitable for grease and oil.

- Lubrication Points: Up to 100
- Pipe Length: Up to 100 m
- Pump pressure: Up to 250 Bar

Product Features:

- Low investment costs; only one main feed line, a simple pump and divider valves are required.
- Several lubricant groups with progressive divider valves can be connected to a single pump if isolating valves are used, and they can then be connected to the system or isolated individually.
- Simple monitoring of the operation by means of a movement indicator on the divider valve, or remote monitoring.
- Divider valves are compact in design.

Multi-Line Lubrication Systems



Applications:

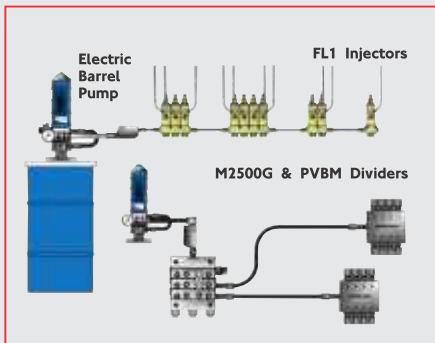
The multi-line, centralised lubrication system can be used for lubricating individual machines and for a small group of machines. In the multi-line system, the lubricant is delivered by the pump in metered quantities through several outlets. Each lubrication point is connected to the pump by its own line.

- Lubrication Points: Up to 32
- Pipe Length: Up to 40 m
- Pump Pressure: 200 Bar

Product Features:

- The pump can be lubricated from the machine, eliminating the need for a separate control system.
- With most types of pumps, the lubrication quantity can be adjusted at the pump for each lubrication point.
- A continuous operation of the pump with very small quantities of lubricant.

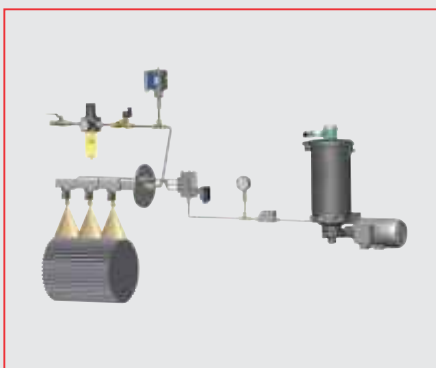
Mobile Lubrication System



Features:

- 24 Volt Pumps (50 & 210 Kg)
- Flow - 150cc per min @ 140 Bar
- Reliable and precise metering of the lubricant
- Simple design and construction
- IP66

Gear Spray Lubrication Systems



Applications:

The spray lubrication system is used where lubricating greases, oils or even adhesive lubricants need to be applied in an even, metered and selective manner due to user-specific and function-related requirements.

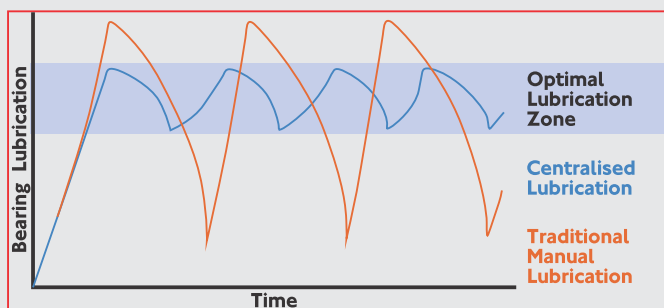
The spray lubrication system allows reductions of up to 50% in the quantities consumed, which is beneficial in terms of the disposal of old lubricant and the reduction of the associated costs. Spray lubrication systems are used on heavy gearing applications such as grinding mills, rotary kilns, cement mills, coal mines and mixing drums.

Product Features:

- Metering and apportioning of the lubricant volume to the spray points are carried out by progressive divider valves.
- The compressed air used for the actuation of the pump is the same as that used for spraying with a pneumatic pump.
- The use of mixed segments allow for the dispensing of a metered quantity of lubricant to the friction points over an adjustable period. In the case of gear spray lubrication systems, the lubricant is further spread onto the greatest possible number of teeth by means of gear mesh action.
- With the help of the limit (attached to the progressive divider valve) the delivery of grease and the correct mode of working of the divider valve, are monitored simultaneously.
- The pressure switches monitor the minimum air pressure required for spraying, as well as the unhindered flow of the spray mixture out of the nozzles.

SINGLE POINT LUBRICATORS

BMG provide a range of single point lubricators (spring, gas and electro-Mechanical units) from 30 ml to 250 ml.



Spring Lubricator



Characteristics:

- Available in two sizes - 100 ml and 220 ml.
- Made of transparent Lexan[®], high mechanical, chemical and thermal resistance.
- Operating Temperatures: -30°C to 132°C.
- Fast and easy refilling by using the side-mounted grease nipple.
- Compatible with all kinds of NLGI 0, 1, 2, 3 & 4 greases.
- A simple adjustment of the regreasing timing, variable at 1, 3, 6 & 12 months.
- Different thread adapters are available for the connection to the bearing housing and the grease nipple for refilling.

Advantages:

- The transparent housing allows for remote consumption surveillance.
- Immediate activation.
- Needs no electrical or gas power source.
- It can be installed indoors, outdoors, remotely, inversely, under water (in either dangerous or uncomfortable spaces).
- Keeps lubrication constant and prevents the accumulation of solid matter.
- Saves production downtime and very expensive repairs.
- Environmentally friendly and refillable without any disposal.
- Fully recyclable.

Gas Lubricators



Characteristics:

- BESLUXLUBE is available in 30, 60, 125 and 250 ml sizes.
- A freely selectable dispensing cycle of 1 to 12 months.
- The dispensing cycle can be modified any time.
- BESLUXLUBE is available filled or empty for self-filling.
- For use in confined and hard-to-reach spaces.
- In any location, including under water.
- Ambient temperatures of -20°C to 50°C.
- Numerous installation options due to a large range of accessories.

Advantages:

- BESLUXLUBE can be refilled up to 3 times.
- Easy disposal at the end of the dispensing cycle.
- BESLUXLUBE lubricators do not contain toxic substances.
- Lubrication points are continuously supplied with lubricant.
- No lubrication point is missed.
- Easy monitoring of the dispensing process due to the transparent housing.

Easytube Elite



Characteristics:

The Easytube Elite (version 5) model is equipped with an electromechanical gear set and a bicolour LED warning light. The bicolour LED warning light provides information about bearing conditions for maintenance through visual inspection.

- Easytube Elite is available in 60, 125 and 250 ml sizes.
- Ambient temperatures of -20°C to 60°C .
- Cycle settings for 1 to 12 months.
- Generates a maximum of 10 Bar.
- Battery operated.
- IP65.
- Intrinsically safe.

Advantages:

- Remote mounting of up to 5 meters on your Smartphone or PDA device (it has evolved into a complete paperless lubrication maintenance program).
- No lubrication point is missed.
- Easy monitoring of the dispensing process.
- 2 Year Warranty.

Easytube RFID



Characteristics:

With RFID technology, the information of the bearing can be obtained immediately and accurately during routine inspections. The Easytube RFID model is equipped with an electromechanical gear set and RFID tag enabling real time tracking. Red warning light flashes intelligently to indicate that the back pressure of the equipment is abnormal or that the cartridge is empty.

- Easytube Elite are available in 60, 125 and 250 ml sizes.
- At ambient temperatures of -20°C to 60°C .
- Cycle settings for 1 to 12 months.
- Generates a maximum of 10 Bar.
- Battery operated.
- IP65.
- Intrinsically safe.

Advantages:

- Remote mounting of up to 5 meters.
- Easytube lubricators via an APP on your Smartphone or PDA device (it has evolved into a complete paperless lubrication maintenance program).
- No lubrication point is missed.
- Easy monitoring of the dispensing process.
- 2-Year Warranty.

Bee PART

24 HR TOLL-FREE EMERGENCY
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WEBSITE:

www.bmgworld.net



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