

Greasomatic

What is the purpose of a single point lubricator?

To automatically deliver lubricant

In the simplest way

The most efficient way

The most economic way

THE GREASOMATIC DOES IT!

Where are GREASOMATICS used?

Pumps & compressors

Oil refineries

Underground & surface mining

Quarries

Pulp & paper mills

Crushers & shakers

Air handling equipment

Food & beverage processing

Power generating stations

Bridge & stacker cranes

Sawmills

Pharmaceutical plants

Foundries

Textile producers

Glass industries

Airports

Plastic moulders

Steelworks

Automotive assembly

Cement plants

Water purification plants

Sewage treatment works

Conveyors

Large electric motors

Glass container plants

Chemical plants

Laundry equipment

Wood processing machinery

Mechanical robotics

Dockside equipment

Ships

Bakeries

Brickworks

Printers

SAFE FOR USE IN MINING/PETROCHEMICAL INDUSTRIES

The GREASOMATIC has been accepted for its suitability for use underground by CERBERUS (Mining Acceptance Services Ltd) as a single point lubricator.



How the GREASOMATIC works

A GREASOMATIC

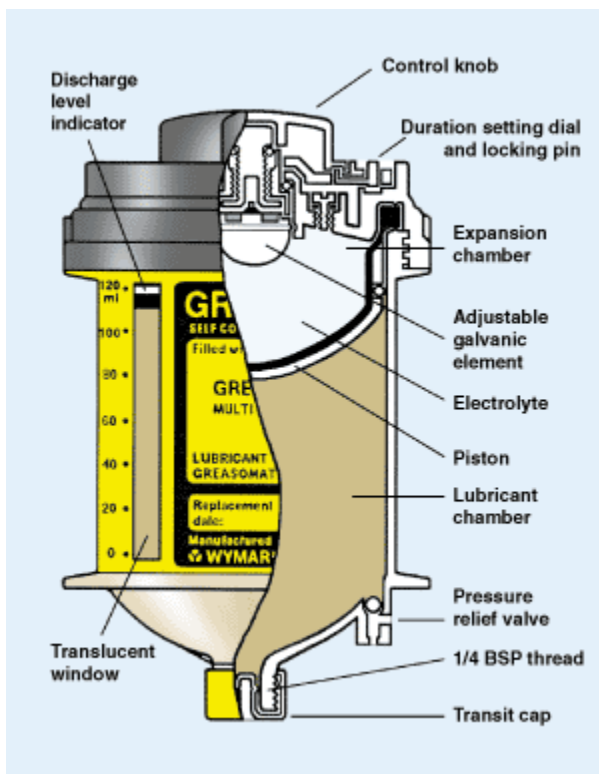
Is a self-ejecting canister of lubricant designed to screw into a grease nipple socket or other lubrication point, and discharge its content of 120 ml of lubricant in a controlled continuous flow, for a pre-selected period of between one month and twelve months. It is completely self contained and needs no pumps, motors, electricity or compressed air. Once fitted and activated it will work without attention until its allotted lifespan is over.

HOW IT WORKS

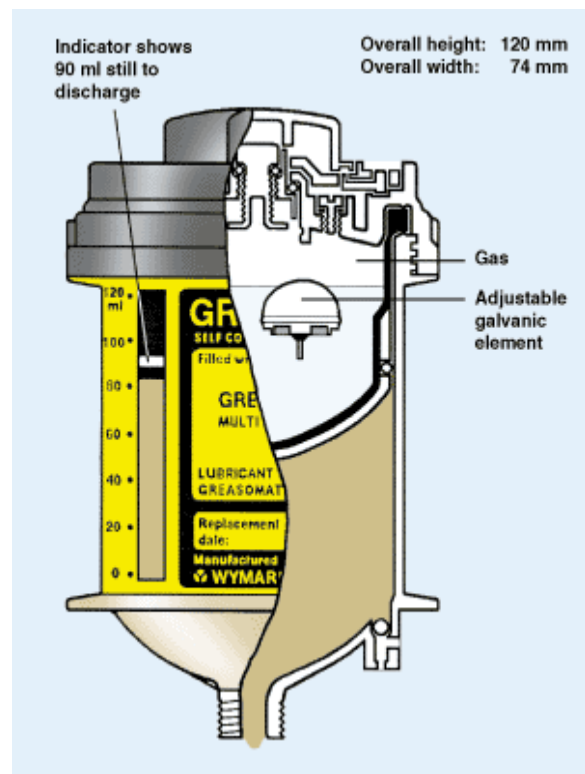
Each GREASOMATIC contains its own unique chemical expulsion unit. This has no springs or mechanisms but relies on an unvarying law of nature. Built into the top of each GREASOMATIC is a flexible rubber expansion chamber containing a liquid electrolyte and a galvanic element. The unit is activated by injecting the galvanic element into the electrolyte. The resultant electro-chemical reaction generates a steadily increasing amount of gas, which gradually expands against a piston, to extrude the lubricant slowly but surely into the bearing to which the GREASOMATIC is fitted. The chemicals and gas remain hermetically sealed within the expansion chamber so that no contamination of the lubricant can occur, even after the unit itself is spent. During the working life of the GREASOMATIC, an indicating ring on the ejection piston shows through translucent windows in the body to enable the discharge state to be monitored.

THE PRESSURE RELIEF VALVE

This is provided to guard against the possibility of the GREASOMATIC being fitted unwittingly to a bearing with blocked greaseways. Should the pressure built up by the GREASOMATIC prove insufficient to clear the blockage, the valve will open to allow the lubricant to escape and prevent excessive pressurisation of the GREASOMATIC. The exudation of lubricant around the GREASOMATIC will serve as a warning that the greaseways are blocked and that no lubrication is taking place.



An unactivated GREASOMATIC



How the GREASOMATIC works

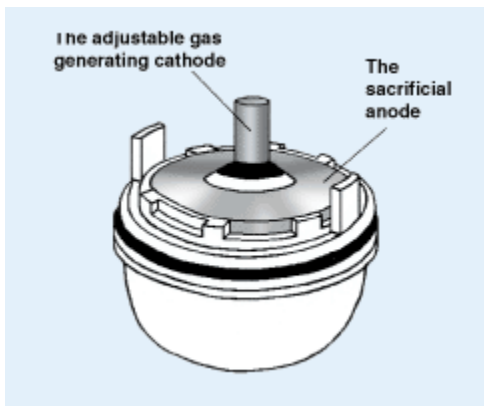
HOW THE DISCHARGE RATE IS CONTROLLED

The discharge duration of a lubricator of this type is dependent on the rate at which it generates gas. This in turn is governed by the degree of exposure of the galvanic element's gas generating cathode to the electrolyte in the presence of the sacrificial anode. The GREASOMATIC has a unique adjustable galvanic element. Before activation this is held in the underside of the cap and is connected to the control knob on the exterior of the unit. Turning the control knob causes the element's inner casing to rotate against its stationary outer casing. This in turn causes the rod shaped cathode to protrude from its seating to the extent necessary to provide the appropriate rate of gas generation for the discharge duration set on the dial.

SETTING THE DISCHARGE DURATION AND ACTIVATING THE UNIT

By rotating the control knob and its linked dial, the desired discharge duration can be set against the arrow on the casing. A choice of 1, 2, 3, 4, 6, 8 or 12 months duration is available. (These apply at an ambient temperature of about +20°C and will vary if the unit operates at abnormally high or low temperatures. Detailed guidance on the durations to be expected at various temperatures is given in the separate download:

After the discharge duration has been set, the red locking pin is depressed to secure the setting and release the control knob from the dial. The knob is then rotated in a clockwise direction to inject the galvanic element into the electrolyte and actuate the unit.



The adjustable galvanic element



Setting the discharge rate of 6 months

How the GREASOMATIC works

HOW A GREASOMATIC IS FITTED

The lubricant outlet in the base of a GREASOMATIC has a 1/4 B.S.P. male thread so that it may be screwed by hand to fit tightly into a standard grease nipple socket. Adaptors are available to enable a GREASOMATIC to be fitted into sockets of other sizes. With the aid of extension tubes it can easily be installed at a distance from the lubrication point. This is particularly useful when it is desired to group a number of 'GREASOMATICS' together on a panel for ease of access, or when it is necessary to isolate them from extremes of temperature or from excessive vibration. Other accessories enable two or more units to be coupled together in order to increase the supply of lubricant to a bearing. A GREASOMATIC will work in any position and need not be mounted upright - it can be mounted on its side or upside down. It can be fitted to rotating or moving machine parts and will work indoors or out of doors.

A GREASOMATIC will even work under water or encased in ice!

ACCESSORIES & FITTINGS

Full details of the range of fittings currently available.

LUBRICANT FILLINGS

In principal, the GREASOMATIC may be filled with almost any type of lubricant required. However, many widely used greases of otherwise high quality are susceptible to oil-soap separation when subjected to sustained light pressure in a GREASOMATIC. This can lead to a serious curtailment of the 'GREASOMATIC's' working life.

It is therefore **essential to use only greases that have been tested and approved** for use in the GREASOMATIC if the correct discharge rates and working lives are to be realised in practice.

Such considerations do not apply to **oils** or **liquid lubricants** and a GREASOMATIC filled with virtually any type of these will function satisfactorily.

