

# **MACHINE TOOLS**



# MACHINE TOOLS LUBRICATION: MQL & CENTRALIZED LUBRICATION

# **Drops**A

The 33V Injector System consists of the latest in positive displacement injector technology developed by DropsA. This technology provides precise and fail-safe displacement of oil, independent of viscosity, temperature, or pressure. When combined with a complementary pump package, a high performance solution can be obtained at a minimal price. DropsA's push-lock system allows further





# **Air-Oil Sensor**

This sensor monitors oil particles in the air stream, to the spindle bearing.



### Smart3

A compact and versatile pump that is the perfect solution for oil and fluid grease lubrication. The Smart3 offers two available versions, allowing the lubrication cycle can be managed by either an external PLC (MANUAL VERSION) or with an integrated controller (AUTOMATIC VERSION).

### DragonX

adjustments to be made.



**MaXtreme** The MaXtreme represents the first step towards a world of near-dry machining by utilizing DropsA's leading air-oil - aerosol technology. Designed in particular for internal (Through Tool) lubrication processes. This exclusive unit generates a thin film of aerosol mixture which is transferred directly to the tool cutting edge by using the existing fluid distribution channels found on most machines. The auto-regulation feature is one of the key characteristics of MaXtreme that is exclusive in comparison to other aerosol generators in the near dry machining market.

#### DropsA has expanded the "minimal lubrication" concept one step further with the VIP4Air, which can achieve ultra-low o i I volume discharge while providing electronic monitoring (using a custom designed differential flow sensor integrated into the unit). This allows true minimal lubrication by applying micro amounts of lubricant, at more frequent intervals, while giving positive feedback that oil is correctly being injected, and mixed, into the air stream. The VIP4Air System contains all components necessary to achieve and monitor optimum minimal Air/Oil Lubrication.

33V Systems

reduction in installation time and costs.

The ideal solution for applications that require calibrated lubrication and control functions. With the ability to utilize up to 8 pumping elements, that can be individually controlled via an integrated solenoid, and available independent adjustment of air and oil output per element, the Miquel is an effective and efficient solution for machine tool applications. Additionally, the Miquel includes a scavenge device that rapidly recoils oil from the delivery line to prevent lubricant drip when powered down.



A compact and versatile pump that offers efficiency and performance in a simple, allinclusive pump package. The Dragon X can be utilized for injector and progressive systems, utilizing oil and fluid grease (NLG000). The external housing of the pressure manifold, encompassing all functional components, allows for convenient



# DropsA













#### **AUTOMATIC OMEGA PUMP**

A versatile solution for small to medium sized applications which can be used to supply different lubrication systems: divider blocks (pair of pumping elements), direct to the point (8 mini pumping units), or with a vent valve kit for injector systems. The automatic version can work in stand-alone mode.



### **MiQuel**

Small size pump for extensive grease applications. This multi-outlet pump allows users to transform a manual lubrication system to an automatic solution in just a few simple steps. The PoliPump offers up to 35 outlet points and the ability to utilize direct power or with an auxiliary battery. This pump is easy to use and does not require specific technical knowledge and is ideal for both timer based systems and low cost and high yield complex applications.

**POLIPUMP** 



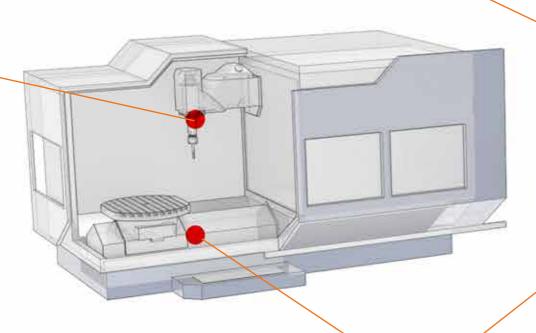
## LOCOPUMP S3

The Locopump S3 grease pump is an ideal single acting pneumatic pump generally used in single line progressive lubrication systems. The transparent reservoir allows the user to visibly see the amount of grease remaining and a low level switch is present to provide remote alarm signals to a machine's control source. Additionally, the reservoir lid can be modified to install a High level or a DropsA continual level sensing



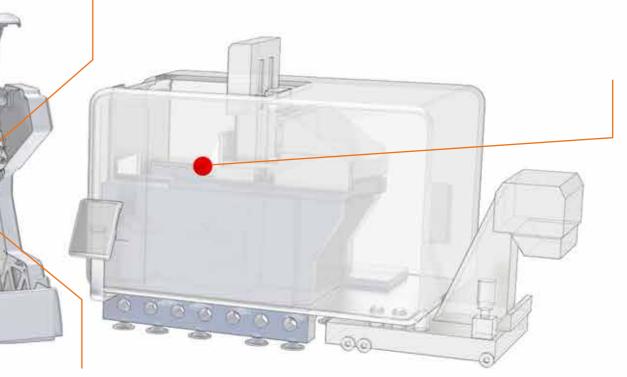
#### **BRAVO PUMP**

Electric pump designed to work with up to three pumping elements, with or without internal by-pass. Designed to work with progressive dividers, this pump can feed several independent lines. Combining the pumping outputs will increase the generated flow up to a factor of three. This pump is available in two versions: manual (controlled by external PLC) or automatic with dedicated, internal control system.



#### SMX DIVIDER

A modular solution to a single line progressive system. The SMX divider block consists of two main components: the base section and the metering elements. With a variety of element distribution sizes available and modular concept, this revolutionary system makes assembly easy and flexible to meet lubrication requirements. Modifications (addition to or removal of) can easily be made on site with additional components and simple hand tools.

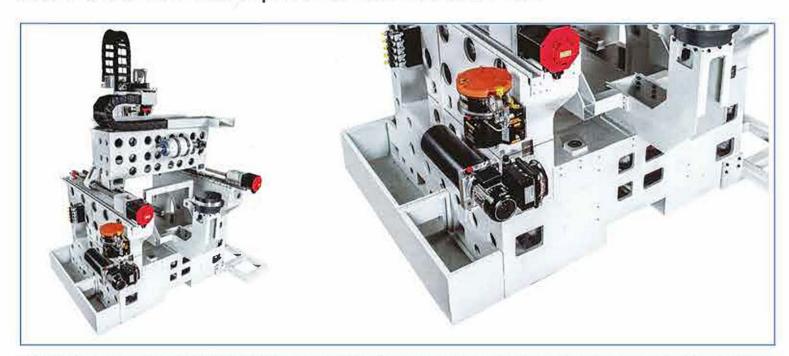


#### NP & NPF

DropsA's nano-Progressive (nP) dividers are the ideal solution for oil and grease lubrication applications that require minimal and accurate dispensed amount of lubricant in a compact, solid, and reliable footprint. The nano-nP uses the progressive movement of pistons to allow precise quantities of lubricant to be accurately dispensed to multiple points. Utilizing the patented RigidLock system, a novel interlocking mechanism between elements, these dividers have the rigidness of a mono divider block with the flexibility of a modular segmented unit. DropsA's nano-Progressive Replaceable (nPr) dividers uses an innovative rail & lock concept to allow the element to be replaced or re-organized without the need to completely dismantle the assembly.



## **Automatic Lubrication: Optimization of Costs and Reduced Down Time**



The use of lubrication systems is essential for machine operation, even more so when the operation functions in heavy duty environmental conditions experienced in the machining industry. The installation of an automatic lubrication system allows for reduced machine downtime, control of lubricant consumption, and the increased life of bearings, chains and gears. Knowledge from years of experience and a widespread network of offices and dealers worldwide, DropsA provides specific solutions for all lubrication needs, including customer defined projects to installation and after-sales support. The solutions proposed for the machine tool sector are applicable on the various machine types:







Drill



Milling



Lathe



Grinding



## **Systems Solutions**



LUBRICATION

TOTAL LOSS



GREASE LUBRICATION



AIR/OIL LUBRICATION



**OIL RECIRCULATION** LUBRICATION



MQL - NEAR DRY MACHINING LUBRICATION

## **DropsA**

Since 1946, DropsA has been producing centralized lubrication systems and components, along with continuously developing new products, and patents, that have contributed to making the lubrication sector, all over the world, more innovative and competitive.

DropsA offers a vast range of products capable of maximizing the profitability and productivity of all machinery, providing the latest technologies in terms of systems, functionality, and components. Thanks to the branches and the specialized distribution channels. DropsA provides prompt responses, support, and assistance to customers on a local and global level, guaranteeing consistent high quality standards all over the world.



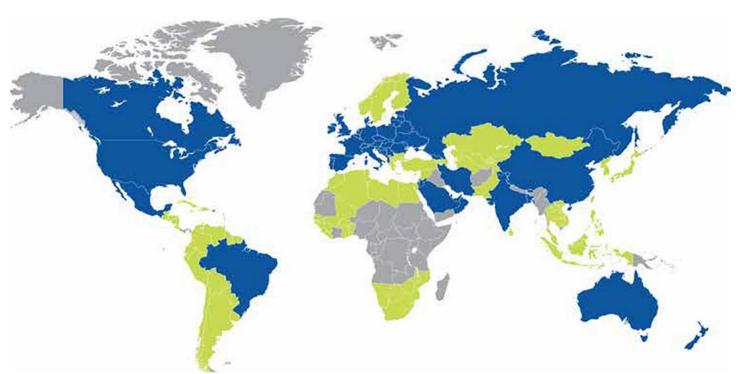
# **DropsA Production**

The production, processing, and automated assembly systems utilized in DropsA's central plant, near Milan, are equipped with an advanced quality monitoring, and product traceability system, in order to guarantee both highly efficient processing and product assembly that accurately reflects all technical specifications.

Continuous investments in all areas of design, engineering, and production of the products ensure a constant improvement in the reliability of the products themselves.











www.dropsausa.com (586) 566-1540 sales@dropsausa.com