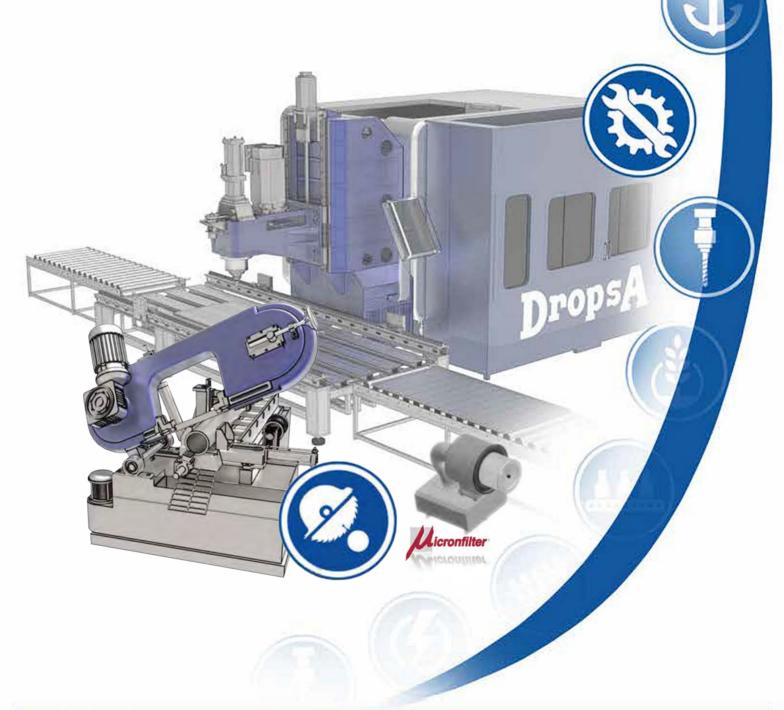


DropsA LUBRICATION TECHNOLOGY bielomatik

MACHINE SHOP SOLUTIONS



MACHINE TOOLS LUBRICATION: MQL & CENTRALIZED LUBRICATION GRUPOGADEN®



DropsALUBRICATION TECHNOLOGY bielomatik





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 transfered directly to the tool cutting edge by using the existing fluid distribution channels found on most machines. The autoregulation feature is one of the key characteristics of MaXtreme that is exclusive in comparison to other aerosol generators in the near dry machining market.



2-Channel System

A high quality, precise MQL solution that meets the rigorous demands of machine tools with high production runs. This through-tool MQL solution is revolutionizing 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

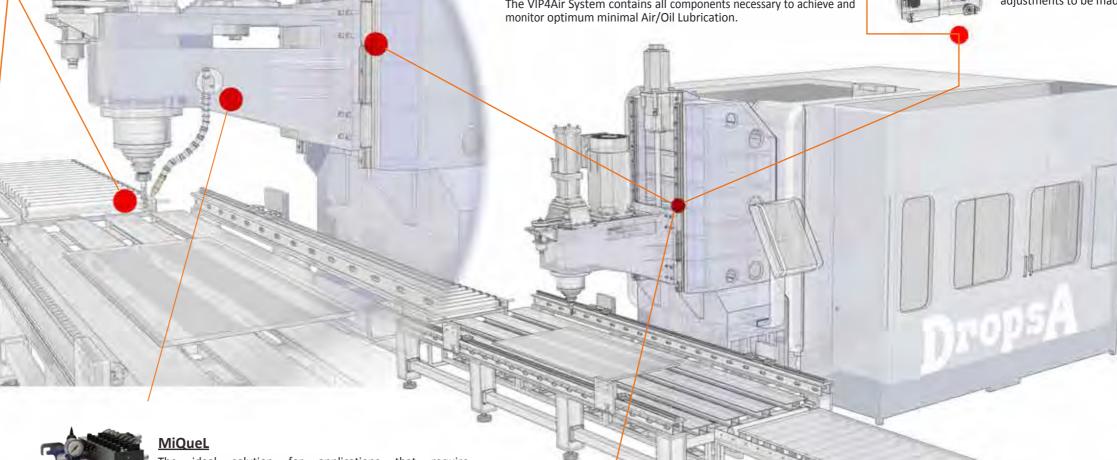


Smart3

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

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 adjustments to be made.



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.

33V Systems

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 reduction in installation time and costs.

LUBRICATION SOLUTIONS FOR A STANDARD MACHINING CENTERS



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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

POLIPUMP

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.



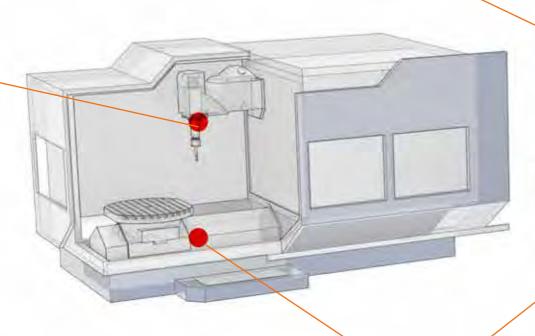
LOCOPUMP S3

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 device.



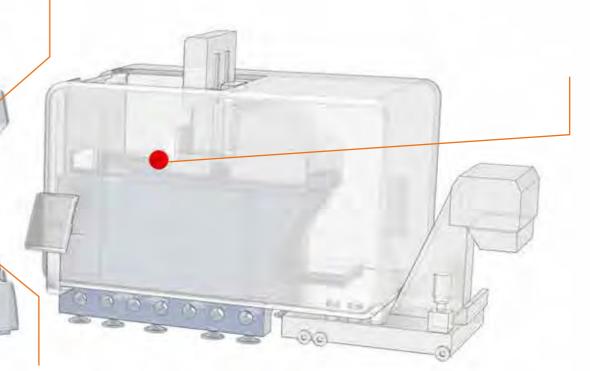
BRAVO PUMP

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.

LUBRICATION SOLUTIONS FOR SAW SOLUTIONS



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MiQueL

Can be utilized on all systems that require a calibrated lubrication solution with function controls. It is possible to combine up to eight elements, interconnected amongst themselves, that can be individually controlled via an integrated solenoid valve. For each single element, it is possible to control air and oil delivery independently or use all the modules in tandem, making the system easy to configure. The system includes a scavenge device that rapidly recoils oil from the delivery line to prevent lubricant drip when powered down, resulting in a clean work environment.



MiQueL EXT - External Pump

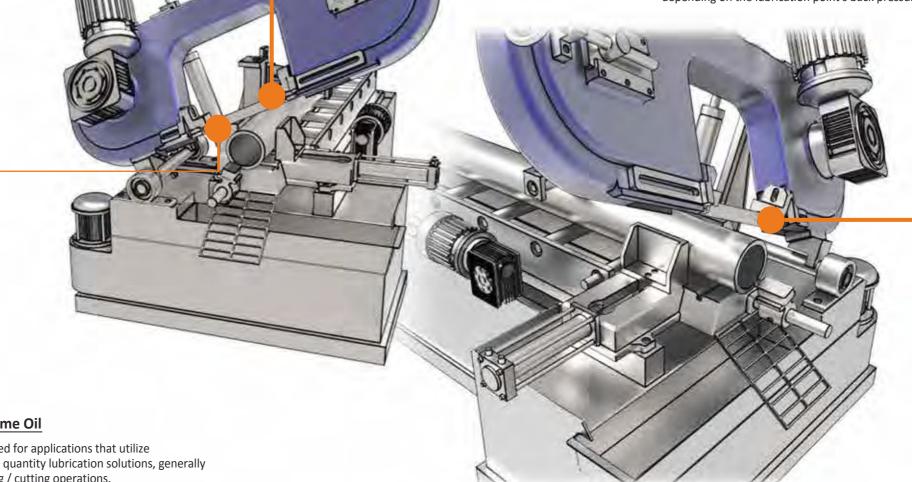
MiQueL EXT (External Pump source version) are centralized minimal lubrication modules engineered to be utilized in conjunction with a separate pressurized reservoir or external lubricant pump. This allows the MiQueL technology to be effectively positioned around an application with limited accessibility or space.

MiQueL EXT, air and oil is provided separately to the module bank. To be effective, oil pressure must be greater than air pressure. The PRO versions will automatically balance oil pressure depending on the lubrication point's back pressure.



Spray Nozzles

The DropsA Spray nozzle provides an effective means to distribute air-oil lubrication to a central point. The pliable, yet hardy, design allows this nozzle to be manipulated to provide lubricant to an optimal spray location.





These special nozzles are specific designed for bandsaw applications that allows for the lubrication of both the working area and the side surface.



MaXtreme Oil

Formulated for applications that utilize minimum quantity lubrication solutions, generally machining / cutting operations.

The innovative characteristics of this oil make it ideal for generating an air-oil mixture, as micro particles, for internal and external tool operations. Its composition contributes to protecting the work environment, reducing waste water, and lowering consumption, contributing to the overall green manufacturing initiative.



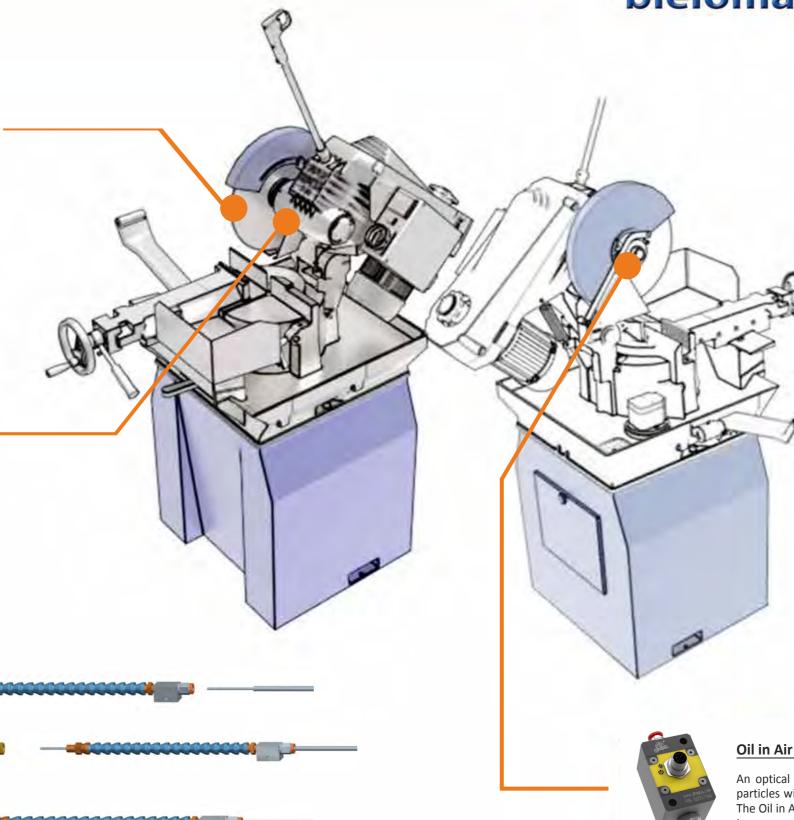
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MiQueL (1 Lt. / 3 Lt.)

The MiQuel, available in one or three liter(s) units, provides the optimal Quantity Lubrication solution for saw applications of all sizes. Available with an innovative compensation valve, which retracts oil back to the module upon the end of a lubrication event, therefore preventing the occurrence of excess airoil lubricant drip. This process creates a clean, safe work environment.



Coaxial Spray Nozzle

The Coaxial Spray Nozzle combines the benefits of a rugged, yet flexible, nozzle with the properties of a coaxial system. In a coaxial air-oil system, the air and oil travel through separate tubes, a 3mm line positioned within a 6mm hose, and mixed at the tip of the nozzle. This process allows for instantaneous air-oil lubrication to be provided to the point of desired lubrication when the MiQuel application is actuated. Additionally, this process produces a highly accurate MQL solution as the required air-oil mixture is produced at the lubrication point in comparison to the outlet of pump application, up stream.

Depicted to the right is the proper instillation of the air and oil lines within a Coaxial Spray Nozzle

Oil in Air Sensor

An optical sensor that detects and monitors oil particles within an air stream of an MQL system. The Oil in Air Sensor provides electronic feedback to ensure a Minimum Quantity Lubrication solution is operating efficiently on critical applications.







MICROIL

The MICROIL series of turbine style mist collectors have been designed for use on all machine tools using water based or whole oil based coolants. The range consists of two models fitted with different turbine blades and motors to provide a good overall choice (up to 7 different combinations) of evacuation capacity from 600 to 3000 m3/h (353 to 1765 scfm).



ELEKTRA

The ELEKTRA series, electrostatic filtration system is equipped with a heavy duty industrial quality electrostatic cell and is designed for use on all types of machine tools using an oil based coolant. This type of collector is designed for applications which do not have HEAVY SMOKE. The range is composed by four different models having a throughput from 400 and 1600 m3/h (236 – 941 cfm).



SHARP MINI-AIRJET

The new MINI-AIRJET filter system is designed for the removal of welding smoke, fine and coarse dust as well as of small quantities of chips, dust and smoke produced by thermal cutting operations. This product is designed for indoor use inside work premises. The filter unit consists of a pre-chamber, where the heavy dust is removed, falling into a primary collection bin. The high efficiency filter cartridges, complete the filtration process, collecting the remaining dust.

DropsAUSA Is a Regional Vendor of Micronfilter USA



KUBE

In the incredibly compact and carefully curved KUBE body, the Micronfilter designers have cleverly inserted 4 stages of filtration with progressive efficiency. The backwardly curved impeller blades, specifically designed to generate a powerful coalescent effect, but primarily conceived for avoiding, along all the mist collector life, any phenomenon of imbalance and subsequent vibration, silently conveys the air flow inside to the mist collector.





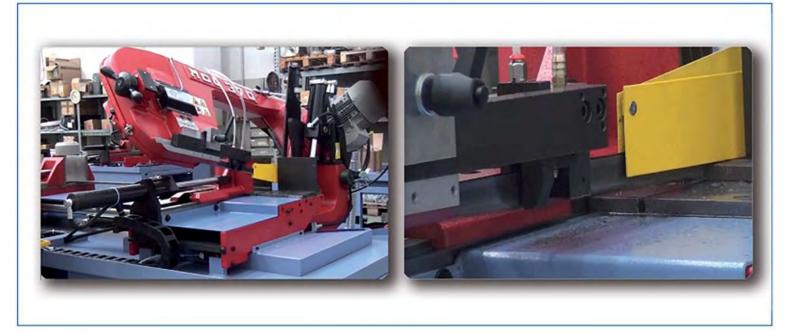
ECOTECH MAXI

ECOTECH has been designed and built in order to provide a versatile, modular solution for the filtration of oil mists, vapours and fumes generated by various types of machine tools; among them Machining Centers, Lathes, Milling and Grinding Machines of different sizes, as well as Parts Washing Machines and other machine tools used in metalworking processes. ECOTECH series born with 5 stages of progressive filtration and is designed to ensure, before anything else, excellent performance of pre-filtration and preseparation of the polluting particles, according to their nature and dimensions.



DropsA LUBRICATION TECHNOLOGY bielomatik

Automatic lubrication: optimization of costs and work times



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:













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.



Systems Solutions



TOTAL LOSS LUBRICATION



GREASE LUBRICATION



AIR/OIL LUBRICATION



LUBRICATION

MQL - NEAR DRY
MACHINING LUBRICATION

Bielomatik Schmiertechnik Drops A

Bielomatik has been a renowned manufacturer and supplier of lubrication systems for machine builders since 1946, supplying lubrication applications to the machine tools, paper and wood processing, and textile industries. In April 2020, the lubrication technology division was spun off from bielomatikLeuze GmbH + Co KG and acquired by DropsA, a lubrication technology specialist based in Milan, Italy, also active in the lubrication business since 1946. As of April 2020, the BielomatikSch-miertechnik GmbH, located in Frickenhausen, is now part of the DropsA Group. By mutually complementing the longstanding expertise and the product portfolio of both organizations, innovative lubrication solutions can be offered in all application areas of central and minimum quantity lubrication technologies. With its headquarters in Italy, and 16 worldwide subsidiaries in Europe, Asia, and the Americas, the DropsA Group has a broad sales and service network with approx. 250 employees worldwide, generating annual sales of more than 50 million euros.



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.





- GADEN S.A. de C.V. MÉXICO Silca N° 4 Col. Vista Hermosa Tlalnepantla, Estado de México C.P. 54080 Tel:(+52) 55 53 18 414 6
- GADEN SALTILLO
 Calle Primera N° 698
 Col.Nazario San Ortiz Garza
 COAHUILA C.P. 25100
 Tel: (+01) 844 180 02 94
 Tel: (+01) 844 180 02 95
 Tel: (+01) 844 268 24 49
- GADEN -IRAPUATO Tel:(+52) 462 215 93 90

GADEN INDUSTRIAL L.L.C.
216 W. Village Blvd. Suite102.
Laredo, Texas. 78041. USA.
Phone: (657) 304 49 49.

Tax I.D. number: 74-3015250.

Dun and Bradstreet number: 0573 95 449.

GADEN S.A de C.V. * Calle Silca No.4 * ColoniaVista Hermosa * C.P. 54080 * Tlalnepantla, Edo. México * RFC: GAD 950614 734 * Méx: Tel (+52) 55 5318 4146 USA: Tel (+1) 657 304 4949