

AGRICULTURAL MACHINERY





OIL LUBRICATION

The oil lubrication of agricultural machines is primarily focused on chain and gear lubrication, where a constant and homogeneous oil film is required. A variety of lubrication solutions, consisting of the following, are available from DropsA :

- System composed of a 31t reservoir with suction filter, piston pump, manifolds, and meter valves, of which outlets depend on the number of points to be lubricated. Brushes, or nozzles, are available for proper chain or gear lubrication
- System similar to the previous listed solution, however, utilizing camshaft controlled pump installed on a roller, or shaft, with an eccentric cam
- System utilizing a 31t reservoir with suction filter and multi-outlet PRM pump connected to a rotating shaft

MANIFOLDS WITH DOSING VALVES

DropsA's dosing valves are ideal for machines and high speed rotating mechanisms where maintaining a continuous film of oil is critical. Chain lubrication is provided by utilizing metering valves with brushes, directly installed on the chain surface, achieving proper and constant lubrication. Metering units can also be installed on manifolds, ranging in size from three to 11 outlets, depending on system design and quantity of points to be lubricated.

PISTON PUMP

The piston pump is a simple spring application that uses rod movement to create a depression inside its chamber in order to pull oil and push it towards the accompanying dosing valves, the instant the piston is released. The rod is actuated by the baler's cover door which is opened every time a bale of hay is pushed through.

CAMSHAFT CONTROLLED PUMP

The camshaft controlled piston pump is an ideal oil lubrication solution for chains or machine mechanisms. The pump is installed on the machine's rollers, or shaft, with an eccentric cam that generates pump function by creating a vacuum in the suction chamber.

PRM PUMP

The multi-outlet PRM piston pump, driven by a camshaft system, allows direct lubrication of several independent lines (max 12), managing the supply of oil without the use of dosing dividers or metering valves. Adjustable flow of each pump outlet is available, a solution more intuitive and simple in comparison to alternate lubrication systems where adjustments of flow can be achieved by changing one, or more, metering valves.

GREASE LUBRICATION

Grease lubrication on agricultural machinery is mainly used for gears, bearings, junctions, and joints. These systems, which are usually automatic and controlled / monitored from the cab, can be implemented with a single outlet electric pump and a primary, and secondary, progressive divider system. Furthermore, a multi-outlet pump can be utilized to directly reach the end points without the need of divider blocks.

nP DIVIDER

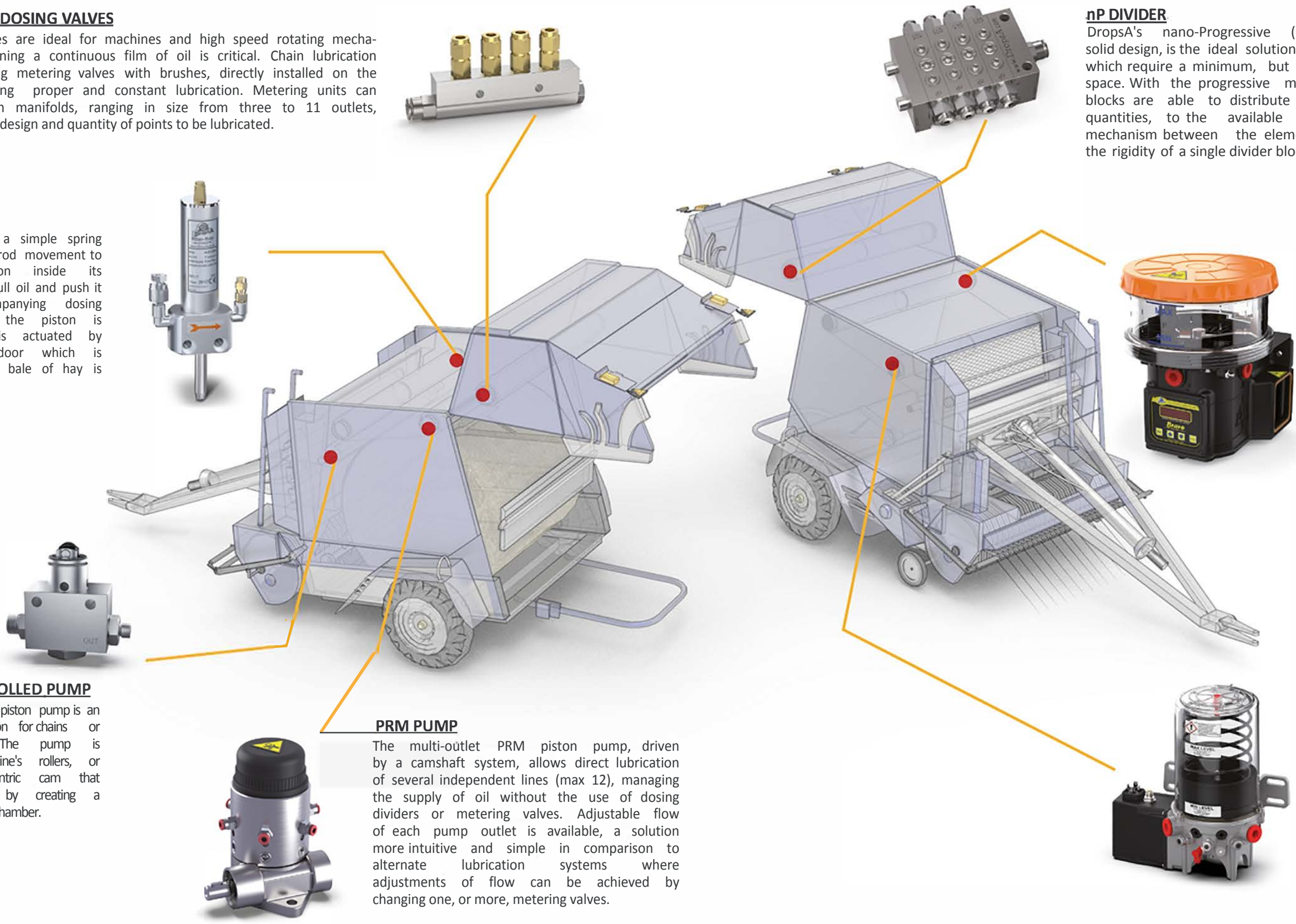
DropsA's nano-Progressive (nP) dividers, with a compact and solid design, is the ideal solution for oil and grease lubrication applications which require a minimum, but precise, output of lubricant in a limited space. With the progressive movement of paired pistons, nP divider blocks are able to distribute the incoming flow rate, in very precise quantities, to the available outlets. The new press-fit, Rigid Lock mechanism between the elements offers nano-Progressive (nP) feeders the rigidity of a single divider block with the flexibility of a modular single unit.

BRAVO PUMP

The small grease pump with gigantic performance. The Bravo pump has many innovative and high-end characteristics that provide extensive capabilities in lubrication system design and engineering. The new generation control system is fundamental for the development of available solutions. This lubrication system can be activated and controlled in a variety of different methods, as well.

OMEGA PUMP

A versatile solution for small to medium sized systems that can be utilized in accordance with different lubrication methods: divider blocks (pairing of pumping elements), direct to the point (8 mini-pumping elements), or with a vent valve kit for injector systems.





GREASE LUBRICATION

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SMP DIVIDER

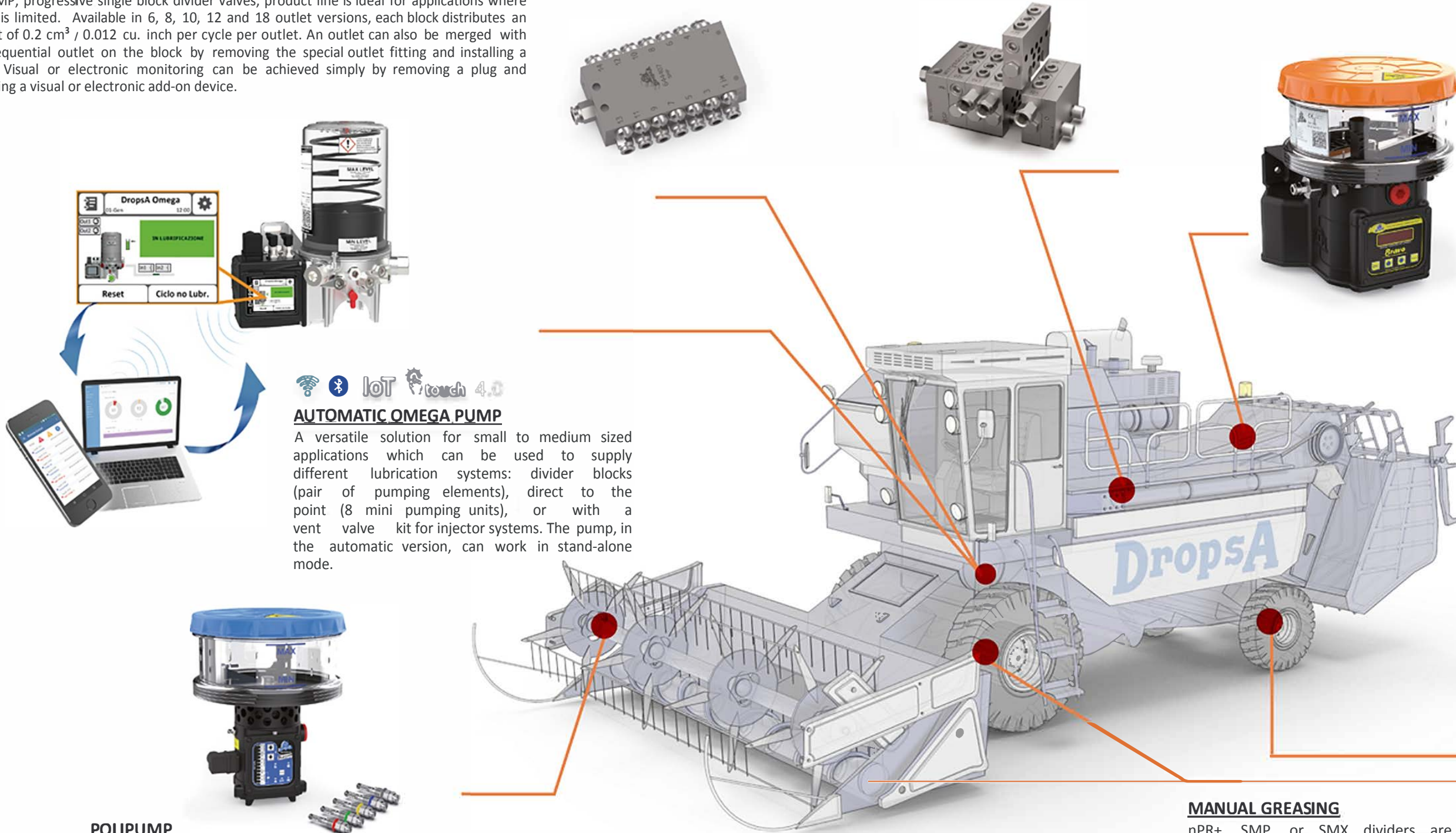
The SMP, progressive single block divider valves, product line is ideal for applications where space is limited. Available in 6, 8, 10, 12 and 18 outlet versions, each block distributes an output of 0.2 cm³ / 0.012 cu. inch per cycle per outlet. An outlet can also be merged with the sequential outlet on the block by removing the special outlet fitting and installing a plug. Visual or electronic monitoring can be achieved simply by removing a plug and installing a visual or electronic add-on device.

nPR+ DIVIDER

The nano-Progressive Replaceable dividers are the ideal solution for oil and grease lubrication in applications that require small and precise quantities of lubricant in a compact and solid, design. The NPR+ uses the innovative "rail & lock" concept that allows the element to be replaced, or repositioned, without the need to completely dismantle the assembly. This innovation allows a single element of an assembled divider to be modified or replaced. The compact size makes them particularly suitable for use in limited space.

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.



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 pump, in the automatic version, can work in stand-alone mode.

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, high yield complex applications.

MANUAL GREASING

nPR+, SMP, or SMX dividers are also used for manual lubrication systems. Multiple configurations can be engineered to create a desired lubrication solution with a manual pump. As an alternative, the use of manifolds with straight, or 90°, nipples on one side and push-in fittings with nylon tubing to the bearing points on the other side, can achieve manual lubrication point to point.



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 agricultural 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 agricultural sector are applicable on the various machine types:



BALERS



COMBINE HARVESTERS



TRACTORS



HARVESTING MACHINES



SEED DRILLS



FEED MIXERS

Systems Solutions



TOTAL LOSS LUBRICATION



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.



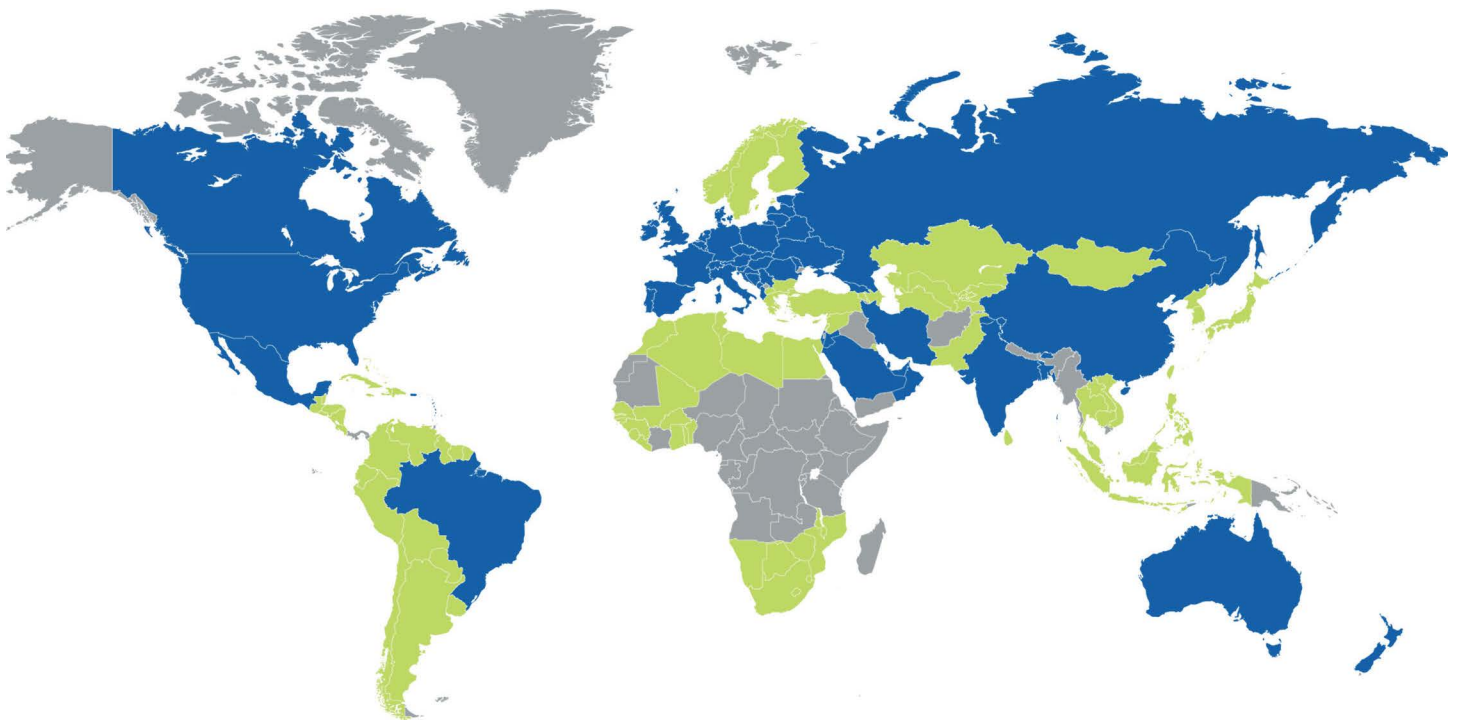
DropsA Production

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.



DropsA

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SERVICING & SUPPORTING



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