

Lubrication systems specialists

# **OIL MIST SYSTEMS**



# **OIL MIST CABINET GENERATOR**

DropsA is specialized in building large oil mist systems typically found in oil refineries. It is common that green field projects for refineries specify an oil mist lubrication system for pumps and motor bearings.

During the refining of the oil, the process pump used to transfer oil must be lubricated with Nebol (mist system). Nebol systems have to be customed designed for each refinery.

#### The Oil mist cabinet generator includes:

- Vortex Mist Header
- Heaters for oil and air
- Control panel that can communicate with customer DCS all the alarms
- Reservoir and in case of request with backup units
- All the parts are certified EX

#### - Mist Manifold

Mist manifold is used to divide correctly the mist from the main line. Normally it is placed above the pumps and it can be used up to 8 lubrication points.

#### - Reclassifies

DropsA reclassifiers are studied to obtain better result depending on the pump application.

#### - Auxiliary manual pump

In a closed loop system the lubricant must be returned to the main station. The manual pump can help to do this work easily.

Reclassifiers





Auxiliary manual pump





Mist manifold - 1 to 6 outlets







## **VORTEX MIST HEADER**





# **VORTEX MIST HEAD**

The innovative Vortex generator mixes oil at a specific distance from the highest velocity point of the vortex maximizing the acceleration of the particles into the vortex's center.

At the outlet of the vortex a rapid de-compression zone initially removes large particles by forcing them to coalesce in a static area of the exhaust cone whilst the remaining aerosol is rotated in a controlled deceleration in the exhaust cone using coanda effect accompanied by a specific surface finish used to help further reduce the particle size into sub-micron particles.

A final coalescing plate is used to collect large particles that are subsequently recycled.

# PURE AND PURGE OIL MIST APPLICATION

DropsA would analyse the refinery layout and determine best positions of the Nebol OMG ( oil mist generator). The system can be open or closed loop depending on customer requirements. Then DropsA would calculate mist flow to each of the lubricating points. Some points can be PURE and some can be PURGE. The following diagrams show the difference between PURE and PURGE.

The following diagrams show the difference between PURE (B1) and PURGE (B2).





# **PURE OIL MIST APPLICATION B1**









# **PURGE OIL MIST APPLICATION B2**

Automatic lubrication: optimisation of costs and work times



The use of lubrication systems is even more indispensable for the correct operation of machines when they operate in difficult environmental conditions, such as those in the Oil Refinery. The installation of an automatic lubrication system allows machine down times to be reduced and allows consumption of the lubricant to be controlled and the life of the bearings, chains and gears to be increased.

Thanks to their many years of experience and a capillary network of branches and resellers all over the world, DropsA provides specific solutions for every need and follows the customer from the definition of the project to the installation to post sales support.

### DropsA

Since 1946, DropsA has been producing systems and components for centralised lubrication, 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 maximising the profitability and productivity of your machinery, providing the latest technologies in terms of systems, functionality and components. Thanks to the branches and the specialised distribution channels, DropsA provides prompt responses, support and assistance to customers on a local or global level, guaranteeing the same high quality standards all over the world.

### **DropsA Production**

The production, processing and automated assembly systems that are in the 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 the technical specifications. Continuous investments in all of the areas of design, engineering and production of the products ensure a constant increase in the reliability of the products themselves.

### Sistems Solutions



TOTAL LOSS



GREASE



AIR/OIL OIL



OIL RECIRCULATION MQL NEAR DRY LUBRICATION MACHINING LUBRICATION











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