# Automatic Micro Lubri-refrigeration System
# LubeTool® model

**Description**  LubeTool® system was designed to supersede the traditional lubrication with water soluble oil used in tooling metals. This new system mixes air and drops of pure oil (preferably vegetable base oil) and directs it to the contact point where the tool touches the part being tooled.
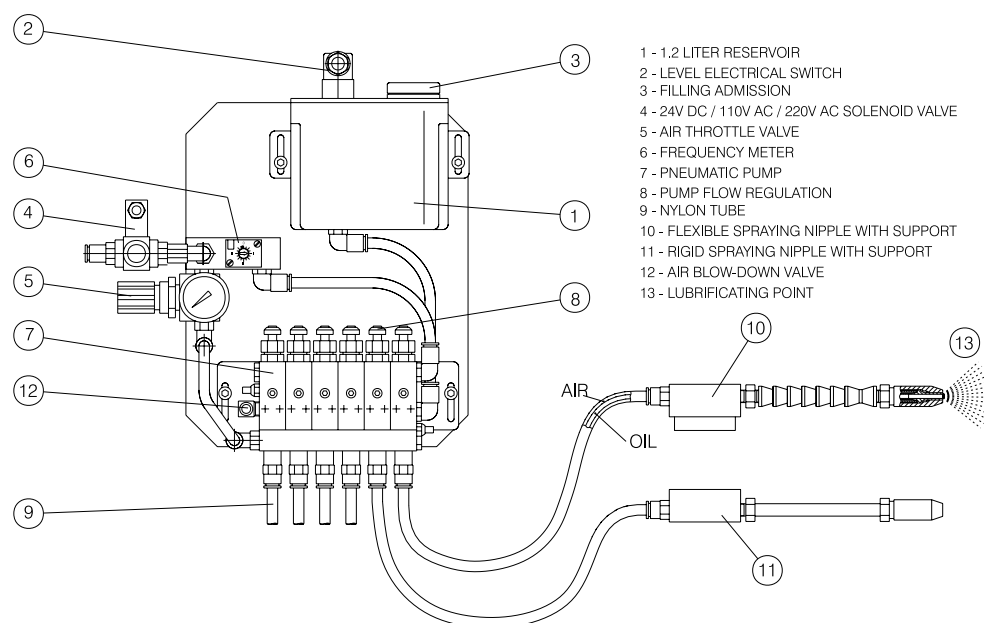
**Advantages**  Clean working environment, larger productivity, increases tool usable life, better surface finishing, cost reduction, increases working tolerances, reduces lubricant consumption in 90 %, eliminates the need for discarding exhausted oil, eliminates washing parts and chips.

**LubeTool® may be applied in several types of works such as: sawing, drilling, threading, milling, punching, stamping, chains and calibration, among others.**

**Operation**  One (or more) pneumatic micro pump (pumping element) meters a small quantity of lubricant through a capillary tube internal to a coaxial piping up to a mixing nipple that mixes it with compressed air and sprays it in the contact point where the tool touches the part and forms an oil film that reduces the working friction. The micro pump may regulate oil metering by action, the frequency generator allows adjusting the number of actions of micro pump and air flow is regulated by an independent valve, so resulting total control of air/oil mix.



1 - 1.2 LITER RESERVOIR
2 - LEVEL ELECTRICAL SWITCH
3 - FILLING ADMISSION
4 - 24V DC / 110V AC / 220V AC SOLENOID VALVE
5 - AIR THROTTLE VALVE
6 - FREQUENCY METER
7 - PNEUMATIC PUMP
8 - PUMP FLOW REGULATION
9 - NYLON TUBE
10 - FLEXIBLE SPRAYING NIPPLE WITH SUPPORT
11 - RIGID SPRAYING NIPPLE WITH SUPPORT
12 - AIR BLOW-DOWN VALVE
13 - LUBRIFICATING POINT

**Specifications:**

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|---|---|---|---|---|
| Pumping element flow | from 0 to 41 mm³ | | Lubricant | oil max. 800 cSt 40º C |
| Number of pumping elements | from 1 to 6 | | Minimum level switch (optional) | 1 at 250 V AC - 220 V DC - 50 W |
| Voltage | 24 V DC - 115 V AC - 230 V AC | | Air pressure | from 4 to 8 kg/cm² |
| Number of cycles of micro pump | from 1 to 66 per minute | | Air consumption per pump | min.: 60 l/min - max.: 100 l/min |
| Oil reservoir | 1.2 - 3.6 liters | | | |

**Purchasing information**

Quantity, model, number of elements, volume of reservoir, reservoir minimum level electrical switch, air throttle valve with pressure gauge, frequency generator, solenoid valve, solenoid valve voltage, spraying nipple type (flexible or fixed).