



Rheological Limited

Adhesives & Liquids Applications

What is minimum quantity lubrication?

Minimum quantity lubrication (MQL) works according to the "less is more" principle. By applying lubricant where it is required in a targeted manner, the tools and work pieces are prevented from heating up. Conventional cooling using full-flooding is unnecessary.

MQL requires extremely high pressure-absorbing high-performance oils and very precise spraying head technology which allows the smallest of amounts of lubrication medium to be applied.

Minimum quantity lubrication reduces oil consumption to an absolute minimum whilst allowing for the lowest possible damage to the environment.

For the exact and precise application of a defined quantity of oil over a distance of up to 600mm, a shot is fired as an accurate drop to the lubrication point.

The in-head cartridge of the coaxial spraying head can be adjusted to the viscosity of the medium. The size of the drops can be determined using a timer control unit.

Advantages

- Dry work pieces, machinery and chippings
- Lower oil usage
- Less rejects and defects
- Increase in productivity
- Improvement to tool life
- Clean work pieces with better surfaces
- No disposal of the cooling lubricant required
- Environmentally-friendly technology
- Lower medium storage costs
- Lower cleaning costs for machinery and workplaces

Areas of application

Drilling, turning, milling, bevelling, stamping, spraying shapes, wetting conveyor belts and coils, recasting, engraving, pipe-bending, wetting rollers, printing, nibbling, flow form, threading, contouring, chain lubrication, Channelling, deep drawing, embossing, compression moulding, countersinking, rust protection, grinding, cutting, sawing, peening etc..etc..