

SPR-2000™ Programmable Fluid Controller

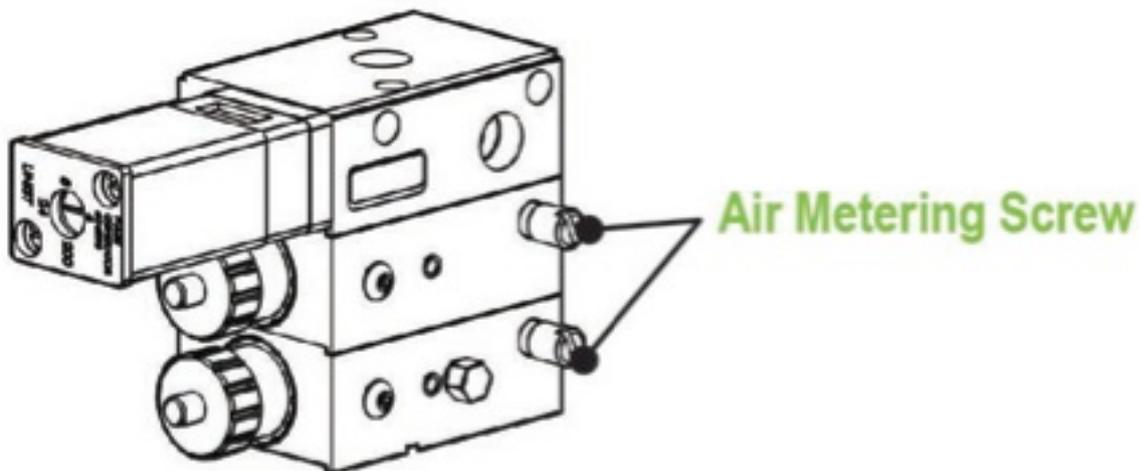
I am getting a mist and it's bothering workers. What do I do?

Machining with minimum quantity lubrication has been shown to produce fewer emissions than flood cooling. It is, in fact, a low-emission process. Unfortunately, when starting with MQL, many shops think that more is better so they blast as far too much air through the MQL nozzles and literally create a fog or mist of lubricant in the air. This is not MQL! A properly adjusted MQL system uses just enough air velocity to drive the lubricant to the tool, not enough to drive it around the block!

Just as less is better with the air, closer is better with the nozzle. The longer the distance that the nozzle needs to spray, the more airflow is needed to carry aerosol and the higher the likelihood of an unwanted mist being generated. In closed machines, an extraction system can help with this. In open systems, putting the nozzle closer to the cut helps. The fluid output should be virtually invisible. If you see a mist spraying from an external nozzle, you will likely see fogging in the plant.

Unless you are working with very small chips, as in micro-cutting, trying to blow the chips away with air from the fluid delivery spray will only create a fog and use more fluid than is necessary. Use a separate chip removal approach, such as an air blow-off or a vacuum, to remove chips if needed.

On a Coolubricator or Serv-O-Spray system the amount of air that mixes with fluid at the nozzle tip can be adjusted with the air metering screw. Turn the metering screw counter-clockwise to increase the air flow and clockwise to decrease the air flow. A good initial setting is open about from $\frac{1}{4}$ to $\frac{1}{2}$ of a turn.



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Author: Unist
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