

## Numerical investigation on Mist Collection Performance of a Zigzag Flow Channel Trap

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### Abstract

The purpose of this study is to develop a simple and maintenance-free mist trap that can capture oil mist generated by cutting machines. A mist trap with a zigzag flow channel (see Figure 1) was designed, and its performance was evaluated using numerical simulations. The effects of folding length and bending angle were examined as design parameters.

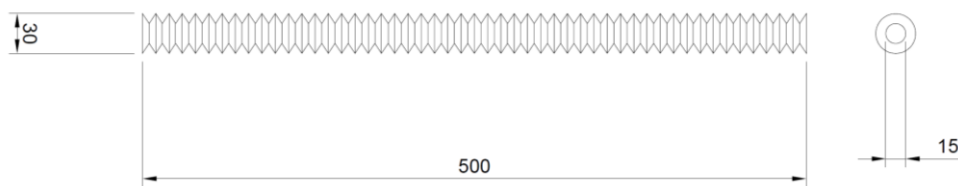


Figure 1 Overview of the zigzag flow channel.