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ANSI/Technical Report for Machines –

Mist Control Considerations For The Design, Installation, And Use Of Machine Tools Using Metalworking Fluids

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Secretariat and Standards Developing Organization:

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Foreword

The Machine Tool Safety Accredited Standards Committee (B11) of the American National Standards Institute formed a subcommittee consisting of professionals that are involved in manufacturing, higher education, industrial hygiene, safety, and design to develop guidelines for the control of airborne contaminants associated with metalworking. The subcommittee operates under the auspices of AMT-The Association For Manufacturing Technology, located in McLean, Virginia.

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There are several informative annexes at the end of this technical report which are used for clarification, illustration, and general information.
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1 SCOPE

1.1 Scope

1.1.1 This document provides guidelines for a uniform approach to the control of airborne contaminants generated by stationary machine tools used to cut and form materials.

1.1.2 Control shall be through the proper design, installation, use, and maintenance of the machine tool and its support systems (such as, but not limited to metalworking fluid delivery systems and air cleaning equipment).

1.1.3 Airborne contaminants can be generated due to: tool action, workpiece action, metalworking fluid movement and characteristics, and thermal conditions.

1.1.4 These guidelines are meant to be used as a whole and should not be considered in part.

1.2 Inclusions

1.2.1 Cutting operations

1.2.2 Machining

1.2.3 Grinding

1.2.4 Microfinishing

1.2.5 Cold forming

1.2.6 Transfer machines

1.2.7 Part or pallet wash-off stations using coolant

1.3 Exclusions

1.3.1 Deburring machines

1.3.2 Parts washing machines

1.3.3 Rolling mills

1.3.4 Stamping operations

1.3.5 Drawing operations

1.3.6 All machining operations that are dry

1.3.7 Roll forming machines

1.3.8 Presses