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# EFFECT OF MACHINING AND LUBRICATING CONDITIONS ON DUST EMISSION DURING GRANITE POLISHING

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**Machining is necessary to shape parts but it is also an important source of pollution (such as dust and aerosols) and this constitutes hazards for machine-tools operators. The emission of dust and the overall shop floor air quality are of great concern when shaping dusty materials such as granite as this process generates harmful dusts containing silica. In recent times, the occupational health and safety regulations have become more severe. To quickly comply with new regulations, engineers and researchers must help industries in developing strategies to limit ultrafine particle emission when polishing granite as a function of machining conditions and parameters. The machining conditions studied include the tool paths, the lubrication and its applications modes. The main goal is to determine machining conditions leading to less dust emission while maintaining acceptable part quality and productivity.**

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