

## **TECHNIQUES FOR DETERMINING & REDUCING VIBRATION FROM POWER TOOLS**

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### **Abstract**

Technological advances in recent years have allowed various machines to increase overall productivity of systems. The development of power tools and equipments had reduced a lot of human effort of doing tasks which would otherwise take enormous human energy and time to complete. These power tools can potentially eliminate the need a major part of human efforts & energy during executing the tasks, but at the same time could cause hand-arm vibration syndrome on an operator after prolonged use of such power tools. Hand-arm vibration is caused by vibration transmitted into the hand and arms through the palm and fingers. Operators whose hands are regularly exposed to hand-arm vibration may suffer from damage to the tissues of the hands and arms, which cause the symptoms collectively known as hand-arm vibration syndrome. Investigations have shown that vibration hazards can be controlled and risks reduced by good management. They have also shown that the costs of such controls need not be high and can usually be offset by the benefits of keeping operators healthy. Additionally, the vibration control measures have, in many cases, led to improved efficiency. [1] The paper is intended to cover the various methodologies used for determining and evaluating risks; dealing with the choice and correct use of work equipment, the optimization of methods and the implementation of protection measures (technical and/or organizational measures) on the basis of a prior risk analysis. [2]

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