

**A SYSTEMATIC ERGONOMICS APPROACH TO EVALUATION, DESIGN AND TESTING OF HAND TOOLS**

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**Abstract**

Guidelines are provided for ergonomics evaluation of an existing hand tool. Apart from the mechanical output of the tool, focus ought to be placed on the anatomical concerns, tool handles and grips and powered tool considerations. Ergonomic design of non-powered hand tools should especially deal with the handle size, length, cross section dimension, curvature, materials and angulation. Ergonomic testing of a redesigned hand tool is often based on work efficiency, muscular stresses and subjective preference/comfort.