Need for Standardization of Manual Inspection in Small and Medium-Scale Manufacturing Industries

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Abstract : In the field of production, characterization of surface roughness plays a vital role in assessing the quality of a manufactured product. The defined parameters for this assessment, each, have their own drawbacks in describing a profile surface. From the purview of small-scale and medium-scale industries, an increase in time spent for manual inspection of a product for various parameters adds to the cost of the product. In order to reduce this, a uniform and established standard is necessary for quantifying a profile of a manufactured product. The inspection procedure in the small and medium-scale manufacturing units at Jigani Industrial area, Bangalore, was observed. The parameters currently in use in those industries are described in the paper and a change in the inspection method is proposed.

Keywords: efficiency of quality assessment, manual areal profiling technique, manufacturing in small and medium-scale industries product-oriented inspection, standardization of manual inspection, surface roughness characterization

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