

## Early Screening of Risk Ergonomics among Workers at Madura's Batik Industrial: Rapid Entire Body Assessment and Quick Exposure Checklist

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**Abstract :** Batik Madura workers are exposed to many Musculoskeletal Disorders risk factors, particularly Low Back Pain (LBP). This study was conducted as an early detection of ergonomic risk level on Workers Industrial Sentra Batik Madura in Dusun Banyumas, Klampar Subdistrict, Proppo Pamekasan, Madura, East Java. This study includes 12 workers who 11 workers had pain in the upper and lower part of the neck, back, wrist right hand, also 10 workers had pain in the right shoulder. This is a descriptive observational study with cross-sectional approach. Qualitative research by observing workers activity such as draw and putting the wax motif, fabric dyeing, fabric painting, discoloration, washing, and drying. The results are workers have identified ergonomic hazards such as awkward postures, twisting movements, repetitive, and static work postures. Using the method of REBA and QEC, the results get a very high-risk level of activity in each of Madura batik making process is the draw and putting the wax motif, coloring, painting, discoloration, washing, and drying. The level of risk can be reduced by improvement of work equipment include the provision of seats, strut fabric, high settings furnaces, drums, coloring basin, and washing tub.

**Keywords :** activities of Madura's batik, ergonomic risk level, equipment, QEC (Quick Exposure Checklist), REBA (Rapid Entire Body Assessment)

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