

Proceedings of the 6th Annual World Conference
of the Society for Industrial and Systems Engineering,
Herndon, VA, USA
October 19-20, 2017

Analysis of the Exposure to Occupational Physical Factors for the Railroad Track Welder in Maintenance of Way

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Author Note: The authors thank the many railroad employees that allowed us to work with them who made our study possible.

Abstract: The physical demands of the North American railroad track welder position has been described, historically, in subjective terms. These descriptions have been based on subject matter experts and railroad employees. Research has demonstrated that subjective accounting of the intensity, frequency and duration of physical exposures of the work, to be notably less accurate than the actual physical exposures. Additionally, it is important to account for the whole shift of exposure to physical demands. Objectively based data collection and analysis of the railroad track welder position has been conducted through multiple full shift job studies at different railroad locations across the country, over a number of years. Results of this study provide reliable exposure data, and suggest that there is generally not an increased relative risk for the development of a variety of musculoskeletal disorders.

Keywords: Musculoskeletal, Workplace, Railroad