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Abstract	:	This study has been carried out to evaluate the work-related Musculoskeletal Disorder (MSD) among workers who have attended the Remotely Operated Underwater Vehicle (ROV) during maintenance activity at onshore engineering industry. ROV is one of the heavy machinery in inspection technology and used as an underwater inspection tool. From observation, workers have experienced high risk MSD which caused by awkward posture, excessive force and repetition due to limited working area, standing for prolong period and lifting heavy equipment. In this study, HIRARC analysis has been used to identify the occurrence of hazard among the selected workers. Next, RULA and REBA method also has been used to support the result of HIRARC analysis. The data is collected through an interview, observation and video recording. This study shows that the workers at onshore engineering industry performed their task in poor working postures and the result from the HIRARC analysis shows that 33% of the workers exposed to high risk level (>15) and 33% of workers with medium risk level (= 10). The RULA and REBA assessment was used in order to evaluate the working posture, and two hazards namely confined space (RULA 7, REBA 11) and awkward posture (RULA 7, REBA 11) need immediate ergonomics intervention. Therefore, ergonomics interventions required immediately in order to avoid any injuries and eventually improve workers wellbeing.