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ERGONOMIC ANALYSIS IN THE HANDLING OF ADDITIVE CANS IN A FUEL DISTRIBUTOR IN MANAUS/AM - A CASE STUDY

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RESUMO

Throughout human history, ergonomics has been developed with the aim of providing greater comfort to the activities developed by man. Along with the modernization of jobs, came the need to develop studies capable of neutralizing or minimizing the negative impacts on the health and well-being of the worker. Aiming to contribute to this end, this work had as main objective to carry out an Ergonomic Analysis of the Work of the professionals who work in the logistics area and who develop activities of handling cans of additives in a Petroleum Distributor located in the city of Manaus-AM, using the Rapid Entire Body Assessment (REBA) and Rapid Upper Limb Assessment (RULA) method, in the activity in which the employee requires an inadequate posture, as he works standing up and with sudden and repetitive movements most of the time. In handling additive cans with a mass of 18 kg and a volume of 20 L, 3 movements were evaluated with the following results: (1) Additive Can Handle: In the REBA Method, the result found was 11 points, considered VERY HIGH RISK where IMMEDIATE Ergonomic Intervention is required; In the RULA method, the result found was 7, being necessary to investigate and modify immediately. (2) Suspension of the Can of Additives: In the REBA Method, the result found was 4 points, considered AVERAGE RISK where an Intervention is necessary to reduce it; In the RULA method, the result found was 6, making it necessary to investigate the information and modify it faster. (3) Positioning of the additive can in the matrix: In the REBA Method, the result found was 10 points, considered HIGH RISK where a QUICK MODIFICATION is needed to reduce it; In the RULA method, the result found was 7, being necessary to investigate and modify immediately. Activity of taking the can of additives leaves the neck in static position flexed greater than 40° and eventual elevation of the arms up to the level of the shoulder, however difficult technical actions and trunk flexion when lifting the can; Suspension activity of the additive can the neck is in a static position flexed below 40° and forearm working in pronation; Positioning activity of the dye can in the matrix leaves the arm elevated up to shoulder level, but with difficult technical actions, the arm carries out abduction with force, performs flexion of the spine when handling the heavy load. Based on the results obtained, some points for improvement were suggested, such as: Ergonomic Project, Work orientation, Physical Preparation and Rotation in Tasks. The recommendations presented tend to solve the problem immediately, as they are simple and easy to implement. The realization of this study

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demonstrates the importance of considering ergonomic adequacy as a decisive factor not only in the quality of life of employees, but in the quality of work and in the productive capacity in a work environment.

PALAVRAS-CHAVE: Ergonomic analysis, REBA method, RULA method.

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