

IMPROVING THE TECHNOLOGICAL WELDING PROCESS IN THE CONDITIONS OF SUSTAINABLE DEVELOPMENT

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Rezumat. În condițiile actuale ale cerințelor dezvoltării sustenabile, este importanta evaluarea activităților companiilor din industrie. Această evaluare este importantă din perspectiva îmbunătățirii impactului organizațiilor asupra mediului înconjurător. Primul pas spre îmbunătățirea amprentei organizaționale asupra mediului înconjurător este înlocuirea procesului de îmbinare lipire flacăra cu lipirea cu laser deoarece cantitatea de emisii generată de CO₂ este minimă, în comparație cu lipirea cu flacăra unde cantitatea de emisii de CO₂ este mult mai mare. Sunt prezentate o serie de implicații teoretice care stau la baza prezentării unui studiu de caz care a fost realizat într-o companie din industria automotive. În final sunt prezentate o serie de activități de management care contribuie la îmbunătățirea amprentei organizaționale de CO₂.

Abstract. In the current conditions of sustainable development requirements, it is important to evaluate the activities of companies in the industry. This assessment is important from the perspective of improving the impact of organizations on the environment. The first step towards improving the organizational footprint on the environment is to replace the process of joining flame bonding with laser bonding because the amount of CO₂ emissions generated is minimal, compared to flame bonding where the amount of CO₂ emissions is much higher. A series of theoretical implications are presented that underlie the presentation of a case study that was conducted in a company in the automotive industry. Finally, a series of management activities are presented that contribute to the improvement of the organizational footprint of CO₂.

Keywords: organizational process, sustainable development, CO₂ footprint, environment, soldering process, process improvement.

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1. Introduction

Companies invest resources for the development of technological processes in accordance with the current requirements of the business environment and with the requirements of customers. In terms of soldering processes, many companies in the automotive industry are replacing the old flame soldering process with the laser welding process [1]. Activities to improve the technological process of

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