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ECO-DESIGN AND ITS TOOLS – ATTEMPTED USE IN THE MILITARY INDUSTRY

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Abstract

The development of military technology in recent years has made tremendous progress. However, some of these technologies have a direct impact on environmental degradation. This makes it necessary to introduce new solutions and technologies in the field of environmental protection. The paper provides a literature review on issues such as eco-design and its tools, life cycle assessment as well as attempted use of them in the defence sector. The environmental regulations and standards ensuring the quality of defence product have been described. In the military industry whose priorities are primarily related to defense the classic approach to design and its tools focused its attention on safety, functionality, ergonomics, costs, strength and technical parameters, instead of environmental problems. In fact militarism has huge impact on the climate because of giant greenhouse gas emissions, the main problem of the Armed Forces is the increased carbon footprint emissions which should be reduce of therefore case studies of eco-design and its tools, commercial software tools for carbon footprint calculation and life cycle assessment are described.

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Keywords: Carbon footprint; Computer systems for eco-friendly design; Eco-design; Eco-design tools; LCA life cycle assessment.