

## **TITLE OF MASTER THESIS**

A Thematic Review of Main Researches on Construction Equipment Over the Recent Years

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## **ABSTRACT**

A considerable body of literature has been dedicated to research studies on construction equipment. Many topics were discussed and analyzed and various conclusions have been reported. However, research papers published in relation to construction equipment, are highly diversified and there is a lack of systematic analysis and classification. Hence, a complete understanding of the topic is not possible, nor is the assessment of any future research direction. A meta-analysis of the latest journal papers dedicated to construction machinery would not only delineate the fields the academic research was concentrated on, but it would additionally reveal potential gaps for future research. In the current study, through a systematic review of the academic literature that has been published over the last decade primarily identified via online databases, main research themes such as optimization, maintenance/downtime, productivity, robotics and automation, operator's competence, innovation, environment are determined and discussed and future research directions are proffered. The outcome of this paper will facilitate future researchers to develop a body of knowledge of progress on construction equipment and its potential functions and provide future research directions on this issue.

## **KEYWORDS**

Construction equipment; optimization; productivity; maintenance; research