

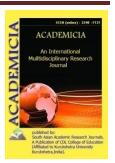
ISSN: 2249-7137 Vol. 11, Issue 3, March 2021 Impact Factor: SJIF 2021 = 7.492



# **ACADEMICIA**

# An International Multidisciplinary Research Journal





DOI: 10.5958/2249-7137.2021.00879.X

## ON OPTIMAL CONTROL OF THE CRUSHING PROCESS

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### **ABSTRACT**

In industry, in most cases, high grinding steppes are required. The automatic control of solid particulate material crushing is a prerequisite for maximizing equipment productivity. A more voluminous task, which must be solved in the automation of crushers, is related to the optimization of the entire process of multi-stage crushing, the effect of using separate units taking into account the requirements of automatic control, rather than by increasing the number of controlled parameters, allowing, as is often the case in practice, not only receive comprehensive information about the process, but also insure against possible malfunctions in the operation of unreliable devices. An automatic crusher performance control system control circuit has been developed. The following tasks are solved: construction and description of functional diagram of automatic crusher performance control system; defined mathematical and computer models of the automatic control system; optimal control scheme is defined.

**KEYWORDS:** Crushing; Performance; A control circuit; Automatic control system; Process; electric motor power consumption.

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