

**VISOKA ŠOLA ZA PROIZVODNO INŽENIRSTVO**

**DIPLOMSKO DELO**

**AVTOMATIZACIJA DELOVNEGA PROCESA ZA  
IZDELAVO BLOKIRNIH PALIC V SUROVINSKEM  
OBRATU PRALNO-SUŠILNIH APARATOV**

**AUTOMATION OF WORKING PROCES FOR BLOCKING  
RODS PRODUCTION IN RAW MATERIALS  
DEPARTMENT FOR WASHING AND DRYING  
MACHINES**

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# **AVTOMATIZACIJA DELOVNEGA PROCESA ZA IZDELAVO BLOKIRNIH PALIC V SUROVINSKEM OBRATU PRALNO-SUŠILNIH APARATOV**

## **POVZETEK**

V diplomskem delu smo obravnavali izziv, kako povečati produktivnost in stroškovno učinkovitost izdelave blokirnih palic v surovinskem obratu pralno-sušilnih aparatov podjetja Gorenje, d. d. Trenutno v izdelovalni stroj posluževalec stroja ročno dozira jeklene palice. Izmerili smo produktivnost obstoječe ročne proizvodnje in izračunali lastno ceno tako izdelanih blokirnih palic. Nato smo preučili možnosti za avtomatizacijo proizvodnje. V sodelovanju z zunanjim dobaviteljem smo na obstoječ izdelovalni stroj dogradili avtomatski podajalnik jeklenih palic. Z uvedbo avtomatizacije delovnega mesta smo povečali produktivnost proizvodnje za 35 % in znižali lastno ceno blokirnih palic za 4,3 %.

**Ključne besede:** proizvodnja, avtomatizacija, produktivnost, stroški

# **AUTOMATION OF WORKING PROCES FOR BLOCKING RODS PRODUCTION IN RAW MATERIALS DEPARTMENT FOR WASHING AND DRYING MACHINES**

## **ABSTRACT**

The thesis deals with a challenge of how to increase productivity and efficiency of production of blocking rods in raw materials department for washing and drying machines in the factory Gorenje PLC. Currently the machine operator manually feeds material for the production of blocking rods. The productivity of manual production was measured and costs of blocking rods were calculated. The possibilities for the automation of the production process were studied. In cooperation with external suppliers the current machine was upgraded with an automatic handler of steel rods. With automation the productivity was increased by 35 % and costs of blocking rods were decreased by 4,3 %.

**Key words:** production, automation, productivity, costs