

VISOKA ŠOLA ZA PROIZVODNO INŽENIRSTVO

DIPLOMSKO DELO

**SNOVANJE IN KONSTRUIRANJE NAPRAVE ZA
ODSTRANJEVANJE ODPADKA NA REZALNI POSTAJI**

**PLANNING AND CONSTRUCTING DEVICE FOR THE
DISPOSAL OF WASTE ON CUTTING STATION**

Študent: BRANKO FERLINC

Mentor: pred. Sebastjan Kotnik

Študijski program: Sodobno proizvodno inženirstvo

CELJE, 2017

SNOVANJE IN KONSTRUIRANJE NAPRAVE ZA ODSTRANJEVANJE ODPADKA NA REZALNI POSTAJI

POVZETEK

Obstoječi sistem za odstranjevanje odpadka na rezalni postaji ne zagotavlja zanesljivega in učinkovitega odstranjevanja obreza, zaradi česar nastajajo nepotrebni stroški. Obstoječo napravo za odstranjevanje obreza rolic je zato treba nadomestiti z izboljšano, ki bi zanesljivo in učinkovito odstranila samo obrez in zmanjšala stroške ter povečala učinkovitost rezalne postaje. V diplomskem delu je podana analiza obstoječega sistema za odstranjevanje obreza rolic. V diplomskem delu sta predstavljena snovanje in koncipiranje naprave, ki bo zagotovila kakovostnejši in učinkovitejši način odstranjevanja lastnega odpadka. Ocena delovanja izboljšane naprave je pokazala, da je mogoče količino kakovostnih izdelkov, ki nehote končajo med odpadki, znižati z 0,046 % na 0 % ter hkrati znižati strošek strojnih delov (s 44 € na 0 €) in načrtovane zastoje, ki nastanejo zaradi menjave verige s prijemalemi zaradi menjave programa.

Ključne besede: obrez rolic, odpadek, produkt, rezalna postaja.

PLANNING AND CONSTRUCTING DEVICE FOR THE DISPOSAL OF WASTE ON CUTTING STATION

SUMMARY

The existing system for the waste removal at cutting station does not guarantee certain and effective elimination of roll cuts, and for this reason unnecessary expenses are being made. Therefore, it is necessary to replace the existing system for elimination of roll cuts with improved system, which would certainly and effectively remove only the roll cuts and would reduce expenses and increase effectiveness of cutting station. In the thesis the analysis is provided for the existing system for elimination of roll cuts. In the thesis the formation plans and designing of the device are presented, which will ensure more qualitative and more effective way for elimination of its own waste. Performance Evaluation of improved device showed that it is possible quantity of quality products, which inadvertently enter the waste stream, reduced by 0.046 % to 0 % and at the same time reduce the cost of machine parts (by € 44 to € 0) and planned downtime resulting from trade chain to grips with the rotation program.

Key words: roll cuts, waste, product, cutting station.

