

VISOKA GOSPODARSKA ŠOLA

DIPLOMSKO DELO

**RAZVOJ BIOLOŠKE ČISTILNE NAPRAVE BIOMATIC
4-6 PE IN NJENA NADGRADNJA**

**DEVELOPMENT OF BIOLOGICAL WASTE WATER
TREATMENT PLANT BIOMATIV 4-6 PE AND IT'S
UPGRADE**

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POVZETEK

Prebivalstvo je vedno bolj pozorno in osveščeno na področju čiščenja odpadnih voda, saj moramo v Republiki Sloveniji do leta 2017 urediti njihovo odvajanje oz. čiščenje. V diplomskem delu smo si zadali nalogo, da razvijemo in izdelamo lastno tehnologijo čiščenja odpadnih voda iz gospodinjstva z imenom Biomatic. Čistilna naprava Biomatic bo plod lastnega razvoja in izdelave. Čistilno napravo Biomatic smo patentirali na Uradu RS za intelektualno lastnino pod številko 23430. Preverili smo tudi trenutno veljavno zakonodajo na področju malih čistilnih naprav v Sloveniji ter privzete standarde, ki določajo snovanje ter preizkušanje malih čistilnih naprav do 50 PE (SIST EN 12566-1/5). V diplomskem delu je tudi podrobno predstavljena konstrukcijska zasnova tehnološkega modula ter betonskega jaška s krmilno enoto.

Ključne besede: tehnologija čiščenja odpadnih voda, čistilna naprava, jašek, biomasa

ABSTRACT

The general population is increasingly more attentive and aware of the situation in the field of wastewater treatment. This can be attributed to the fact that, in Slovenia, by 2017, the field of wastewater disposal and treatment must be regulated. In the thesis, we have undertaken the task of developing and producing our own household wastewater treatment technology, named Biomatic. The Biomatic wastewater treatment plant is the result of own development and production. Biomatic has already been patented with the Slovenian Intellectual Property Office under no. 23430. We have also reviewed the currently valid legislation in the field of small wastewater treatment plants in Slovenia, and have considered valid standards, which deal with the design and testing of small wastewater treatment plants, with the capacity of up to 50 PU – population units (SIST EN 12566-1/5). This thesis also contains the detailed design of the technology module and the concrete shaft, as well as the controller.

Keywords: wastewater treatment technology, wastewater treatment plant, shaft, biomass.