

## ABSTRACT

The diploma project is designed at 88 pages and carry 41 drawings, 6 tables and graphical part on 3 pages A1.

The main purpose of this diploma project is to design and study a pumping unit for a five-story building. To carry out the analysis of dynamic and static characteristics of the system received at modeling of installation with system of pipelines of the house. The investigated model of the pump installation and pipelines of the house was developed in the Matlab software environment using the blocks of the Simhydraulics package.

To achieve this goal, an analytical review of pumping units, methods of their connection and areas of application, calculated and built a daily schedule of water consumption of a five-story building and based on it designed and selected pumping unit. A model of two parallel centrifugal pumps was developed, and modeling was performed in accordance with the water consumption schedule.

The calculation and implementation of this thesis project was implemented using the packages software: Microsoft Office Word, Microsoft Office Visio and MATLAB.

PUMPING INSTALLATION, FREQUENCY CONVERTER, SMOOTH STARTING DEVICE, PRESSURE, PRODUCTIVITY, PARALLEL CONNECTION OF PUMPS, SIMHYDRAULICPH, HYDRAULIC

					141.61111.019.BP		
		№ of doc.	Sign				
Devel		I. Khudia		Electromechanical automation system of a pumping unit for the five-storey building	L	Page	Pages
Checked		M.Pechechenyk				7	88
N.Contr.					NTUU «Igor Sikorsky Kyiv Polytechnic Institute», <i>FEA</i>		
Approved.		S.Peresada					