

SUMMARY

This diploma project contains 105 p., 26 fig., 7 tabl., 6 folias of graphic part.

In this work description of travelling cranes and requirement is developed to the direct control, the methods of frequency speed control of electric drive system are described. Electro-mechanical system with frequency converter and induction motor is designed. Block diagram of the control system is designed parameters of speed.

A mathematical model with direct torque control is designed. Simulation of the developed electrical drive is carried out to take into account changes of hydraulic resistance, using medium "SIMULINK" software package "MATLAB")

We prove the economic feasibility of using the system. Develop safe methods of operating the system.

Electric drive, structured scheme, functional scheme, principle scheme, automation, electromechanical system, development, power, researching, regulator, simulation.

					141.3215.005.MD			
Изм.	Лист	№ докум.	Подпись	Дата	Direct torque control system in electric drive of bridge crane Summary	Лит.	Лист	Листов
Разраб.		Погромська Н.О.					6	105
Провер.		Пушкар М.В						
Реценз.								
Н. Контр.								
Утверд.		Пересада С.М.				КПІ, ФЕА, гр. ЕП-з71мп		