

## **Abstract**

In the master's thesis developed an automated system for control and protection worm machines for manufacturing blanks bead rings in the manufacture of pneumatic tires as in the operating mode of the machine, and during its re-launch. Considered in detail the principle of the extrusion unit for gumming VA90 steel cord, its functional circuit diagram of automation and speed control worm. The effectiveness of the system with PID regulator approved in terms of current production, particularly in PJSC "Rosava", which specializes in manufacturing pneumatic tires wide range. Also in a master's dissertation the question of accident prevention is considered on the production of aquafortis.

A master's dissertation contains an explanatory message by volume of 89 pages.

An explanatory message contains 21 pictures, 6 tables, 6 additions and 14 literary source.

Keywords: The pneumatic tyre, metal cord, rubber coating, the screw machine, the starting period, mathematical model, static characteristics, dynamic characteristics, channel disturbances.