

## SUMMARY

UDK 621.941

**Subject:** Development of the adaptive control precision heavy lathe model 1K665F3

Antoniv V.M. Development of the adaptive control precision heavy lathe model 1K665F3 / V.M. Antoniv. – Ternopil: TNTU, 2014. – 156 p.

**Objective:** Increase precision machining on heavy lathes based on research contribution of different factors to balance errors during processing on the machine

**Object of research** - the processing to heavy lathe

**Subject of research** - control various parameters of the technological system that determine the precision of.

In this paper a review and analysis methods to improve the accuracy of processing heavy machines. The influence of various parameters of technological system for precision machining. Your best option is a managed IT system. Investigated heterogeneity thermal field frame heavy lathe finite elements. A structural scheme of the adaptive control.

**Key words:** machine tools, error, deflection sensor carriage, parameters of accuracy, adaptive control accuracy, drive.