SUMMARY

Solian Pavlo Petrovych. Nonrigid helical work pieces boring process research on lathes. Master thesis contains 135 pp, 31 figures and bibliography of 64 titles. The graphic part comprises 10 drawing sheets.

The goal of research is to increase the quality of nonrigid helical work pieces manufacturing by setting rational loading parameters of boring process on lathes.

The master thesis deals with:

- technique and methods review of existing nonrigid helical work pieces and their field of use, the accuracy technical requirements are given ;
- existing methods review of nonrigid helical work pieces forming and turning;
- the mathematical model of law rigid helical work pieces boring process as well as the dynamical model of inner diameter nonrigid helical work pieces boring process are developed;
- the experimental results of boring process loading characteristics are analyzed;
- the equipment and manufacturing accessories of nonrigid helical work pieces boring process are given.

Key words: NONRIGID HELICAL WORK PIECES, BORING, LOADING PARAMETERS, QUALITY IMPROVEMENT