

## **Abstract**

Patent-informative researches automatic replacement of tools with the development of database modules / Master's Thesis. Roman V. Ivanishiv . Ternopil Ivan Pul'uj National Technical University, Faculty of Engineering and Food Technology, Department of designing machines tools and machines, group HVm-51.: TNTU, 2015.

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Master's thesis consists of introduction, 10 chapters and key findings placed on pages 223, 102 figures and 25 tables on 57 pages, list of references with names 66 on 6 pages and applications on 5 pages. Only 234 pages.

The aim is to assess the state of automatic replacement of multipurpose machines and tools to develop a database of modules.

Object of study - the automatic replacement of tools as a complex technical system.

Subject of research - functional and structural contiguity interchangeability of modules groove.

Method study - systems theory, methods of statistical processing.

In this thesis work Master the basic design of automatic replacement instruments held their detailed analysis. The technological process of manufacturing parts building «Carter A31.18.014». Done design executive units, multi-machine. A database «Modules automatic replacement tool». Solved the question of the feasibility adopted technical solutions. Also disclosed issues of safety and security of human life, proposed measures to address the harmful effects of machine tool environment.

Keywords: multi-purpose machine, the automatic replacement of tools, calculation, database.