# ABSTRACT

Thesis: 83 pages, 23 drawings, 14 tables, 37 references.

Aim: study the influence of process parameters on the magnetic properties of ferrites derived from waste metal.

Research methods: microstructural, X-ray, measuring the magnetic properties of ferrites.

Research object: material derived from the dust generated during grinding and cutting of carbon steels and sucked air purification system and accumulates on the bag filters.

Scientific novelty: Found that using magnetic separation, additional oxidation original powder waste and changing sintering temperature can be controlled phase composition, density compacts and sintered samples and their magnetic properties in order to obtain high-quality cores.

Practical meaning: the possibility of using waste metal in powder metallurgy to produce products with high efficiency and quality indicators.

Keywords: WASTE METAK, SECONDARY ROW, FERRITE, MAGNETIC PROPERTIES