

## ABSTRACT

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In this paper we present an overview of the current state of the theory and technology of obtaining TiN coating. The influence of nitrogen medium and spray modes on the structure and properties of the obtained coatings was investigated.

The purpose of the work is to study the spray modes on the formation of structure and mechanical properties.

Research methods:

- research of microstructure;
- research of microhardness;
- research of friction resistance.

In the work the process of formation of microstructure and mechanical properties, depending on the modes of spraying, is investigated.

It has been established that with increasing spray time of up to 15 minutes, the structure becomes more qualitative, and the number of defects on the spray surface decreases, and as a result the numerical parameters of the microhardness of the coating increase.

Key words: NITRID TITAN, COATING WRAPPING, WASHING TIME, NITROGEN ENVIRONMENT.