

Project name:	Investigation of the boronizing kinetics of alloy steels
Description:	The aim of the project is to extend the knowledge about boronizing by investigating the influence of the chemical composition of alloy steels and the boronizing parameters on the growth kinetics and the morphology of the resulting layers. Estimating these relationships would make it possible to optimise the boronizing process, as the parameters of the process could be determined in advance based on the desired layer properties.
Webpage:	
Source of finances:	University of Slavonski Brod
Beneficiary:	University of Slavonski Brod
Partners:	
Project budget:	2.650,00 EUR
Duration:	1. 10. 2023. – 30. 9. 2024.
Location:	Slavonski Brod
Target groups:	Mechanical faculty in Slavonski Brod, University of Slavonski Brod, scientific research community, companies engaged in the production / application of tools and other parts that are exposed to wear
Objectives:	<ul style="list-style-type: none"> - Estimation of the values of the activation energy and the frequency factor for the boronizing and investigation of their dependence on the chemical composition of the steel - Determination of whether there is a functional dependence between the boronizing parameters and the morphology of the obtained layers. - Investigation of the dependence of the change in the volume fraction of the boride phase in the layer cross-section on the boronizing parameters and the chemical composition of the steel - Estimation of mathematical models that show the functional relationship between the properties of the boride layer, the boronizing parameters and the steel grade