

III INTERNATIONAL WORKSHOP
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«III International Workshop on Advances in Materials Science – AMS-III - 2021»

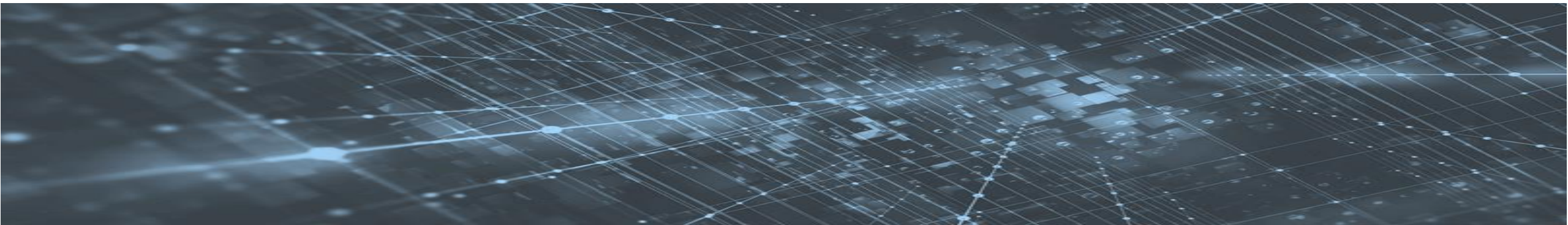
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«Application Of Metal Powders To Bronze Bushings»

Pavel Golinitiski, Galina Temasova, Uliana Antonova, Elmira Cherkasova and Julia Vergazova

Problem statement

- To restore bushings made of bronzes, it is proposed to use a combined method, which consists in crimping the bushing in order to reduce the inner diameter to compensate for wear and subsequent processing and applying metal powders based on iron and nickel by the method of electrical contact welding on the outer surface



Solution methods

- On the basis of the analysis and installation experiments, bushings made of bronze were selected, for welding, two powders were selected containing refractory components, one with a nickel base, the second powder with an iron base.



Conclusions

Results, implementation

- As a result of the research carried out, it was found that for a nickel-based powder, the best quality indicators are achieved at a welding temperature of 1160 ° C, and for an iron-based powder, the best indicators are achieved at 1280 ° C with an exposure time of 100 seconds at 1100 ° C.

Contacts

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