

## BECTHIK

## ГОМЕЛЬСКОГО ГОСУДАРСТВЕННОГО ТЕХНИЧЕСКОГО УНИВЕРСИТЕТА ИМЕНИ П.О. СУХОГО

НАУЧНО-ПРАКТИЧЕСКИЙ ЖУРНАЛ ИЗДАЕТСЯ С МАРТА 2000 г.

ВЫХОДИТ ЧЕТЫРЕ РАЗА В ГОД

3(30)′ 2007

## CONTENTS

Mechanical engineering and theoretical engineering	
Vereschaguin M. N., Zapouskalov N. M., Agounovich I. V. The Formation of a Contact Surface of Frozen Metal in the Process of Two-Roll Melt Fast	
Hardening	3
Kovenya A. S., Bosiakov S. M. Employing Functional Resources of Finite Element Software Packages for Modeling and Designing Network Structures	10
Demidchik A. V., Shepelevich V. G. Super Fast Hardening	
of Bismuth –Antimonous Alloys by Spinning and Rolling	17
<b>Popov V. B.</b> The Formation of a Functional Mathematical Model of a Plant Mass Crushing Mechanism	24
Strickel N. I., Liskovich M. I. Stand for Antifriction Bush Testing	31
Ginzbourg A. A., Pinchouk V. V. The Criteria of Selecting the Parameters of Hydraulic Drive Actuators Adaptable for the Load	38
Ginzbourg A. A., Pinchouk V. V. The Comparison of the Efficiency of Throttle Governing of Hydraulic Drive Actuator Speed at Parallel and Series Throttle	
Arrangement	45
Ostricov O. M. Some Properties of Electrolytically Precipitated Amorphous Films of Ni-W Alloys	
Mezhennaya O. B. Improving the Shape and the Definition of Dimensions of Jet Devices Forming a Stretched Water Veil	59
Kamko A. I. The Method of Antifriction Layer Forming on Working Surfaces	
of Articulated Joint	66
Power engineering	
Choubricov L. G. Converting Units	75
Fikov A. S., Borsouk S. V. Regarding Climatic Conditions of the Republic of Belarus for Electric Power Consumption Predicting and Standardization	
at Oil Pipe-Line Transport Enterprises	83
Kouznetsov A. P., Markov A. V., Alqatawneh H. A. Fast Acting Synchronization Systems with Small Increment Output Signal	91