
Contents

Preface	5
Paweł Łojek, Ireneusz Czajka	
Analysis of applicability of flow-acoustic coupling used for pressure measurement	7
Adam Kalwar, Krzysztof Pytel, Franciszek Kurdziel, Grzegorz Grzywnowicz, Uliana Marikutsa	
Analysis of external factors that affect availability of gas engines	17
Adam Kalwar, Krzysztof Pytel, Franciszek Kurdziel, Grzegorz Grzywnowicz, Mykhailo Melnyk	
Analysis of methane as energy fuel – operational issues	23
Franciszek Kurdziel, Krzysztof Pytel, Adam Kalwar, Grzegorz Grzywnowicz, Andriy Zdobytskyi	
Analysis of compressor units – operational issues	31
Mykhaylo Lobur, Franciszek Kurdziel, Krzysztof Pytel, Adam Kalwar, Grzegorz Grzywnowicz	
Analysis of processes that take place in absorber of absorption chiller	39
Vatally Mazur, Sofiia Panchak	
Control system for experimental model of robotic mobile platform with manipulator	45
Roman Musii, Nataliia Melnyk, Uliana Zhydyk, Mykhaylo Melnyk, Oksana Oryshchyn, Krzysztof Pytel	
Determination of thermal-stressed state of inhomogeneous orthotropic cylindrical shell under thermal heating	55
Zinoviy Stotsko, Tetyana Stefanovych	
Development of algorithmization bases for jet treatment evaluation modes of product curvilinear surfaces	67

Andriy Holovatyy, Roman Panchak, Mykhaylo Lobur	
Development of microcontroller-based temperature and humidity data logger	77
Radosław Ptak, Krzysztof Kołodziejczyk	
Numerical tests of the power coefficient the VAWT with ODGV	85
Andrzej Łukaszewicz, Grzegorz Skorulski, Mykhaylo Melnyk, Andriy Kernytskyy, Andriy Zdobytyskyi, Kostyantyn Kolesnyk	
Engineering drawing education using CAD tools.....	95
Dawid Nowicki, Katarzyna Suder-Dębska, Ireneusz Czajka	
Concept of using unmanned aerial vehicles to locate pollution in industrial area	103
Grzegorz Skorulski, Andrzej Łukaszewicz	
Numerical analysis of cold extrusion of tubes using CAx system	113
Petro Kosobutskyy, Andriy Zdobytyskyi, Uliana Marikutsa, Mykhaylo Melnyk, Marek Iwaniec	
Probabilistic modeling of mechanical cantilever oscillator fluctuation	121
Roman Musii, Nataliia Melnyk, Khrystyna Drohomiretska, Valentyn Shynder, Liubomyr Hoshko, Marian Banaś	
Thermomechanical behavior of two-layer orthotropic cylindrical shell with local convective heat exchange with external environment	133
Krzysztof Pytel, Andriy Zdobytyskyi, Mykhailo Lobur, Roman Panchak, Anna Hnatiuk	
Topology optimization parameters of blades of wind turbines	145
Andriy Zdobytyskyi, Uliana Marikutsa, Mykola Khranovskyi, Vladyslav Yusiuk	
Ways to increase efficiency of lidar scan system of three-dimensional objects.....	155