

# CONTENTS

**Mikhail Doudkin, Alina Kim, Murat Sakimov**

Mathematical and experimental study of deformations of a steel roll of a road roller with a variable geometry of a contact surface .....	1
--	---

**Michal Schmid**

Windshield Defrost Simplified CFD Model .....	8
---	---

**Andrzej Pacana, Karolina Czerwińska**

Analysis of the causes of control panel inconsistencies in the gravitational casting process by means of quality management instruments .....	12
---	----

**Gheorghe Cristian Popescu**

Agricultural knowledge transfer: A case study for small farms and young farmers' beneficiaries of European funds .....	17
--	----

**Ruth April A. Labajan, Pisut Koomsap**

Customer Journey Clue-based Service Failure Prevention .....	21
--	----

**Andrej Lisec, Klemen Lisec, Matevž Obrecht**

Cost and Safety Aspects of Using Electric and Hybrid Vehicles in Local Food Supply Chain .....	35
--	----

**Dušan Gaňa, Tatiana Liptáková, Lenka Markovičová**

Comparison of the properties of the original and applied LDPE foils in returned bottles .....	39
---	----

**Viera Zatkalíková, Lenka Markovičová**

Influence of temperature on corrosion resistance of austenitic stainless steel in Cl <sup>-</sup> containing solutions .....	43
--	----

**Aneta Gądek-Moszczak**

The impact of the resolution of the measured object on the assessment of its perimeter .....	47
--	----

**Martin Vicen, Jozef Bronček, František Nový**

Investigation of tribological properties of CarbonX coating deposited on 100Cr6 steel .....	52
---	----

**Michalene Grebski, Wes Grebski**

Project-based Approach to Engineering Technology Education .....	56
--	----

**Radomila Konečná, Denisa Medvecká, Gianni Nicoletto**

Structure, Texture and Tensile Properties of Ti6Al4V Produced by Selective Laser Melting .....	60
--	----

### **Editor' office**

Department of Production Engineering and Safety,  
Faculty of Management, Czestochowa University  
of Technology

### **Publisher**

Printing House The Managers of Quality and Production  
Association  
(Oficyna wydawnicza Stowarzyszenia Menedżerów  
jakości i Produkcji)

### **EDITOR-IN-CHIEF**

Robert Ulewicz (PL)

### **VICE EDITOR-IN-CHIEF**

Branislav Hadzima (SK)

### **SCIENTIFIC THEMATIC EDITOR**

#### **Materials engineering**

Otakar Bokůvka (SK)  
Ružica Nicolíć (SRB)  
Mario Guagliano (ITA)

#### **Advanced Technologies**

Jiri Kliber (CZ)  
Michał Szota (PL)  
Richard Vlosky (USA)

#### **Quality systems**

Juhani Anttila (FI)  
Denis Jelačić (HR)

#### **Intellectual potential management in production engineering**

Martina Blašková (SK)  
Joanna Paliszkievicz (PL)

#### **Total production maintenance**

Tamer Rızaoğlu (TR)

#### **Safety systems**

František Nový (SK)  
Andrzej Pacana (PL)

### **TECHNICAL EDITORS**

#### **English language editor**

Marlin Dyason (UK)  
Agnieszka Pyziak (PL)

#### **Statistical editors**

Jacek Pietraszek (PL)

#### **Technical editors**

Marek Krynke (PL)  
Krzysztof Knop (PL)

### **SCIENTIFIC BOARD**

Adam Torok (HU)	Mario Guagliano (ITA)
Ahmet AK (TR)	Marlin Dyason (UK)
Antonio José Balloni (BR)	Martina Blašková (SK)
Antonio Márquez Prieto (ES)	Michael Wenz (USA)
Atul B. Borade (IN)	Milena Filipova (BG)
Borut Jereb (SLO)	Miroslav Drlić (HR)
Darko Motik (HR)	Mohamed Eldessouki (EG)
Denis Jelacic (HR)	Montalee Sasananan (IN)
Dorota Jelonek (PL)	Otakar Bokůvka (SK)
Eva Schmidová (CZ)	Park, Kyu Yeol (KR)
Evgeny Borisowicz Tsoy (RU)	Paweł Szataiak (PL)
Ferdynand Romankiewicz (PL)	Peter V. Kurenkov (RU)
František Holešovský (CZ)	Pisut Koomsap (THA)
Irene Krebs (DE)	Radosław Wolniak (PL)
Iuliana Cenar (RO)	Renata Stasiak-Betlejewska (PL)
Jacek Pietraszak (PL)	Richard Vlosky (USA)
Jacek Selejdak (PL)	Robert Ulewicz (PL)
János Takács (HU)	Ruzica Nikolić (SRB)
Jiri Kliber (CZ)	Tamer Rızaoğlu (LV)
Juhani Anttila (FI)	Tatiana Čorejová (SK)
Kanchana Sethanan (Thai)	Tatjana Volkova (LT)
Maj Kappagomtula (IN)	Wensheng LI (CHN)
Maria Popa (RO)	Witold Biały (PL)

### **LIST OF REVIWERS**

Abdelbadeeh Salem (EGY)	Kot Sebastian (PL)
Benes Libor (CZ)	Kotus Martin (SK)
Bitniowska Agnieszka (PL)	Kuzel Robert (PL)
Blikharsky Zinowiy (UKR)	Lermont Radim (CZ)
Brozova Silvie (CZ)	Lipiński Tomasz (PL)
Brzeziński Stanisław (PL)	Michalak Aneta (PL)
Dudek Agata (PL)	Pribulova Alena (SK)
Dunay Anna (HU)	Radek Norbert (PL)
Grabara Janusz (PL)	Rozak Marek (PL)
Hassan Momeni (NOR)	Supapan Chairapat (THA)
Huynh Trung Luong (THA)	Szchmidova Eva (CZ)
Hys Katarzayna (PL)	Szmidla Janusz (PL)
Illés Bálint Csaba (HU)	Ślusarczyk Beata (PL)
Ingaldi Manuela (PL)	Tilova Eva (SK)
Jonek-Kowalska Izabela (PL)	Ulewicz Małgorzata (PL)
Klimecka-Tatar Dorota (PL)	

### **EDITOR**

#### **Editor's address:**

Katedra Inżynierii Produkcji i Bezpieczeństwa, Wydział Zarządzania,  
Politechnika Częstochowska, Al. Armii Krajowej 19B, Poland  
tel. +48 34 3250 333  
e-mail: journalarchive@qpij.pl

Nakład 350 egz.