

CONTENTS

Roman BAMBURA, Erika SUJOVÁ, Miroslav DADO EVOLUTION AND INTEGRATION OF DIGITAL TWIN	8
Miroslava BARBUŠOVÁ, Iveta MEDVECKÁ, Radovan SVITEK APPLICATION OF THE TCO METHOD IN THE ASSESSMENT OF INVESTMENT VARIANT COSTS	12
Eleonóra BIGOŠOVÁ, Ľuboslav DULINA, Blanka HORVÁTHOVÁ DIERS SYSTEM AS A NON-RADIATIVE WAY TO DIAGNOSE THE SPINE	16
Tomasz BOROWY, Dariusz PLINTA MEASUREMENT SYSTEM ANALYSIS FOR VARIABLE DATA	20
Monika BUČKOVÁ, Miroslav FUSKO, Pavol PODHORA COMPUTER SIMULATION OF ENERGY CONSUMPTION	24
Monika BUČKOVÁ, Dariusz PLINTA, Gabriela GABAJOVÁ SMART INDUSTRY TRENDS	28
Łukasz BYRDY, Dariusz WIĘCEK ANALYSIS OF PRODUCTION TECHNOLOGY FROM THE POINT OF VIEW OF COST	32
Paweł FURDYGIEL, Dariusz PLINTA SUPPORTING TOOLS FOR WAREHOUSE PROCESSES	36
Beáta FURMANNOVÁ, Radovan FURMANN, Michal MAJOR LEARN FROM NATURE	40
Miroslav FUSKO, Monika BUČKOVÁ, Arkadiusz GOLA KEY CONCEPTS OF MAINTENANCE IN INDUSTRY 4.0	44
Miroslav FUSKO, Miroslav RAKYTA, Milan EDL PREDICTIVE MAINTENANCE 4.0	48
Aleksandra GREŃ, Paweł ZAZIEBŁO THE USE OF PARETO ANALYSIS IN ORDER TO INCREASE THE EFFECTIVENESS OF MACHINES	52
Mária HALADOVÁ, Lucia STUPAVSKÁ, Miloš ČAMBÁL MOTIVATION IN CONTEXT OF GENERATIONS	56

CONTENTS

Róbert HODOŇ, Róbert ŽALMAN, Andrej ŠTEFÁNIK THE BENEFITS OF EMULATION IN LOGISTICS SYSTEM	60
Blanka HORVÁTHOVÁ, Martin GAŠO, Eleonóra BIGOŠOVÁ IS ERGONOMIC REALLY ERGONOMIC? - MARKET INVESTIGATION OF ERGONOMIC CHAIRS	64
Marta KASAJOVÁ, Milan MARTINKOVIČ, Vladimíra BIŇASOVÁ INNOVATION IN TEAMWORK	68
Marek KLIMENT, Peter TREBUŇA, Richard DUDA VERIFICATION OF MACHINE MODIFICATION IN PRODUCTION PROCESS WITH SOFTWARE MODULE TECNOMATIX PLANT SIMULATION	72
Lucia KOVÁČOVÁ, Peter BUBENÍK, Juraj ČAPEK KNOWLEDGE USE IN COMPANY PERFORMANCE EVALUATION SYSTEM	76
Jiří KYNCL, Martin KYNCL, Tomáš KELLNER CONCEPT OF MANIPULATION WITH REFRACTORY PRODUCTS	80
Marta POMIETLORZ-LOSKA DESIGNING HUMANIZED FORMS OF WORK ORGANIZATION ON THE EXAMPLE OF THE MAINTENANCE EPARTMENT	84
František MANLIG, František KOBLASA, Radek VOTRUBEC THE INFLUENCE OF SENZOR POSITION ON AGV DRIVING PROPERTIES	88
Martin MARSCHALL, Branislav MIČIETA, Radovan SKOKAN LAYOUT OF WAREHOUSE OF MODULAR PLATFORMS IN RECONFIGURABLE MANUFACTURING SYSTEMS	92
Milan MARTINKOVIČ, Branislav MIČIETA, Vladimíra BIŇASOVÁ HUMAN-ROBOT COOPERATION IN ASSEMBLY PROCESS	96
Štefan MOZOL, Milan GREGOR, Marek SCHICKERLE THE USE OF THE STATISTICAL RESULTS OF TECNOMATIX PLANT SIMULATION FOR THE PURPOSES OF DETERMINING THE OPTIMUM MANUFACTURING BUFFER CAPACITY	100
Miriam PEKARČÍKOVÁ, Peter TREBUŇA, Marek KLIMENT CREATING PRODUCTION MODEL USING VALUE STREAM MAPPING TECHNIQUE IN SOFTWARE TECNOMATIX PLANT SIMULATION	104

CONTENTS

Radovan SKOKAN, Martin KRAJČOVIČ, Martin MARSCHALL IMPLEMENTATION OF THE DIGITAL TWIN CONCEPT IN DESIGNING OF MANUFACTURING SYSTEMS.....	108
Lucia STUPAVSKÁ, Mária HALADOVÁ, Miloš ČAMBÁL OPTIMIZATION OF THE PRODUCTION PROCESS.....	112
Radovan SVITEK, Martin KRAJČOVIČ, Miroslava BARBUŠOVÁ CEIT TABLE, SYSTEM FOR INTERACTIVE EVALUATION AND DESIGN OF PRODUCTION DISPOSITION.....	116
Michala ŠELIGOVÁ, Eva SLAMKOVÁ, Ivana ČECHOVÁ DESIGN OF LOGISTIC SYSTEMS.....	120
Jozef TROJAN, Peter TREBUŇA, Marek MIZERÁK PROCESS DESIGNER AS A TOOL FOR ASSEMBLY LINE DESIGN.....	124
Maria URBAN, František KOBLASA, Jan VAVRUŠKA SIMULATION OF G/M/C/K QUEUEING MODEL FOR PLANING OF E-CARS CHARGING UNITS.....	128
Vladimír VAVRÍK, Milan GREGOR, Patrik GRZNÁR THE SUGGESTION OF METHODOLOGY FOR DESIGNING MANUFACTURING LINES VIA CHARACTERISTICS OF RECONFIGURABILITY.....	132
Richard WROBEL, Peter BUBENIK, Lucia KOVÁČOVÁ IMPROVING BUSINESS PROCESSES IN PRINTING COMPANY BY USING SIMULATION TOOLS.....	136