CONTENTS

Product and Process 1

Assessment of dynamics and risks in supplier selection processes
  Abstract
  Paper

An Integrated Decision Making Framework for Auto-motive Product Development with the Supply Chain
  Abstract
  Paper

An exploration into measurement consistency on coordinate measuring machines
  Abstract
  Paper

Cai model for prismatic parts in digital manufacturing
  Abstract
  Paper

Product and Process 2

Storage pricing and allocation in a Headquarter-managed centralized distribution center
  Abstract
  Paper

3D Digital Reconfiguration of an Automated Welding System for a Railway Manufacturing Application
  Abstract
  Paper

A Novel Product Representation to Highlight Cross-Assembly Dependencies and Product Robustness
  Abstract
  Paper

Evolutionary optimisation of production workflows
  Abstract
  Paper
Product and Process 3

Virtual Reality based Conjoint Analysis for Early Customer Integration in Industrial Product Development

Abstract
Paper

LOPEC – Logistics Personal Excellence by continuous Self-Assessment

Abstract
Paper

Direct toolpath generation based on graph theory for milling roughing

Abstract
Paper

Valuable Use Cases towards a Generic Model of Geo-station Welding

Abstract
Paper

Product and Process 4

Multi-Criteria Assembly Line Design under Demand Uncertainty

Abstract
Paper

Usage of case-based reasoning in FMEA-driven software

Abstract
Paper

A machining feature information model for dynamic manufacturing planning

Abstract
Paper

Low-cost extension of information transparency throughout the product life-cycle via optical identification and quality indication

Abstract
Paper

Light Controlled Factory 1

Identification of Key Temperature Measurement Technologies for the Enhancement of Product and Equipment Integrity in the Light Controlled Factory

Abstract
Paper

Intelligent Composite Layup by the Application of Low Cost Tracking and Projection Technologies

Abstract
Paper

A novel approach for the combined use of AR goggles and mobile devices as communication tools on the shopfloor

Abstract
Paper

Laser Tracker Position Optimization

Abstract
Paper
Light Controlled Factory 2

Comparison of the measurement performance of high precision multi-axis metal cutting machine tools

Abstract
Paper

Simulation of the Laser Beam Melting Process – Approaches for an Efficient Modelling of the Beam-Material Interaction

Abstract
Paper

Short-term cyber-physical Production Management

Abstract
Paper

Dynamic alignment control using depth imagery for automated wheel assembly

Abstract
Paper

Large Volume Metrology Technologies for the Light Controlled Factory

Abstract
Paper

Factory 1

Production Resource Search using the Viral Phenomenon: Concept Introduction

Abstract
Paper

Capacity planning and resource allocation in assembly systems consisting of dedicated and reconfigurable lines

Abstract
Paper

Integration Architecture of Intelligent Maintenance Systems and Spare Parts Supply Chain Planning

Abstract
Paper

Research on Reliability Evaluation of Reconfigurable Manufacturing System

Abstract
Paper

Factory 2

Integrating Pointing Gesture Detection for enhancing Brainstorming Meetings using Kinect and PixelSense

Abstract
Paper

Simulation in Manufacturing: Review and Challenges

Abstract
Paper

Conceptual Design of a Self-Optimising Production Control System

Abstract
Paper
Simulation based-applications (DREAM) 1

Introduction to “Simulation based application Decision support in Real-time for Efficient Agile Manufacturing” – DREAM

Abstract
Simulation based decision support systems: An industrial end-user based requirement gathering process

Paper

Modeling of System Knowledge for Efficient Agile Manufacturing: Tool evaluation, selection and implementation scenario in SMEs

Abstract
Paper

Implementing ManPy, a semantic-free open-source Discrete Event simulation package, in a Job Shop

Abstract
Paper

Simulation based-applications (DREAM) 2

Simulation-based Decision Support Tools for Demand Disaggregation in a Supply Chain characterised by High Routing Flexibility

Abstract
Paper

Information Support and interactive planning in the Digital Factory: Approach and industry-driven evaluation

Abstract
Paper

Test Implementation and Initialisation of a Simulation model using CMSD

Abstract
Paper

From COTS simulation software to an open-source platform: a use case in the medical device industry

Abstract
Paper

Systems, IT and interoperability 1

Information Technology for the Factory of the Future – State of the Art and Need for Action

Abstract
Paper

Interoperability between OPC-UA and AutomationML

Abstract
Paper

Automatic Conformance Test Generation based on a Verified Model of a Bus System Standard

Abstract
Paper

Pattern-based Business Model Development for Cyber-Physical Production Systems

Abstract
Paper
Systems, IT and interoperability 2

Cloud-based Platform to facilitate Access to Manufacturing IT
Abstract
Paper

Cloud-based Auction Tower for Perishable Supply Chain Trading
Abstract
Paper

A solution for information management in logistics operations of modern manufacturing chains
Abstract
Paper

Competences for Cyber-Physical Systems in Manufacturing – first Findings and Scenarios
Abstract
Paper

Product and Process 5

Digital Planning of Harmonised Quality Testing Activities throughout the Product Life Cycle
Abstract
Paper

Process-Oriented Semantic Knowledge Management in Product Lifecycle Management
Abstract
Paper

Towards a PLM interoperability for a collaborative design support system
Abstract
Paper

Factory 3

Towards a role-centric and context-aware information distribution system for manufacturing
Abstract
Paper

Evaluating a prototype approach to validating a DDS-based system architecture for automated manufacturing environments
Abstract
Paper

Optimisation of Weld Seam Configurations Using a Genetic Algorithm
Abstract
Paper

Minimising energy consumption for robot arm movement
Abstract
Paper
Machine availability monitoring for adaptive holistic scheduling: A conceptual framework for mass customization

Engineering innovation factory

Concept of a Failures Management Assistance System for the Reaction on Unforeseeable Events during the Ramp-Up