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Production Planning, Scheduling and SME

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Abstract : Small and medium-sized enterprises (SME) are the backbone of central Europe's economies and have a significant contribution to the gross domestic product. Production planning and scheduling (PPS) is still a crucial element in manufacturing industries of the 21st century even though this area of research is more than a century old. The topic of PPS is well researched especially in the context of large enterprises in the manufacturing industry. However, the implementation of PPS methodologies within SME is mostly unobserved. This work analyzes how PPS is implemented in SME with the geographical focus on Switzerland and its vicinity. Based on restricted resources compared to large enterprises, SME have to face different challenges. The real problem areas of selected enterprises in regards of PPS are identified and evaluated. For the identified real-life problem areas of SME clear and detailed recommendations are created, covering concepts and best practices and the efficient usage of PPS. Furthermore, the economic and entrepreneurial value for companies is lined out and why the implementation of the introduced recommendations is advised.

Keywords: central Europe, PPS, production planning, SME

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