## An ontology-based model for describing processes within a production system under special consideration of a discrete production

by Dipl.-Wirt.-Ing. Christian Kösters

## **Abstract**

The environment, in which companies are operating, has significantly changed during the past few years. Complexity is increasing due to more product-, customer-, supplier- and distribution-channel diversity. Necessarily, the production systems have to be adapted permanently to those new requirements. Therefore the integration of all actors within the production network is needed in order to optimize the ongoing processes.

Mr. Kösters developed a method, that creates the possibility to build up a model of a production system, which will be interpreted unambiguously by all participants. To this end a modeling method is coupled to an expandable ontology, which includes the relevant terms and their meaning in the applicable domain of knowledge. Thereby advantages of methods of modeling and ontologies are united and weaknesses of individual solutions are avoided.