Data-driven Model Development for Quality Prediction in Forming Technology

Abstract:
In this investigation data recorded from a flexible rolling process is processed by data driven methods to develop a quality prediction model for manufactured blanks. A concept for a incremental prediction method is proposed, which takes into account the specific character of the discrete manufacturing process. The method is evaluated based on a data set of process and quality data provided by a test rig. By the example of a specific quality parameter the effectiveness of the proposed method is confirmed. A precise quality prediction model is developed, which predicts the quality value with a high accuracy.

Kongress- / Buchtitel:
15th IEEE International Conference on Industrial Informatics (INDIN)

Verlagsort:
Emden, Germany

Jahr:
2017

Nachgewiesen in:
Scopus; Web of Science

Revied:
ja

Volltext / DOI:
http://doi.org/10.1109/INDIN.2017.8104871

Occurences:
- Hochschulbibliographie > 2017 > Fakultäten > Maschinenwesen > Lehrstuhl für Automatisierung und Informationssysteme (Prof.)
entries: