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## A Machine Learning Approach for Classification of Directional Valve Leakage in the Hydraulic Final Test

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**Abstract :** Due to increasing cost pressure in global markets, artificial intelligence is becoming a technology that is decisive for competition. Predictive quality enables machinery and plant manufacturers to ensure product quality by using data-driven forecasts via machine learning models as a decision-making basis for test results. The use of cross-process Bosch production data along the value chain of hydraulic valves is a promising approach to classifying the quality characteristics of workpieces.

Keywords: predictive quality, hydraulics, machine learning, classification, supervised learning

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