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Predictive Maintenance in Industry 4.0: Current Themes

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Abstract

The Fourth Industrial Revolution (Industry 4.0) has created significant technological growth for manufacturing organizations worldwide, attracting important attention from the research community. Industrial automation and the introduction of smart digital technologies to traditional manufacturing processes has led to a generation of intelligent production methods to engineer smart products. In the last few decades, the term 'maintenance' has evolved with researchers offering various perspectives. The aim of this paper is to identify the issues related to industrial maintenance, uncovering its historical evolution, and providing a perspective for new types of industrial maintenance linked to Industry 4.0.

Keywords: Predictive Maintenance; Industry 4.0; Manufacturing and Production; Intelligent Production; Smart Systems.