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CAD-based Automated Robot Offline-Programming Approach for Disassembly of Electric Vehicle Batteries

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Abstract

Up to this day, robot programming is a time-consuming task. To address this challenge, an approach to automatically program an industrial robot for disassembly is introduced. The relevant information is extracted directly and automatically from a CAD-model of an assembly. Using the manufacturer-independent robot offline-programming software “Octopuz”, several modules are developed to create program blocks for robot programming. A digital twin of a robot cell is created to evaluate the generated programs.

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