

PEP 2016

Design and Model Build-up for CVD device control system modernization

At the work group of surface and materials technology (LOT) a chemical vapor deposition (CVD) device is used for diamond coating of cutting tools. To monitor and control the CVD system more precisely during its operation and produce more repetitive deposition results, an addition control computer has to be connected and mounted onto the current unit group. Therefore the I/O interfaces from the units such as power source, reactor controller, gas sources, and bias voltage source to the control computer are also to be defined. Necessary upgrade list of the system and a schematic model of the reconstructed, connected CVD deposition system are expected as an output of this project.



Work package breakdown:

1. Identification of the existing device for feasibility study.
2. Define an appropriate upgrade of the system, the interface connection in and out the control unit.
3. Set up a CAD model of the modernized CVD system. Optimize the equipment arrangement.

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