ModusCAM Cad-to-Motion

Solidworks Cad-to-Motion path planning tool. This capability allows users to 3D coordinate path plan in a user-friendly setting, while exporting motion files cutting down on set-up time.

Draw motion paths in multiple ways:
- 3D sketch path in space.
- 3D sketch path on a given solid.
- Import 2D files and project on surfaces.
- Select 3D contours for modifications.
- Subtractive manufacturing
- Printing 3D parts with slicing

Additional Features of ModusCAM
1. Capability to assign I/O functions at specific points during the path planning process
2. Capability to assign process speeds at specific points during the path planning process
3. Capability to assign tool orientation and direction with respect to a normal to a surface
4. Capability to assign a range of tool orientation angles to be evenly distributed along the deposition surface
5. Capability to assign lead-in and lead-out planes in order to avoid collision and dictate tool approaches.
6. Import of a 2D structure in .dxf format
7. Capability to project a 2D structure on a 3D solid
8. Capability to see and differentiate: a) active paths, b) passive paths, and c) transition lines necessary for path planning.
9. Capability to adjust deposition geometry such as: a) number of layers, b) U, V distances, etc.
10. Export a .posXML file with position data, kinematic data (velocity), and I/O data. Export format can be adjusted (such as G code) as per customer’s request.
11. Import of scanned data and producing a rendered image.
12. Import coordinate frame information corresponding to the fixture part inside the machine and relating this to the part coordinate frame in ModusCAM.

Integration to existing machinery

This software technology may be integrated to your existing systems built, sold or have purchased. The SolidWorks API may be customized to your motion and contain your tooling process requirements, creating “ease of use” for manufacturing.

With our help and our software, you may control a robotic system.

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