Overview – Introduction to robot offline programming

Wellcome to the AUTOMAPPPS tutorial for faster robot programming / robot offline programming.

About the tutorial videos:

- Left highlight left mouse clicks in red, right mouse clicks in green. As mnemonic device: use the same color coding as in naval position lights.
- Videos are located in youtube. Depending on your browser settings: It can take 3 to 5 seconds untill youtube changes to the high resolution.
- It may be helpfull to simply watch the videos at reduced speed.

The video below introduces you to a unique concept of robot-programming: uncoupling process and robot motions. You will see the main portion of the robot offline programming and simulation task with AUTOMAPPPS software - after the cell is designed. We will show the individual steps in more detail in the following sections, documents and videos. Step by step and section by section / chapter by chapter.

The video is embedded by YouTube and only loaded and played from there when you click on the play button. From then on, the privacy policy of Google applies.

AUTOMAPPPS guides the task of robot offline programming in a structured sequence starting with all that is needed to build up the robot cell (robots, axes, tools..). Then tool-paths are defined, simulated and checked if they are feasible. Next, you assign tool-paths to robots and plan them collision-free and singularity-free to establish an optimal workflow. Finally, you export executeable robot programs. As user, you can follow one step after the other (from top down) in the project-browser.

"Editors" of the robot project-browser

- CAD model editor: import, manipulat and enrich CAD
- Work-piece editor: define CAD models as part you want to treat
- Tool editor: load tool models, creating tool models, parametrizing process simulation
- Robot editor: load new robots
- Obstacle editor: define CAD models as obstacles
- Conveyor editor: define rails, conveyors, auxiliary axes, rotation tables etc
- Scene editor: to construct the robot cells
- Setup editor: to define and simulate tool-paths
- Workflow Editor to simulate,collision-free plan different assigments of tool-paths to different robots / and or different timings - for an optimal robot job.