

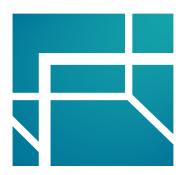
Title: A Reconfigurable robot workCell for fast set-up of

automated assembly processes in SMEs

Acronym: ReconCell

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Executive summary

This deliverable introduces the workcell simulation manual. The manual is an online resource that is integrated into the complete ReconCell user and developer manual available at

http://docs.reconcell.eu/

The parts specific to the workcell simulation can be directly accessed via

http://docs.reconcell.eu/UserManuals/Simulation/index.html

It is separated into four chapters that introduce the basic steps to start the simulation system VEROSIM and provide guidelines for a number of practical applications to design and program the ReconCell system.

The four chapters are

- Getting started,
- Modeling,
- Interface to external tools and
- Practical Applications.

The Getting started section includes the software basics. It is intended as an introduction to the simulation system VEROSIM and its graphical user interface. In addition, the Modeling section introduces the user to the Model Library, essential modeling techniques and the basics about programming the ReconCell system with ActionBlocks. The Interface to external tools section covers the inclusion of the ReconCell ecosystem into a simulation model. The user learns how to call and provide services and how to access configuration data. The last section Practical applications focuses on minimal tutorials and examples. It provides information on how to safely transfer the control from the virtual environment to the physical workcell and how to operate the analysis tools that enable the monitoring tasks. In addition, this section also contains information on accessing the finger design webpage.