

EASY-ROB™ Kernel

„The Robotics Booster for your Application“

You need professional robotics functionality?
The EASY-ROB™ Kernel is the right answer.



Robot Kinematics

- Forward and inverse transformation
- Robot libraries from ABB via Fanuc to Universal Robots and many more
- Positioner, devices and tools are available in an extensive library
- More than 1000 pieces

Advantages

- Integration in technology-based software solutions
- 100% robotics know-how available
- Robot libraries
- Trajectory planning and -execution
- ToolBox - calculation of external axis
- AutoPath™ - collision-free path planning
- Collision detection with tolerances
- Available on Windows® 64-Bit DLL

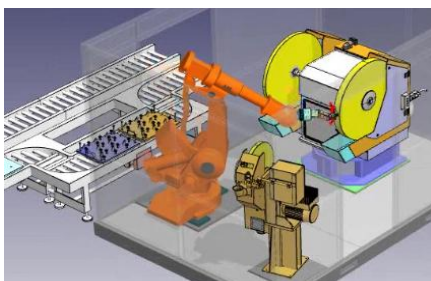
Trajectory planning and -execution

- Motion types: PTP, LIN, CIRC, SLEW
- Jerk free and phase synchronous velocity profile
- Tool- and work piece guided movement (external TCP)
- Synchronization with external axes
- Track motion (LVA), conveyor tracking
- Paint shops, tracking windows
- ToolPath (trajectory) definition
- Automatic reduction of speed, due to singularity
- Cycle time estimation

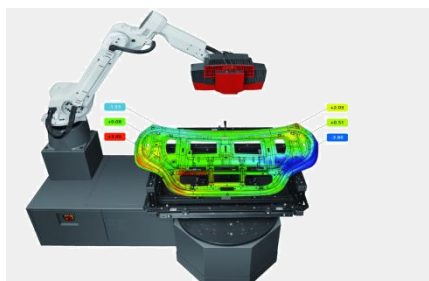
ToolBox - PostProc - AutoPath

- ToolBox - individual customization
- PostProc - API, creates a robot program from a ToolPath
- AutoPath™ - collision-free path planning, use of constraints

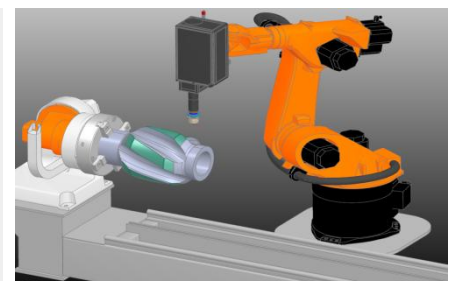
Integration examples



Offline-Programming system
FAMOS robotic®, carat robotic GmbH



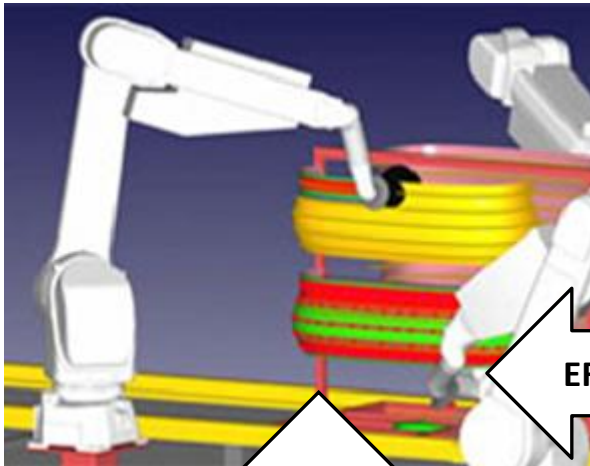
Virtual Measuring Room (VMR),
ATOS Professional, GOM GmbH




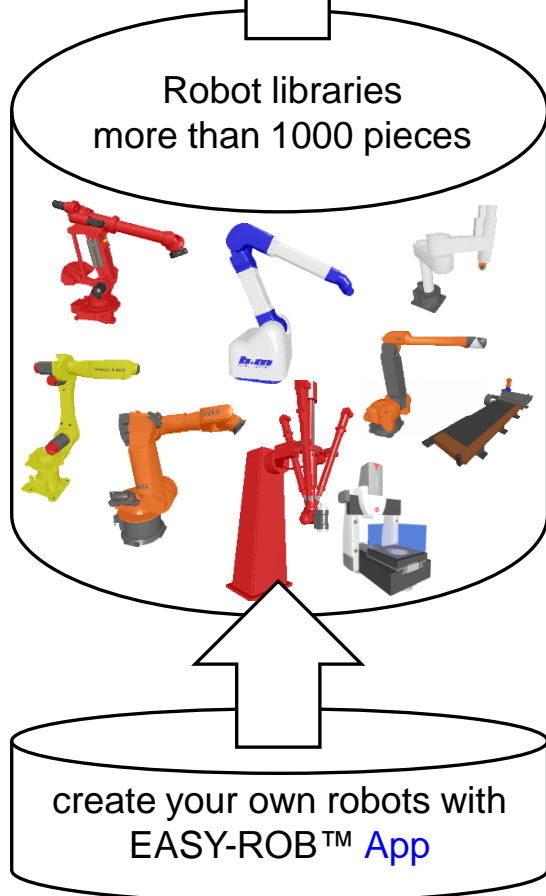
Laser beam cladding
SKM DCAM, S.K.M Informatik GmbH

EASY-ROB™ Kernel

OEM application: technology based software with its own 3D visualization



EASY-ROB™ Kernel	
erk_capi.h erk_capi_types.h EasySimKernelx64.lib EasySimKernelx64.dll EasySimKernel_tboxx64.dll EasySimKernel_apippx64.dll er_wibukeyx64.dll er_codemeterx64.dll  EASY-ROB-Robotics-Simulation-Kernel.chm	



System requirements

- Windows® 64-Bit

Integration

- Detailed Doxygen documentation
- Method class ERK_CAPI
- Programming examples: kinematics, interpolation, ToolPath, AutoPath for Microsoft® Visual Studio C++ development environment

Support

- Support for individual integration and development of software architecture