

EASY-ROB™ Collision

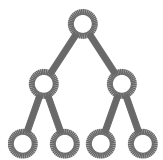
Collision Detection of 3D Objects

The high-performance EASY-ROB™ Collision is used for integration into technology-based software applications. Quickly and accurately check your 3D application for collisions- It doesn't matter how big your models are, you can rely on EASY-ROB™ Collision!



Various Calculation Methods

- Collision Detection
- Clearance
- Distance



Hierarchical Representation

- Intelligent and fast with OBBTree-Tight-Fitting



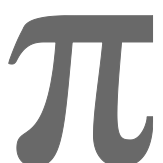
Threadsafe

- Parallel collision test safe on multi-core CPU



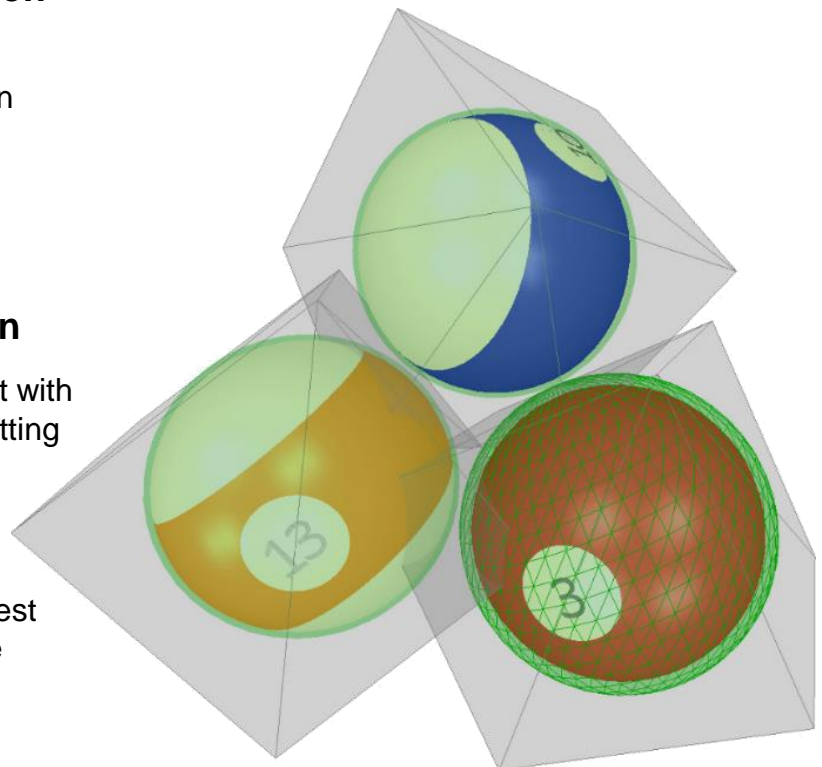
API

- C/C++ and C# Method class ERK_CAPI



Mathematics

- Method class for math. calculations, e.g. of homogeneous matrices



Advantages

- Including various calculation methods
- High performance with low hardware requirements
- Thread safe
- Easy integration into technology-driven software solutions
- Available for Windows® 64-Bit

EASY-ROB™ Collision

Collision Detection of 3D Objects

More than 1000 times in use –

Now finally free available! Thanks to the open software architecture [EROSA](#), EASY-ROB™ Collision is now available.



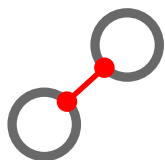
Collision Detection

- Method of whether two triangulated models collide
- Collision detection according to the first colliding triangle pair
- Calculation of all colliding triangle pairs



Clearance

- Checks if two models are closer or further than a defined tolerance distance

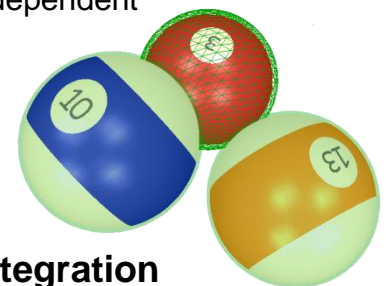


Distance

- Calculates the smallest Euclidean distance between two non colliding models and
- The 2 closest points on the models

Application Possibilities

- Animation and simulation
- Motion planning
- Assembly tests
- Offline programming
- Measurement protocols
- Virtual Prototyping
- Surgical simulation
- Haptic rendering
- Molecular design
- Industry-independent



Integration

- Detailed doxygen documentation
- Programming examples for MS Visual Studio® C/C++ und C#

System requirements

- Windows® 7/ 8/ 10, 64-Bit

Support

- Support for individual integration

More modules available:

- EASY-ROB™ [VISU](#)
- EASY-ROB™ [3D-PDF Export](#)
- EASY-ROB™ [RobLibs](#)