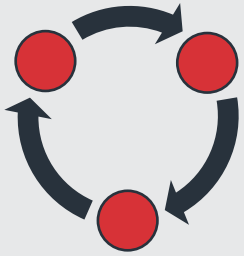
PathFinder

ADVANTAGES

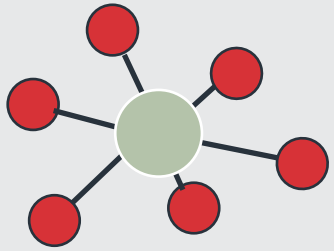
SAVE TIME & MONEY

- Up to **90 % less production downtime**
- Parts programming on a PC without interrupting ongoing welding cycles
- Significantly faster programming due to intelligent functions



SIMULATE & OPTIMIZE

- Accurate representation of the physical plant
- Automatic collision detection
- Precise determination of cycle times
- Easy process optimization



COMPATIBLE

- Program code generation compatible to the most common robot brands
- Low variance in the operation of different robot systems
- Wide range of compatible CAD formats

Virtual twin

PERFECT MATCH

between virtual and physical system

PROCESS SIMULATION

Realistic simulation of the complete process flow, optimal for process optimization and determination of cycle times

FUNCTIONS

AUTO SEAM
Auto-detection of weld seams

TORCH ANGLES
Auto-detection of weld seams

PATH CLONING
Copying, linking, grouping, mirroring of welding paths

PATH ADJUSTMENT
Manual fine-adjustment of the generated welding path

CAD IMPORT
Import parts as 3D CAD model

MULTI-PASS
Multi-pass welding and easy layer creation

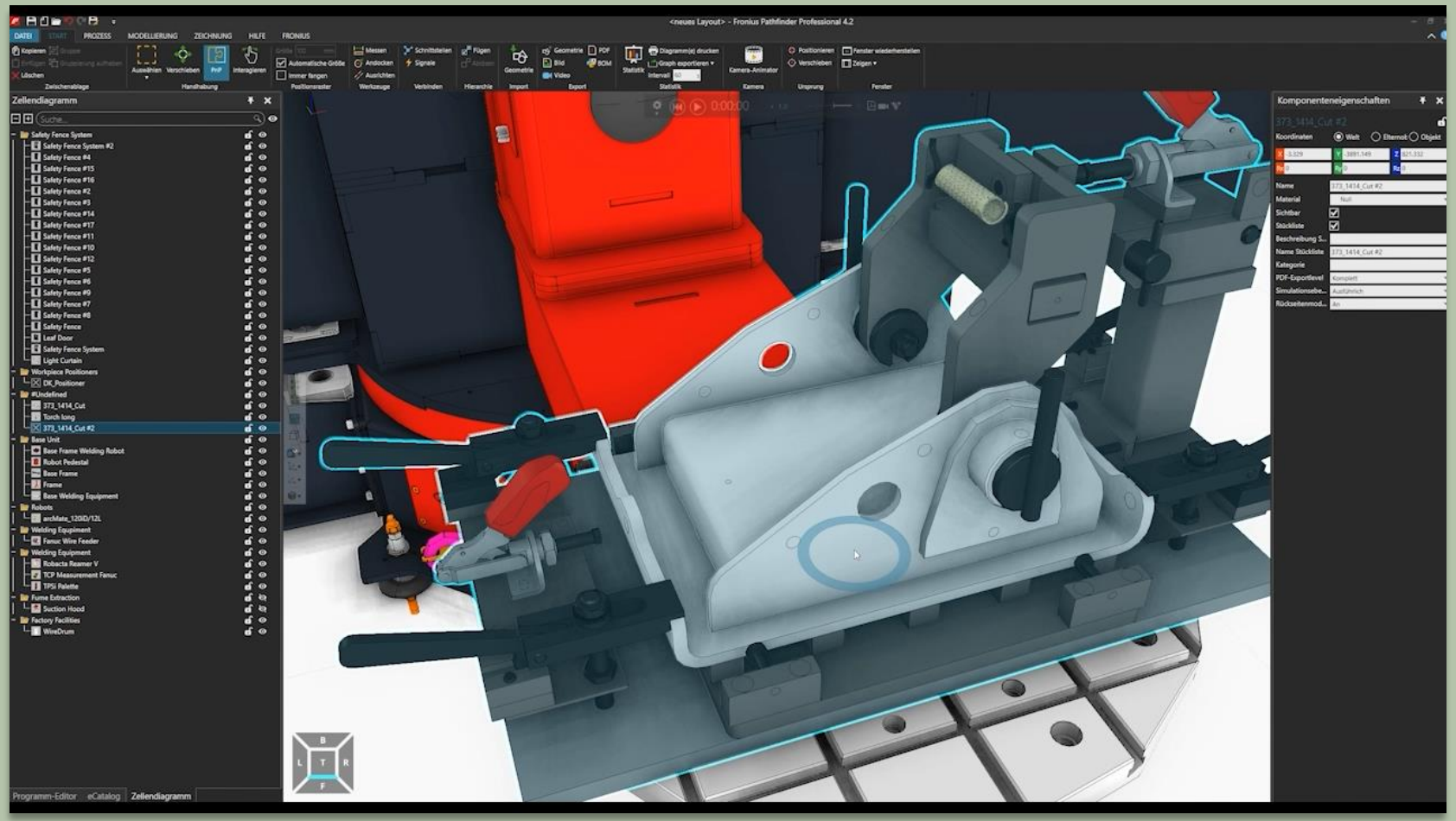
EXTERNAL ROBOT AXES
Interaction with external robot axes (positioners, etc.)

SIMULATON
Determination of cycle time, automatic collistion detection, ….

AUTO SEARCH
Auto. search-path creation

POST PROCESSING
Program code generation for the most common robot brands

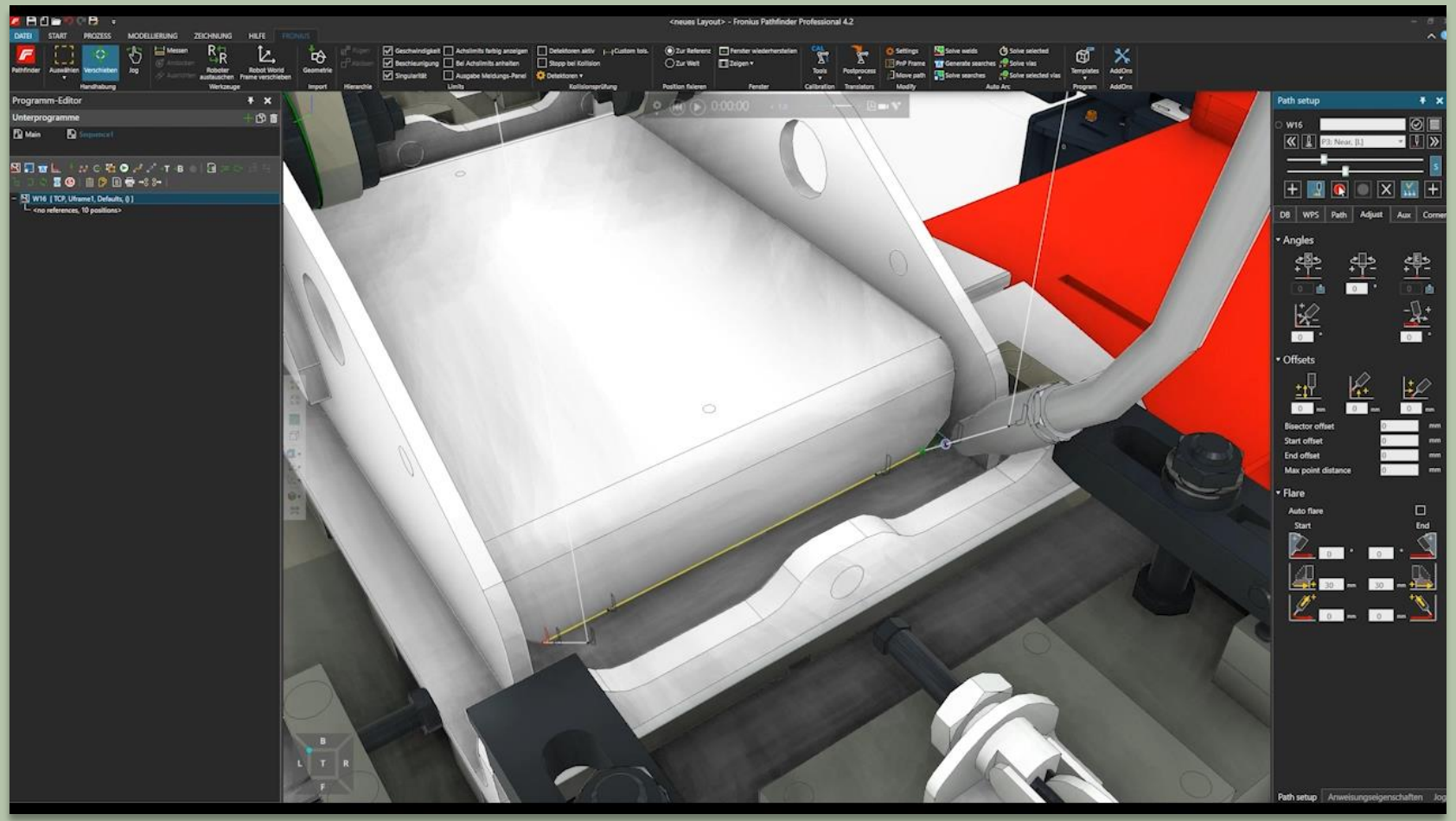
3D CAD import



CAD data import

- Import parts data as 3D CAD model
- Support of the most popular file formats

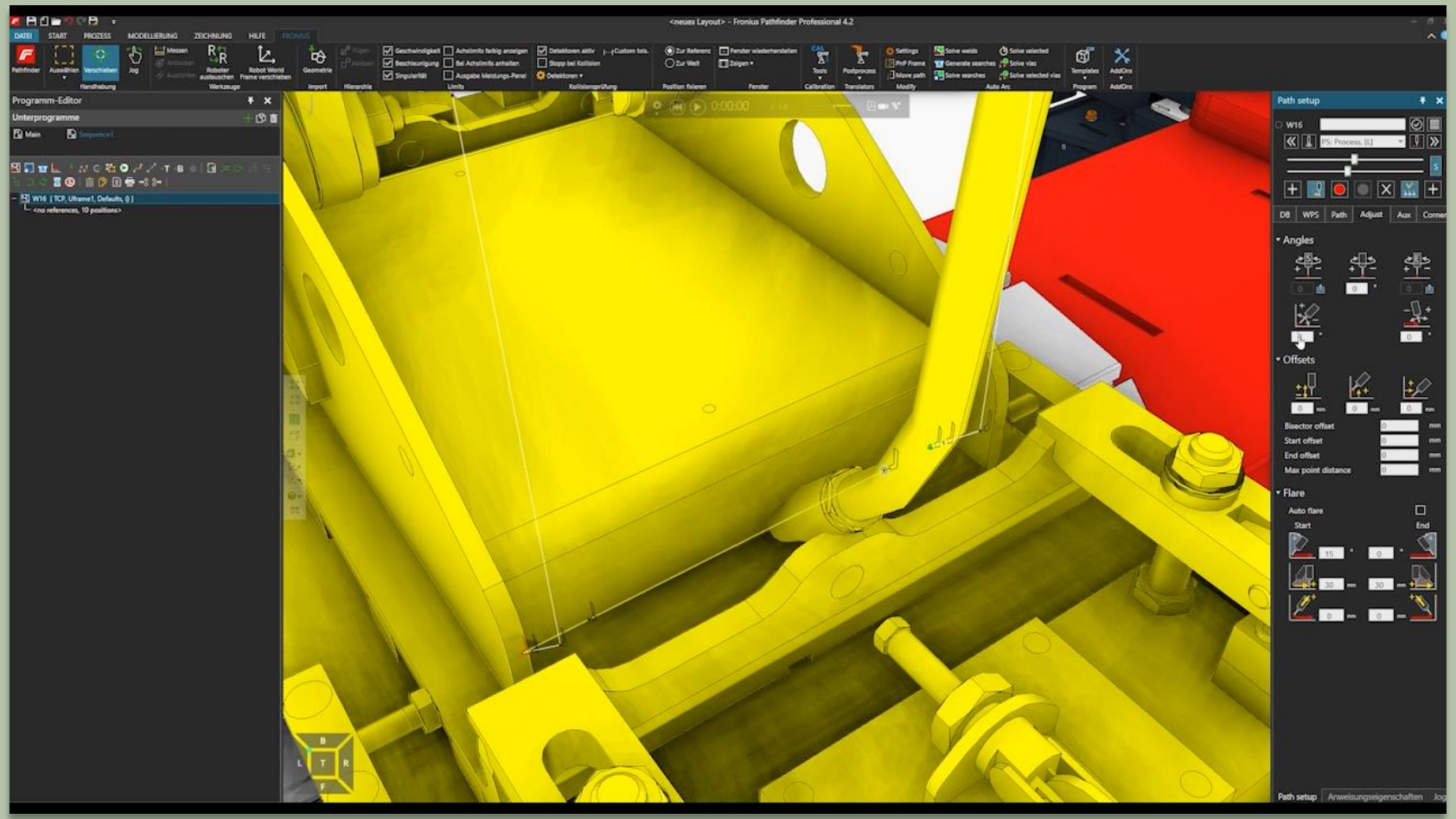
Auto seam



Auto seam

- Automatic seam detection
- Multirun management
- Path-check: Check of axis limits and singularity issues

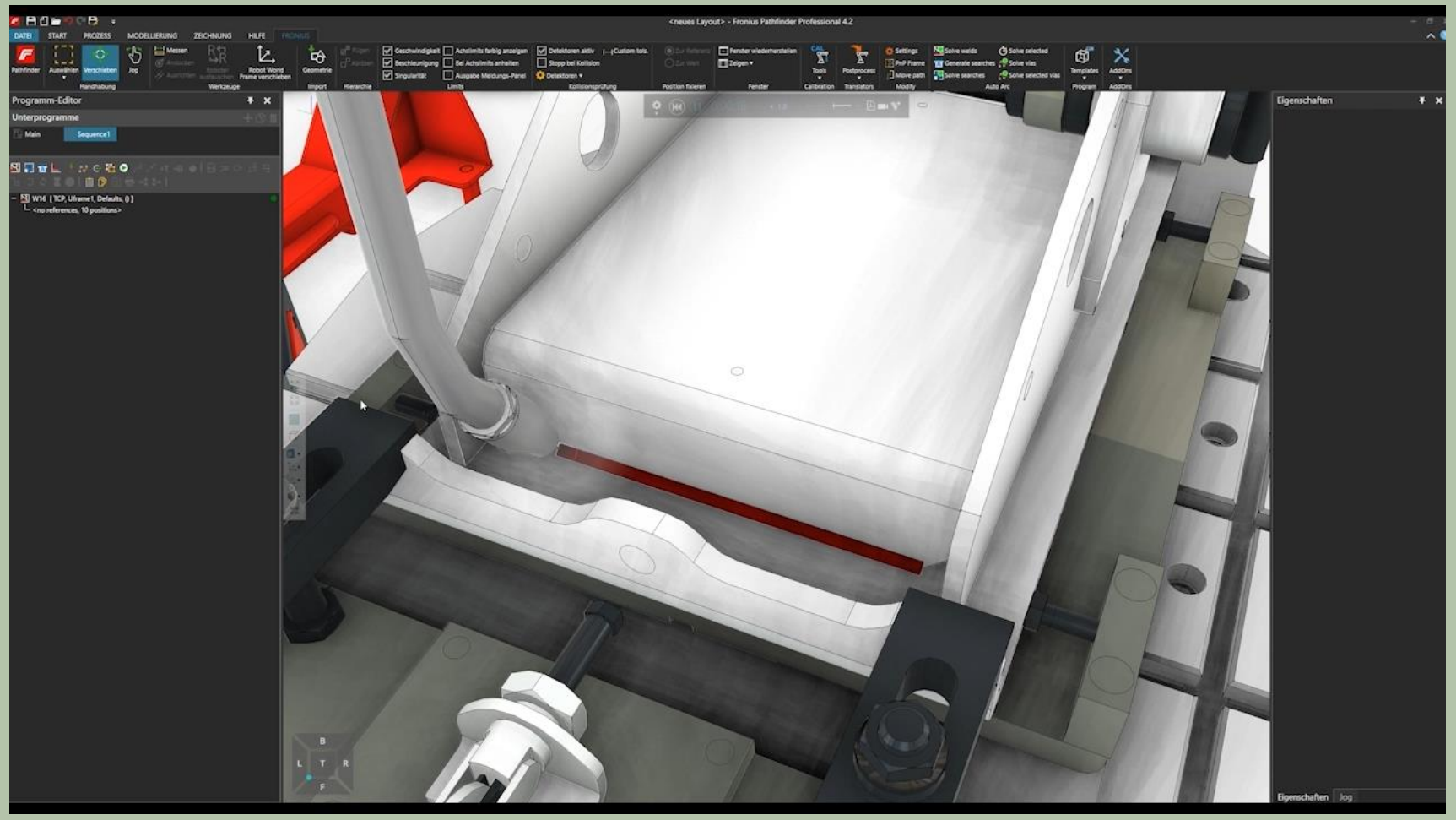
Collision detection



Collision detection

- Automatic detection of collisions and axis limits
- Easy adjustment / correction of the torch angle

Simulation



Simulation

- Effective and fast simulation of the created welding program
- Determination of cycle times
- Offline process optimization

Generate / export robot programs

COMPATIBLE WITH THE MOST COMMON ROBOT BRANDS

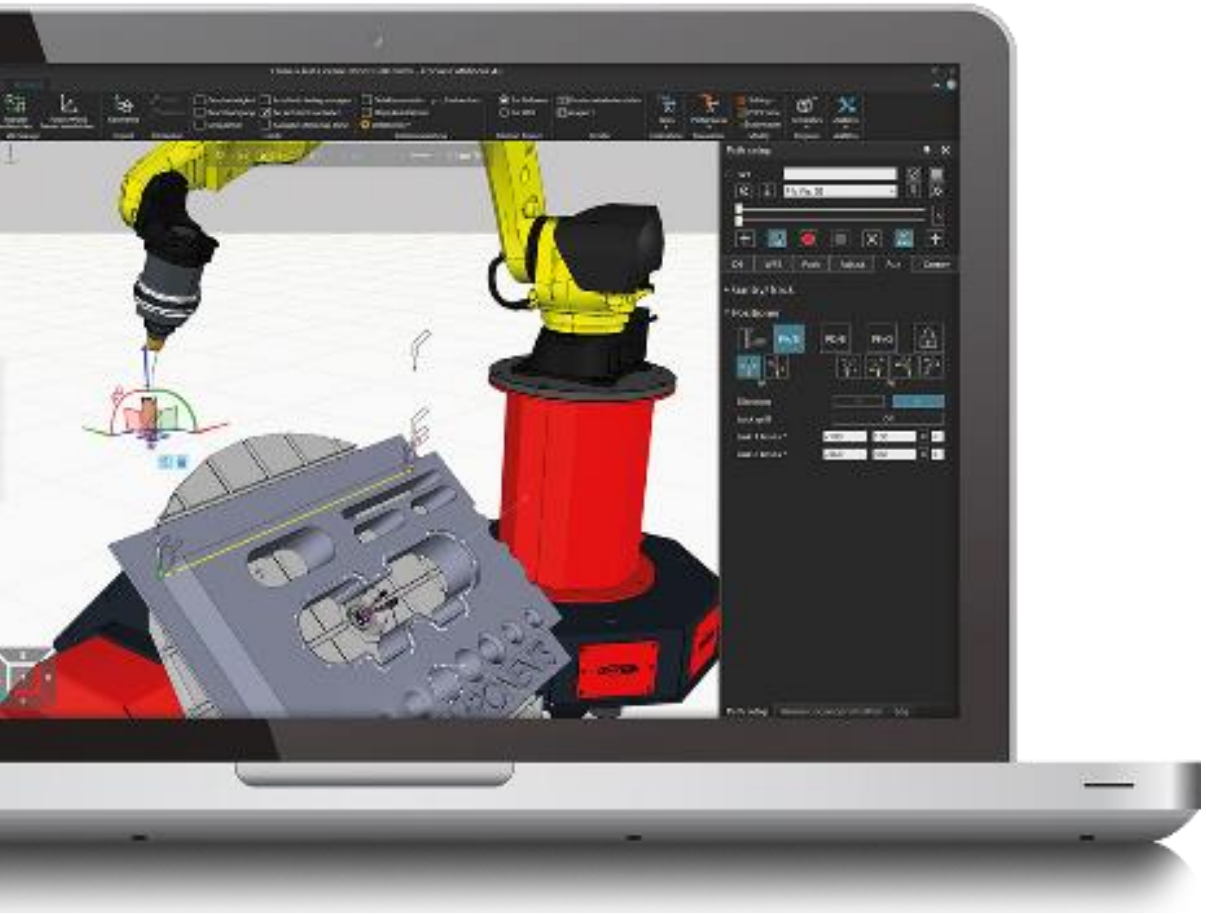


ABB
YASKAWA MOTOMAN ROBOTICS
KUKA
FANUC Robotics
igm
OTC DAIHEN Corporation
CLOOS Weld your way.
REIS ROBOTICS
Kawasaki Robotics
NACHI

Scope of delivery

FRONIUS PATHFINDER PACKAGE

VIRTUAL TWIN

We create an accurate 3D model in the simulation environment

CALIBRATION

Measuring and matching the virtual model with the real system on site

SOFTWARE LICENCE

- Fronius Pathfinder 4.5 standalone
- Fronius Pathfinder 4.5 server

TRAINING & SERVICE

- User training
- Functional test of software and calibration incl. final welding test

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