



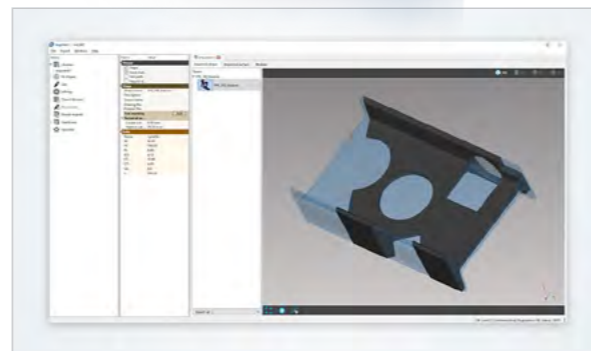
mCAM

Powerful 3D CAM software for parts and assemblies

mCAM is an efficient programming tool for automated 3D cutting of pipes, profiles, beams, domes and plates with cutting machines equipped with various technologies (plasma, oxyfuel, waterjet and laser). mCAM can directly import 3D models (created in e.g. SolidWorks or Inventor), organize them into individual libraries and process them. The software analyzes the shape of the entire model and automatically detects all cutting paths. Thanks to integrated nesting, all individual components can be subsequently nested on material templates. In addition to many supported shapes, mCAM also provides the option to unfold circular pipes to be cut from plates.

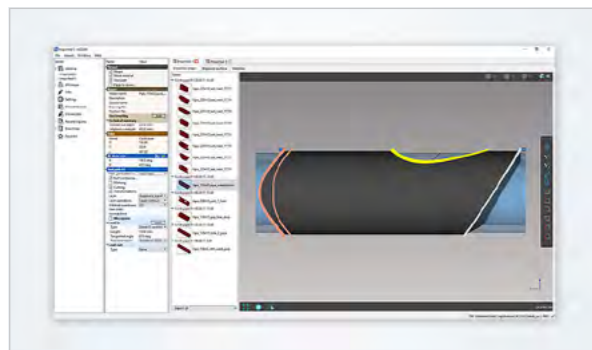


Processing of pipes, profiles, domes and plates



mCAM automatically detects both simple and complex 3D shapes: plates, circular pipes, rectangular profiles, elliptical, torispherical and semi-elliptical domes, cones, arched, dished, flat and inverted domes, sphere-caps, extruded and bent U- and L-beams and H- and I-beams with parallel and non-parallel flanges.

Integrated part libraries ensure efficiency for repeated cutting jobs



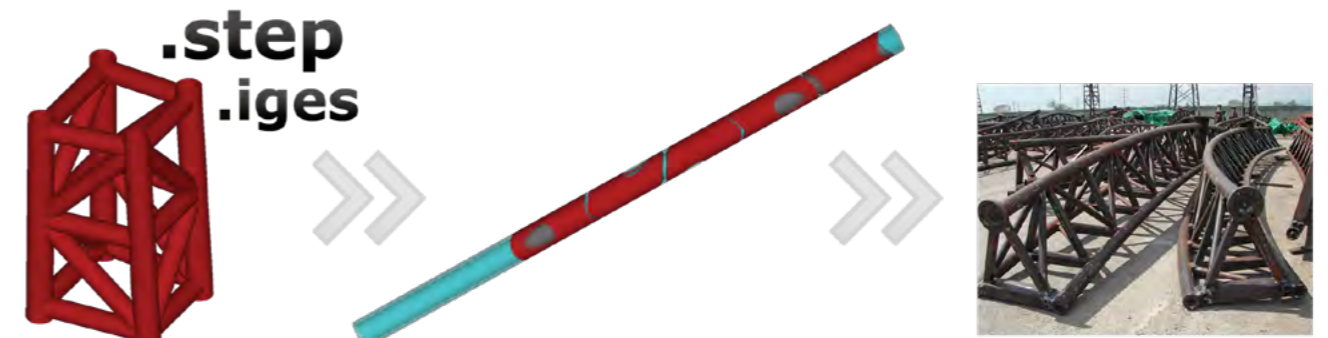
Whole assemblies and individual components can be easily imported from 3D models, nested and cut. mCAM stores all imported parts in internal part libraries for later re-use and parameter adjustment.

Built-in CAD design tools



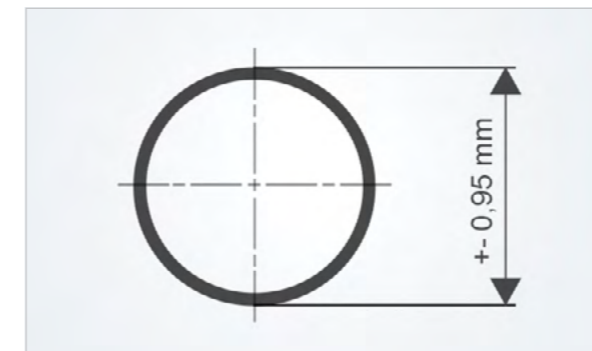
Integrating CAD and CAM functionalities within a single software creates a seamless workflow. Users can design their parts from pre-defined shapes and immediately proceed to CAM processing without the need to export or import files.

Automatic nesting of complex 3D models



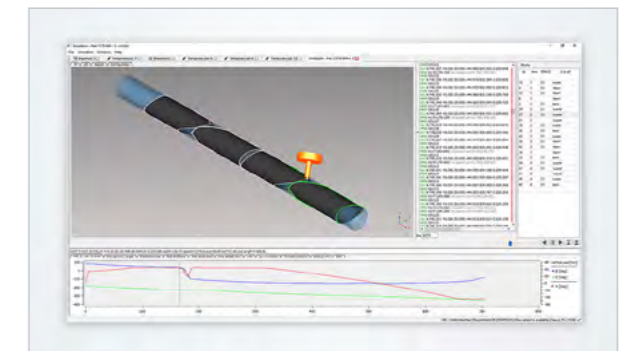
1. Import of a 3D model into mCAM
2. Automatic detection of cutting paths
3. The model is split into individual components
4. Automatic nesting on a material template
5. Complete compensation of cutting kerfs
6. Simulation of the cutting process for increased process reliability
7. Cutting of nested components

Compensation of geometric deviations



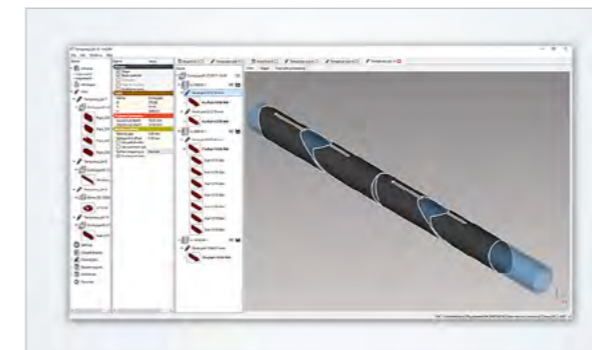
MicroStep uses 3D laser scanning or other detection methods to measure the semi-products for any production-related imprecisions. After detection, mCAM is used to automatically re-calculate cut paths to compensate for material inaccuracies during the cutting process.

Simulation of the cutting process



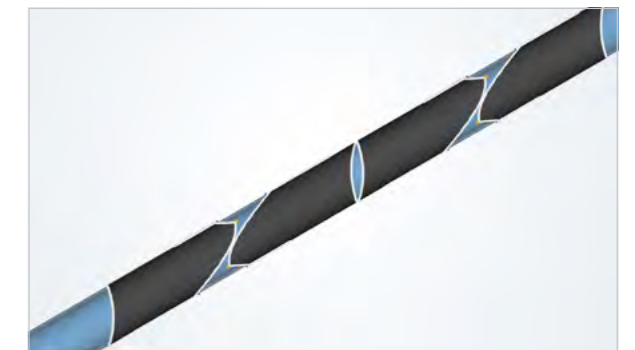
With cutting simulation in mCAM, cutting plans can be checked for possible errors before the actual cutting, saving time and resources through less waste, and generally ensuring higher process reliability.

Automatic nesting and integration with CyberFab® Manager



mCAM's nesting algorithm intelligently nests the parts on stock material with minimal gaps, so that maximum material utilization and most efficient cutting paths are achieved. Further automation can be provided by integrating mCAM with CyberFab® Manager and connecting it to an ERP system.

Automatic placement of micro-joints



mCAM can add micro-joints to the finished cutting plan to minimize the risk of thermal deformation and to keep the individual components together right up to the end.