CAGILA®

Laser-CAM

## Your flexible CAM system for beamshaped tools

i **What are the capabilities of CAGILA?**

job shops
R&D companies
complex CAD data
heterogeneous CNC controls

ONE programming system for your shop floor

Preparation of CAD data

- CAD interfaces with preview for **DXF**, **DWG IGES**, **EPS, Gerber, HPGL, Tops-GEO, NC**
- Conversion of **splines and ellipses** to **tangential arcs** with preview
- **Recognition of arcs** and **reduction of elements** for CAD data with polylines
- Automatic **contour recognition** (complex drawings in just a **few seconds** !)
- NC optimized **analysis** and **repair** of faulty **CAD data** (small elements, repair of gaps, etc.)
- Automatic **recognition of similar contours as macros** (e.g. variants of longholes)
- **Report generator** provides important workpiece data for **calculation**
- **TrueType editor** for laser optimized text curves
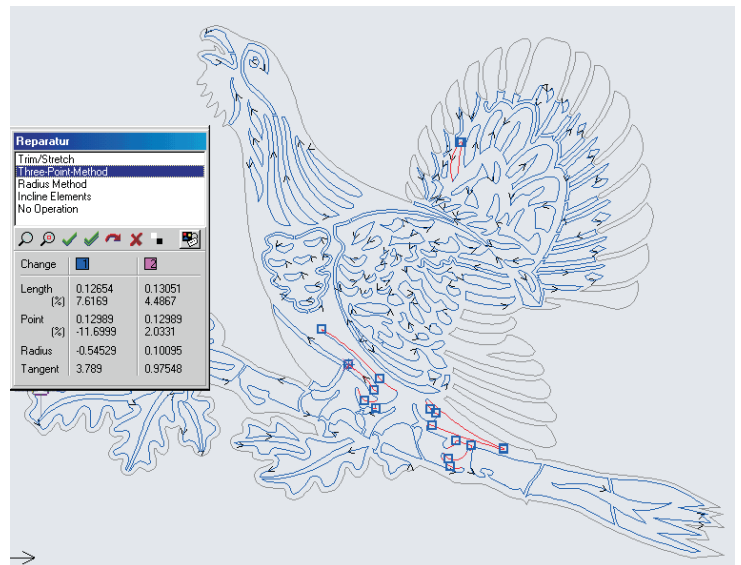
Data repair with CAGILA - Fast and extensive preparation of complex CAD data from technology and design
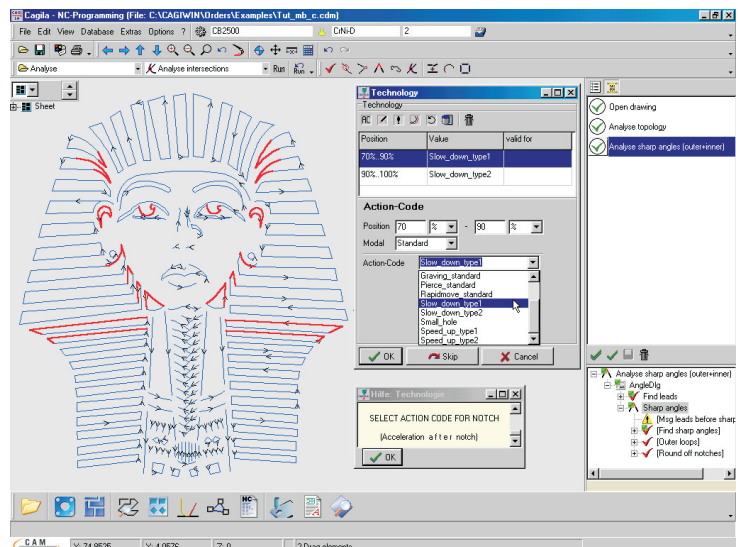
NC technology

New technology concept to **reduce effort** of **NC programming** and **change of machines**:

- Easy to handle technology of **all** needed **process parameters** by **'Action-Codes'**
- Automatic / interactive positioning of **lead-ins** and **lead-outs**
- Automatic generation of **outer loops** and **acceleration ramps** at sharp angles

Support of all CNC controls

by new generalized NC processor:

- **Any kind of NC format** (e.g. ISO 66025, ESSI, Gerber, HPGL)
- **Real NC simulation** provides verification and calculation of old and new NC programs
- Preparation of NC code for **tube axis** by calculation of rotation angle and linear moves
- **NC subfiles and macro technology**

*Easy handling of technology with 'Action-Codes'. Sets of process parameters are stored in a database defined for various manufacturing situations
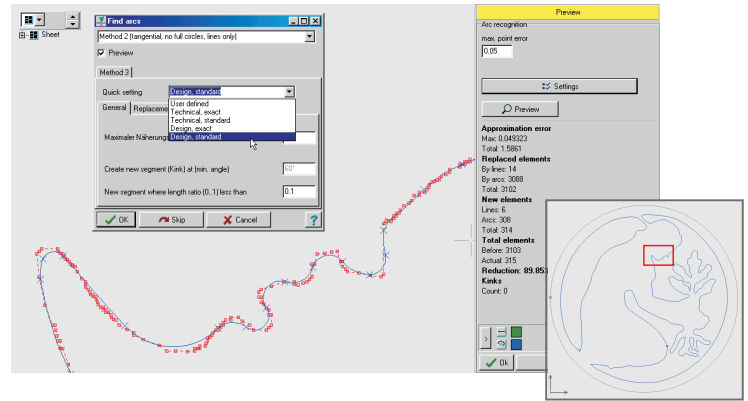A storable history list documents all user actions*

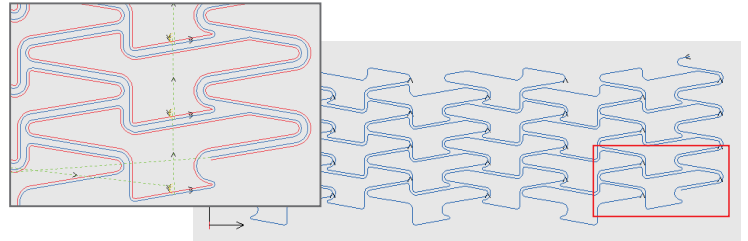## CAM service

Where is CAGILA used?

PRODUCTION

E.g. in mechanical engineering, automotive industry, electronic, medicine technology for:

- *Laserbeam cutting*
- *Waterjet cutting*
- *Plasma and oxyfuel cutting*
- *Cut plotting*
- *Contour milling*
- *Marking, graving*

Arc recognition in line based curves (e.g. scanned 50Pf logo) results in fewer elements (up to -99%) and highly improved NC path quality.

What makes CAGILA special?

ADVANTAGES

- **Fast algorithms** *need only a few seconds for data preparation of complex files*
- *Extensive and new methods for* **CAD data repair** *which focus on NC optimized contour paths*
- **Reduction** *of* **material costs** *by optimized fully automatic* **nesting** *software*
- *CAGILA ist* **compatible** *with all common CAD systems and CNC controls*
- **Flexible adaption** *to solve your NC problems, but at the same time* **easy** *to use* (**'NC code by mouse click'**)
- **ONE system** *for heterogeneous machinery*
- *CAGILA functions are the result of intensive* **team work** *with* **jobshops** *and* **R&D companies**
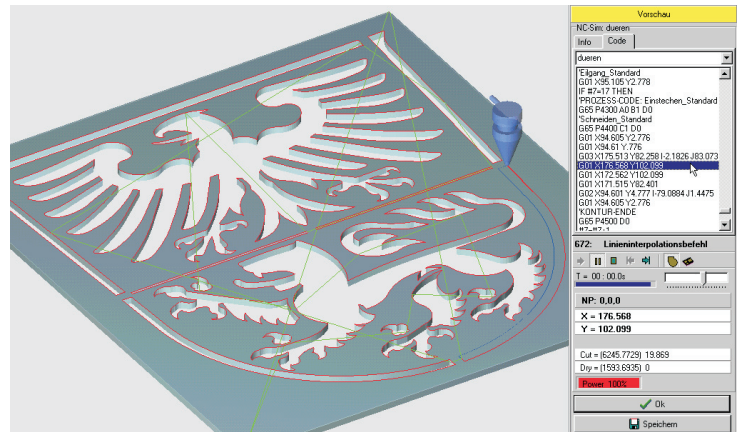

Offset can be done by G41/42 or geometrical calculation. Offset can be set seperately for inner / outer as well as closed / open contours are selectable (e.g. medical stent with open segments)
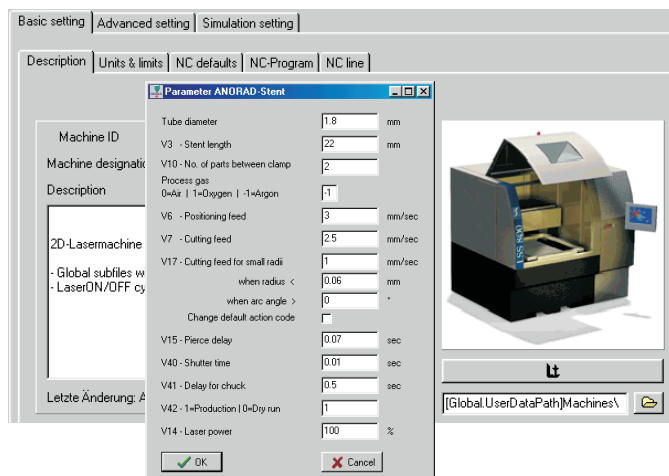

Any kind of NC format can be generated by the NC processor New or existing G-Code can be analyzed and calculated by NC simulation

Customizable NC processor offers a wide range of functionality for best adaption to the NC machine (e.g. Sinumerik, PMAC, Anorad, Aerotech, Fanuc, Mazak). Custom specific parameter windows can be generated with the strategy editor.

For more information please contact

CAM-Service GmbH
Fürstenaustr. 12
D-32052 Herford
Germany

Tel: +49 (0)5221 9943-93
Fax: +49 (0)5221 9943-92
E-mail: info@cam-service.com
Internet: www.cam-service.com
Your contact partner: Dr.-Ing. Alexander Köhler

CAM
service