

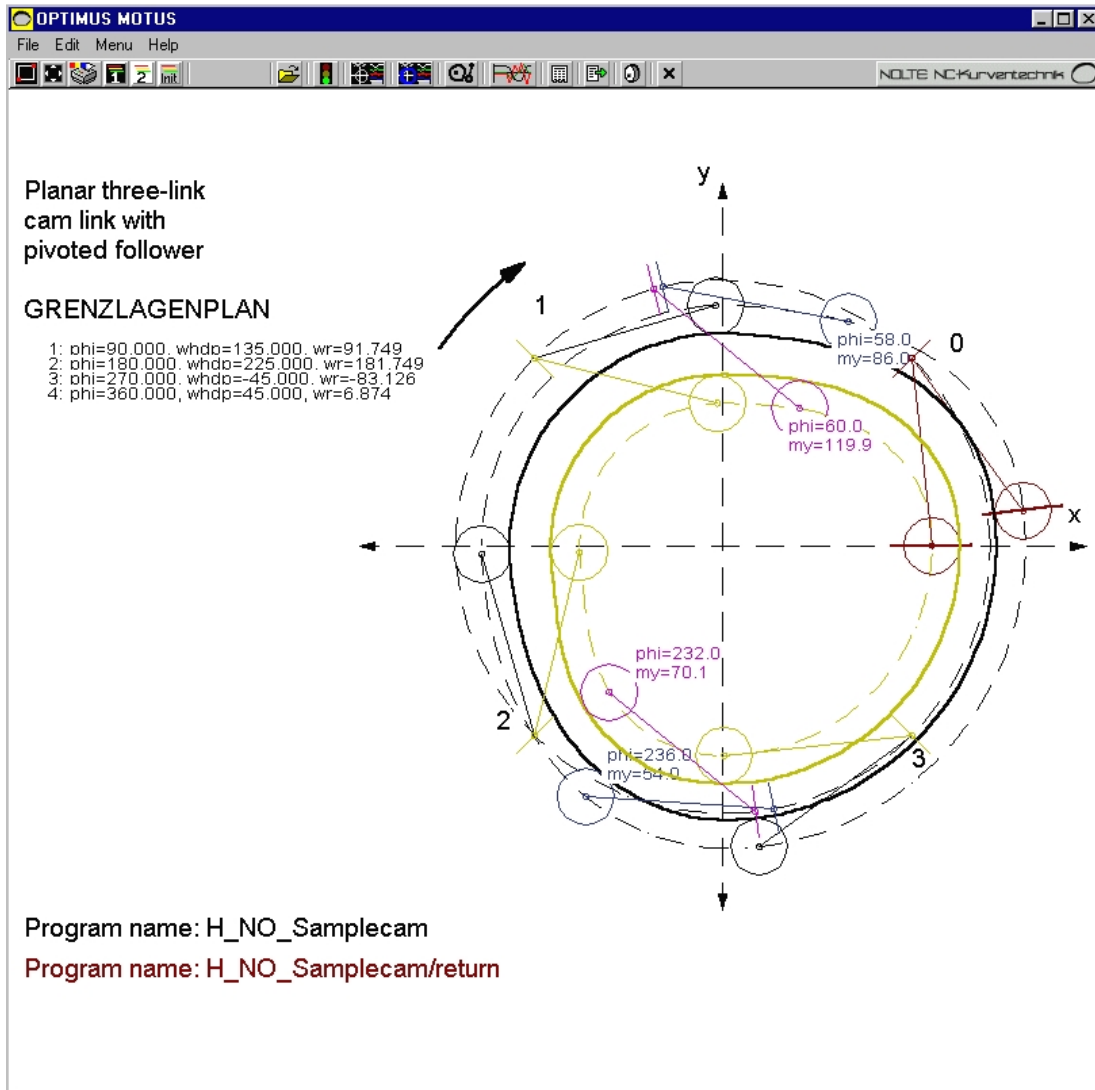
**OPTIMUS MOTUS ® Cams:**

- **Planar and Cylindrical Cams** with pivoting and translating follower
- External and internal cams, track and raised track cams, cams with bead, single and double cams, complementary cams, barrel cams, linear cams
- **Full set of motion laws: german VDI 2143, polynomial interpolation, splines (with smoothing), more powerful laws of motion, Fourier synthesis (HS profiles), tables, automatic adjustment of boundary values, polydyne functions**
- **Grafic definition of the motion scheme**
- Automatic generation of an optimized displacement diagram from the motion scheme with harmonic acceleration curves
- Grafic optimization of the displacement diagram
- Diagrams and lists for all relevant values
- Evaluation with **path, velocity, acceleration, jerk, fourier analysis, transmission angle, radius of curvature**
- Load calculation with **inertia and springs**
- Calculation of the **force** and the **Hertz pressure** on the cam
- Optimization of roller diameter and spring parameters
- **Cam and roller durability calculation with electronic roller catalog**
- Calculation of the **driving torque** on the cam shaft
- Diagrams of summed up torques for multiple cams and for braking and rev up
- **NC-postprocessing** of the cam trace for milling, grinding or eroding
- Automatic documentation function
- Export of **2D and 3D CAD files** (DXF, IGES, ME10, VRML, PTS, DAT, NRM, SAT, STEP, XYZ tables)
- German and English user interface available

**System requirements:** Windows XP / Vista / 7 / 8 / 10

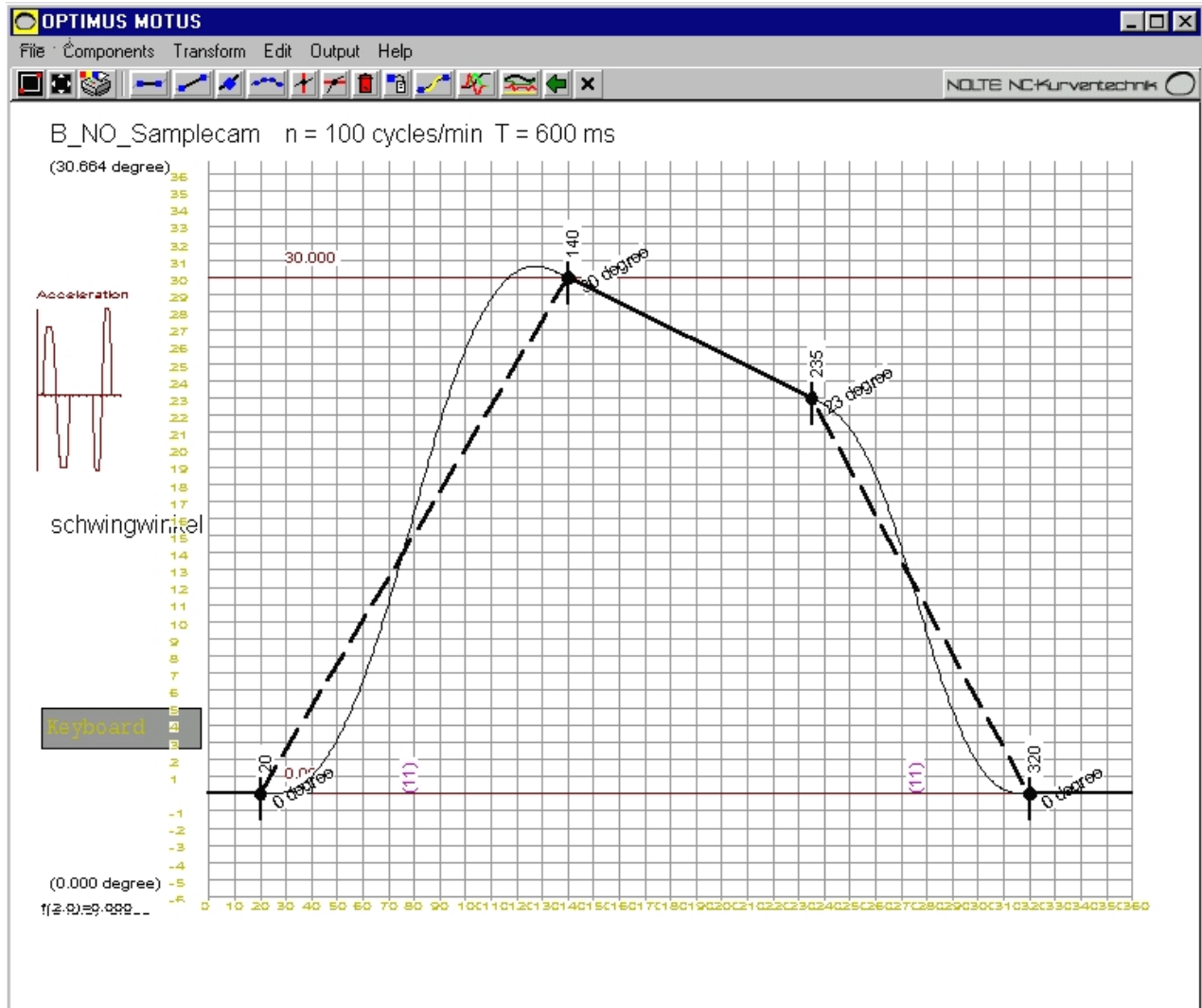
Updated 13.3.2017

- Suitable for practical application, rich set of functions
- Easy to use Windows-like user interface
- Short training phase
- Independent from CAD-licences



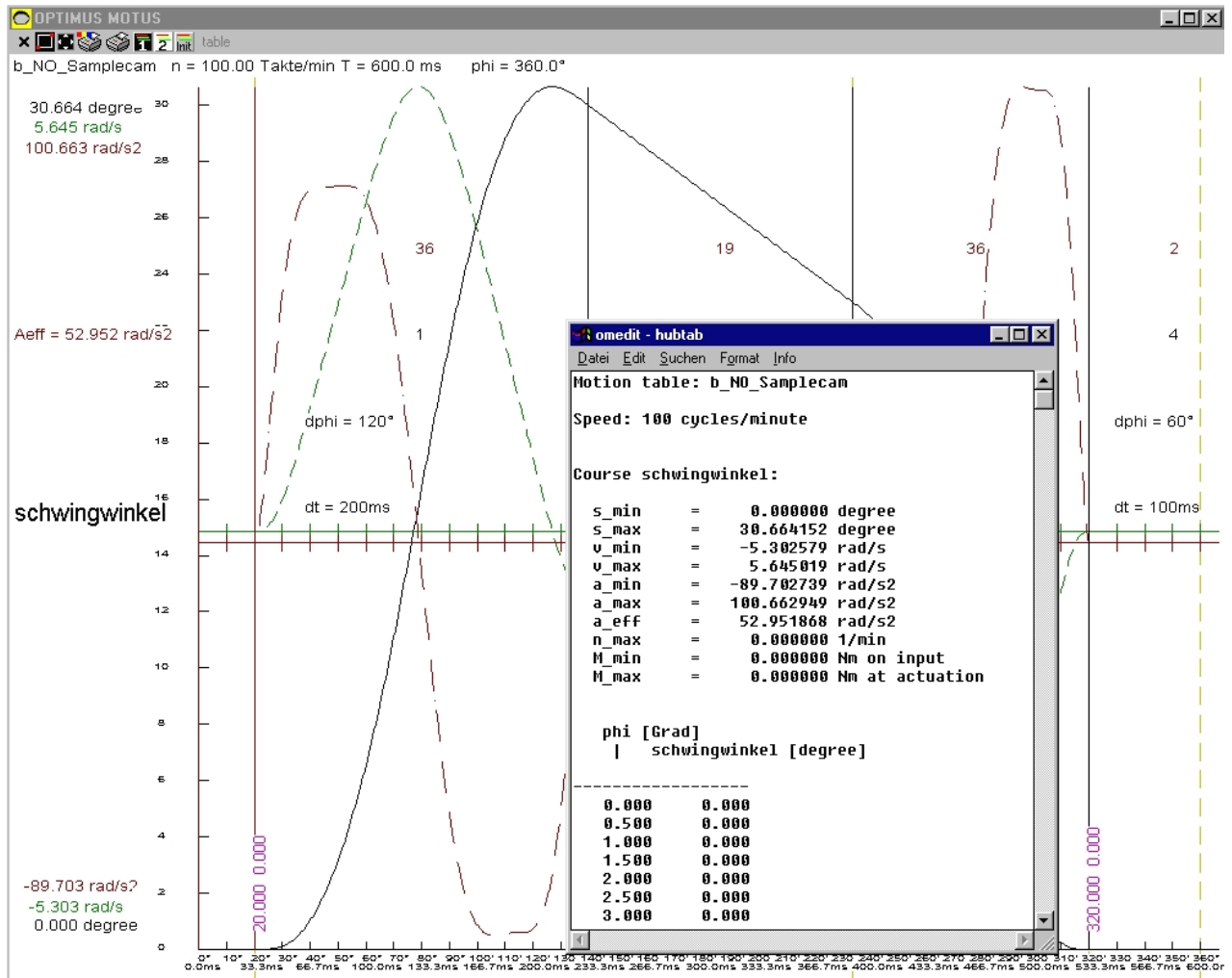
**Accelerate your product design considerably by using a modern, practical calculation and optimization tool!**  
**Show your customers in the phase of presale and design how his machine will work!**

- Grafic definition and optimization of the displacement plan
- Automatic generation of the motion diagram with harmonic acceleration curves
- Laws of motion can be enhanced with property dialogs
- Motion design by dragging points, velocities, accelerations and jerks



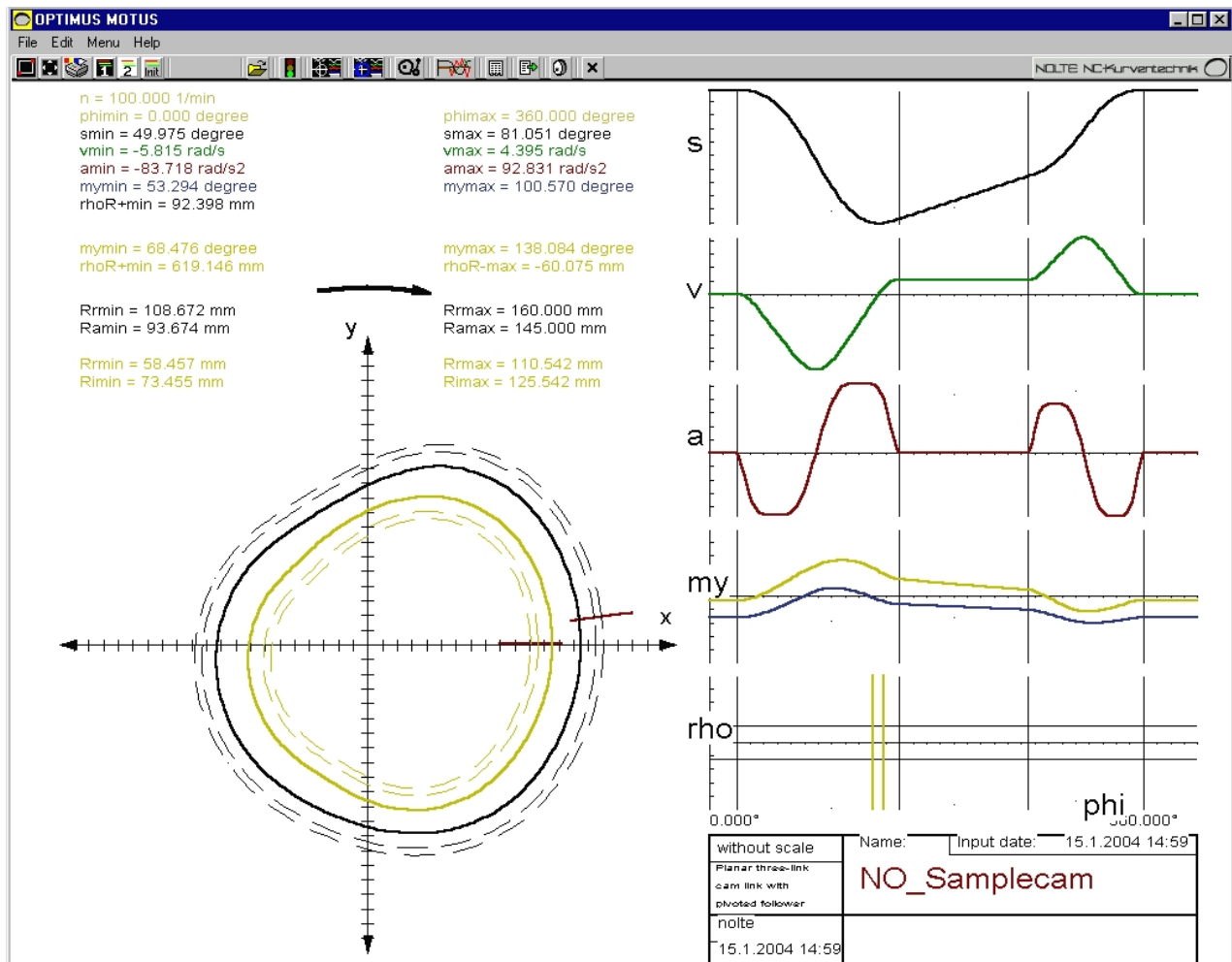
**Take the chance to overlap sections of motion.  
This is the largest sleeping potential of performance!**

- 62 motion laws: german VDI-directive 2143, higher motion laws, polynomial interpolation, splines, HS profiles, tables, polydyne functions
- time angles, lifts, reversal points, boundary values, types of motion laws etc. easy to change by few clicks
- Easy optimization of acceleration with dynamic display of peak values



Use the extensive possibilities to describe motions with OPTIMUS MOTUS ® to get the highest performance and the lowest wear!

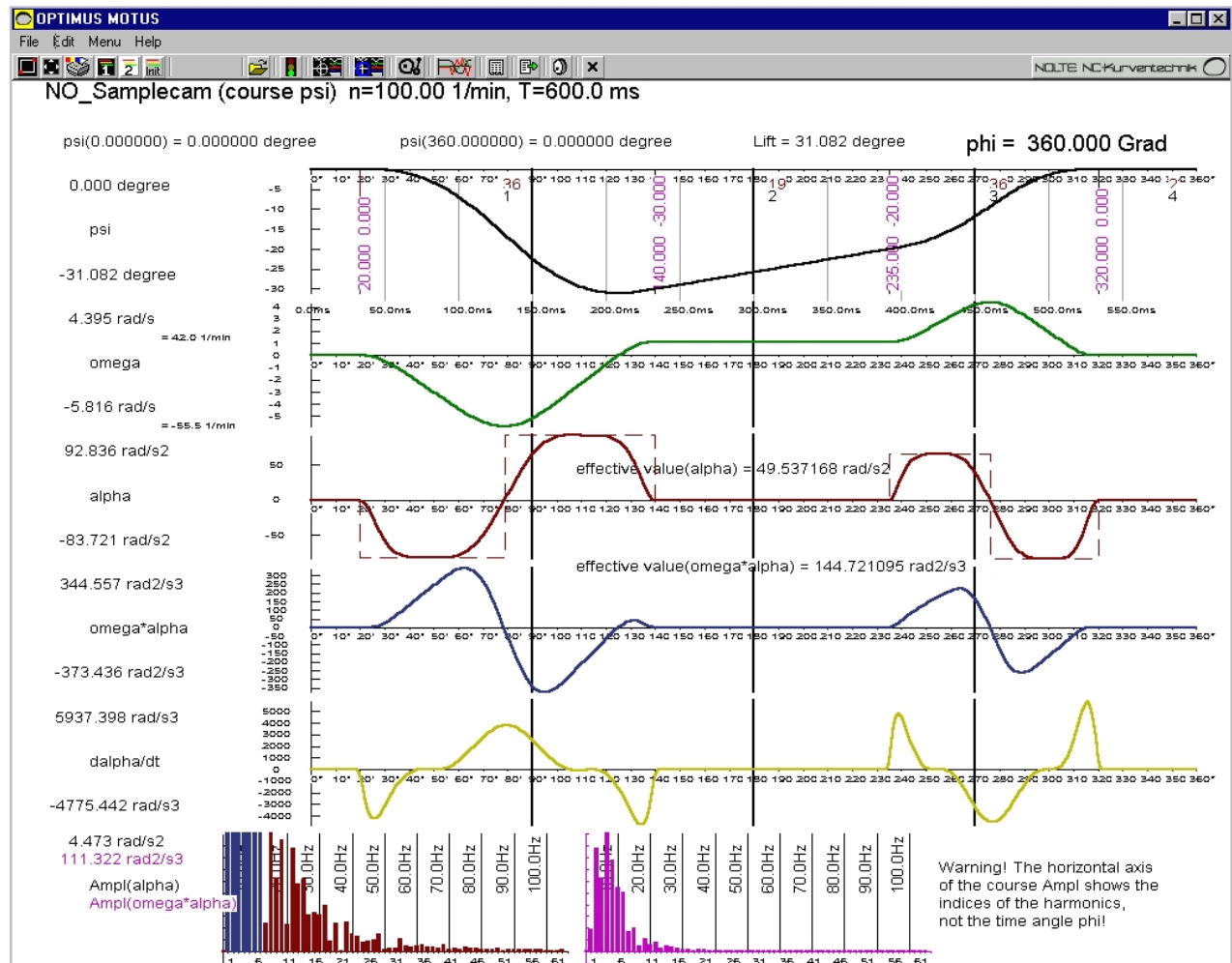
- Detailed evaluation of the planar cam and the cylindrical cam with path, velocity, acceleration, transmission angle and radius of curvature
- Export of tables and diagrams as documentation of the results of the calculation
- Automatic documentation function
- Generation of technologically optimized NC programs with linear and circular interpolation in many formats (ISO, Heidenhain, DXF, special formats)



**Check and optimize your machine on the screen first and not in real life!**

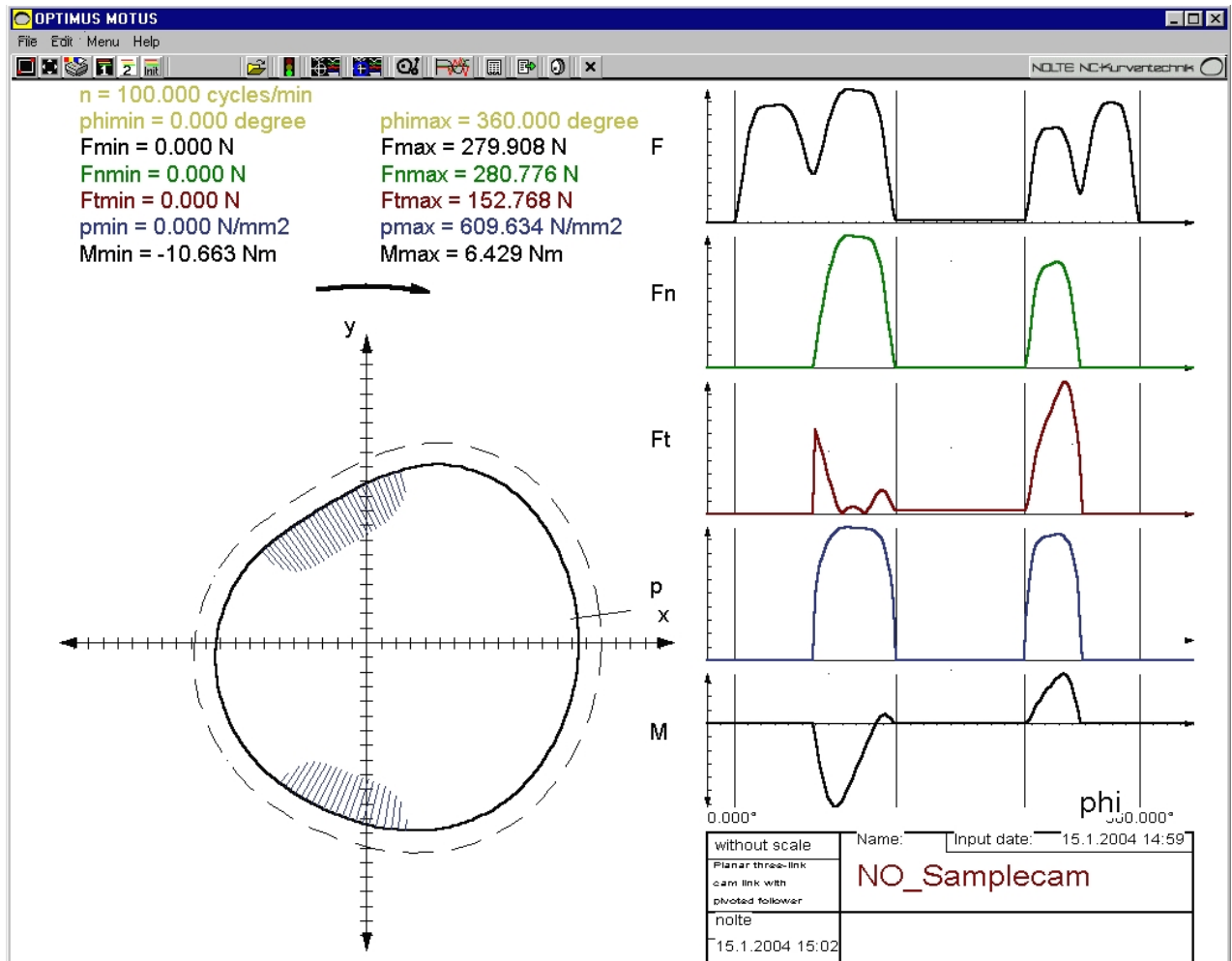
**Demonstrate the correctness of your concept by showing explicit diagrams, drawings and tables!**

- Detailed evaluation of motions with path, velocity, acceleration, power, jerk, ping and Fourier analysis
- Optimal adjustment of motions to the task
- Maximum and effective values of the acceleration and torque to choose the best suited actuators



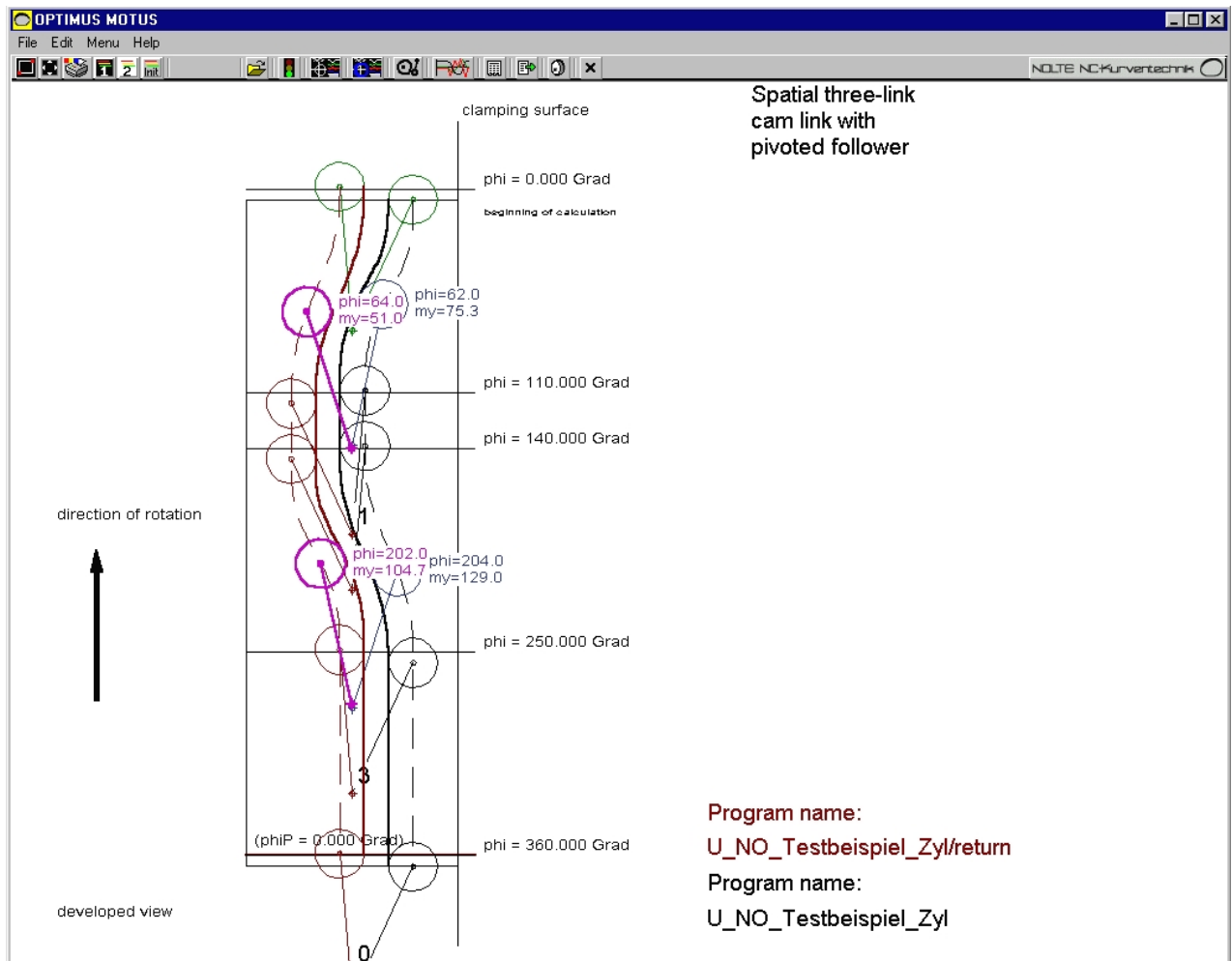
**Optimize the paths of motion with the help of expressive diagrams to deal with following conditions: minimization of vibration, high static loads, high masses, adjustment of internal slack, cutter interference**

- Calculation of cam loads (normal force, bearing loads)
- Hertzian pressure on the cam
- cam and roller durability calculation with an electronic roller catalogue
- Calculation of the driving torque on the cam shaft
- Sum of the driving torques for multiple cams
- Simulation of the rev up or braking of cam shafts



**Determine the static and dynamic loads on your cams in time of engineering to be sure that the prototype of the machine will have the desired performance!**

- Developed view for cylindrical cams
- Main and return cam in one view
- Export of 2D and 3D CAD files for the cams
- NC programs for the corrected path for given tool diameters





**Available software modules for OPTIMUS MOTUS ® Standard Cams:**

- **Planar cams**
- **Planar and cylindrical cams**
- **Indexing cams (globoidal, cylindrical, parallel, cycloidal)**

**You get the perfect solution for your machine motion business with the software OPTIMUS MOTUS ® combined with our additional services:**

- + Special customization of the software**
- + Individual Training on OPTIMUS MOTUS ®**
- + Hotline-Service**
- + Update-Service**
- + Design and optimization of your specific motion application as service**
- + „Mechanism theory and practice“ as courses**

**Contact us!**

Nolte NC-Kurventechnik GmbH  
Hellingstraße 17  
D-33609 Bielefeld

Telefon: 0049-521-74477  
Telefax: 0049-521-750880

Homepage: [www.nolte-nc-kurventechnik.de](http://www.nolte-nc-kurventechnik.de)  
E-Mail: [nolte-nc-kurventechnik@t-online.de](mailto:nolte-nc-kurventechnik@t-online.de)

Development and Sales:  
Dipl.-Ing. Dipl.-Inform. Rainer Nolte, CEO

