Trac-Cal 4.8

Trac-Cal 4.8 - Build 22 (05.11.2026)

- Integrated new TracMan version into the installer (1.8.127.32542)
- Maestro IFC: reworked connection procedure
- Maestro IFC: make sure volume is the same in the software for each machine of the same type

Trac-Cal 4.8 - Build 21 (29.10.2026)

- Integrated new TracMan version into the installer (1.8.126.32540)
- Maestro IFC: reworked connection procedure
- Maestro IFC: make sure volume is the same in the software for each machine of the same type
- Zeiss IFC: added handling of triggered data for machine type MMZ
- MultiTrace IFC: measured distances for offline measurement with planned paths were not taken for all lasers
- Laser position measurement: minimum distance to laser was not considered correctly in all cases
- Rotary axes, result calculation: fixed index error in spline fit

Trac-Cal 4.8 - Build 20 (31.03.2026)

- Integrated new TracMan version into the installer (1.8.115.31529)
- Deactivated automatic software update, server not available anymore
- Fixed some errors in LineCAL damping routine
- Measurement data file: wrong air pressure unit for certain laser devices (e.g. Leica)

Trac-Cal 4.8 - Build 19 (19.01.2026)

- Integrated new TracMan version into the installer (1.8.113.31396)
- Rotary axes: fixed index error in reflector angle calculations
- Maestro: added new user and adapted reading of the strokes

Trac-Cal 4.8 - Build 18 (20.10.2025)

- Integrated new TracMan version into the installer (1.8.109.31019)
- LineCal: fixed error in automatic damping routine
- LineCal: reworked error handling in automatic damping routine

Trac-Cal 4.8 - Build 17 (25.08.2025)

- Integrated new TracMan version into the installer (1.8.107.30821)
- MultiTrace:
    - In some cases, there was an error during calculation because of unselected adjustment type.
- Errormaps:
    - Maestro
        - Fixed error in errormap calculation.
        - Enhanced checking for extra point.
        - Fixed language issue.
    - Bosch / Fagor:
        - Fixed wrong check for kinematic chain xyz.
- Machine interfaces:
    - In some cases there were errors during connection procedure due to missing parameter in some interfaces.
    - Leitz OnTheFly:
        - Fixed possible errors when losing a point during measurement.
- Report:
    - In some cases trying to get the selected model name failed.

Trac-Cal 4.8 - Build 16 (15.01.2025)

- Integrated new TracMan version into the installer (1.8.96.29926)
- New separate license for linear axes table bending model
- New models for Tigo to be measured with LaserTRACER
- Fixed error with larger tcc files after saving
- Several changes for Maestro IFC and Errormap output
- Heidenhain Plugin: Start had to be pressed twice on controller
- MultiTrace:
    - error in simulation, access to wrong data structure
    - check positions for automatic adjustments in planning window
- Added option to select X-AX Laserbar XL for extreme values
- Added check for volume shift when connecting machine and reading out axes limits

Trac-Cal 4.8 - Build 15 (19.06.2024)

- Integrated new TracMan version into the installer (1.8. 89.29123)

- Integrated new Japanese language pack.
- Error map outputs
    - Fanuc pitch and straightness: added option to output pitch error with absolute values
    - Fanuc pitch and straightness: fixed error in parameter assignment
    - Siemens pitch and straightness: fixed error in units for output for rotary axes
    - Maestro: fixed some errors in the output
- Fixed error in linear axes calculations when selecting more than one measurement for a planned position
- Added option to output planned linear axes positions for import into upcoming software Unical
- Reworked selection of laser and reflector for rotary axes planning to work as for the linear axes planning
- Fixed some errors in path calculation for linear and rotary axes

Trac-Cal 4.8 - Build 14 (04.12.2023)

- Language:
  Integrated new Japanese language pack.

Trac-Cal 4.8 - Build 13 (22.11.2023)

- See Build 12

Trac-Cal 4.8 - Build 12 (13.11.2023)

- Integrated new TracMan version into the installer (1.8. 71.27873)
- Machine interfaces:
    - Siemens Online: added option to use different command prefixes for Trac-Cal and Trac-Check
    - Siemens Online: fixed error for the laser position measurement for rotary axes measurements
    - Siemens OnTheFly: fixed trigger card selection issue for the X-AX Laserbar
    - Siemens/Fanuc/Heidenhain: added option to use different feeds for linear and rotary axes in rotary axis measurement
    - Heidenhain: added new DNC installer 1.7.3
    - Fanuc pitch error compensation: fixed error on writing parameter 3624, now always three decimal places
- Error maps
    - Heidenhain: added option to combine non linear and volumetric error compensation for rotary axis compensation
    - Heidenhain: reworked reading of active compensations for non linear axes compensation

    - Siemens pitch and straightness error compensation: added wait times to file, which can be set in the parameter window
    - Leitz VFK: added missing property “Subtype” to file header
- Measurement window: do not allow user interaction until window has been completely initialized
- Simulation ISO 230: fixed some display errors
- Rotary axes, check data window: fixed error in calculation of position on axis
- Linear axes, path generation: fixed some errors for certain extreme cases regarding laser placements
- Fixed some errors in rotary axis measurement report generation
- Fixed error in connection of Sios LCS
- Fixed error with Windows Update 22H2 for Windows 10
- Fixed problems with display of XPS documents
- Integrated usage of Testo V3 base unit

Trac-Cal 4.8 - Build 11 (30.11.2022)

- Integrated new TracMan version into the installer (1.8.52.26038)
- Integrated new kinematic models for DEA Single and Dual Reader Gantry
- Heidenhain nonlinear axes compensation: added window for axes names selection
- Automated measurement:
    - Heidenhain: do not write backlash to file in case it has not been calculated
    - Heidenhain: reworked creation of nonlinear axes compensation files, layout and axes order is now taken from controller
    - Added measurement for Fanuc
    - Added compensation to disk for Fanuc data generation tool
    - Added compensation to disk for Fanuc pitch and straightness compensation
- LineCal:
    - Fixed error in blind channel usage
- Added new option for EDS connections: SIOS sensor box (requires additional hardware)
- Reworked Siemens pitch and straightness compensation files for linear axes, fixed timing problem.
- Added option for separate feed for the rotary axis for Fanuc controllers.
- Fixes for some window layouts

Trac-Cal 4.8 - Build 10 (13.05.2022)

- Integrated new TracMan version into the installer (1.8.46.25118)
- Automated measurement with Fanuc compensation: added option to generate output for the Fanuc data generation tool
- Automated measurement with classical (pitch and straightness) compensation: added table of uncertainties for the calculated output parameters to the report
- Automated measurement: make sure certain warnings are not shown between the positions and therefore stopping the process

- Reworked the RRB model to be able to handle offsets in one direction
- Parameter uncertainty calculation in planning window: in case all device uncertainties were zero, this calculation failed
- Static MultiTrace measurement: fixed error in measurement data header/footer data assignment
- Heidenhain nonlinear axes compensation for rotary axes: fixed error in sign convention
- Heidenhain Kinematics Comp: output unused/uncalculated error parameters with all zeros
- Heidenhain CNC generation: do not use M91 in standard format
- Siemens Online interface: integrated selection of axes names to read 3D position for
- Fanuc Online interface: the feed factor for rotary axes can now be set through configuration file
- Starting LineMAN caused error if it was not done within a certain time span

Trac-Cal 4.8 - Build 9 (18.01.2022)

- Add functionality to use the automatic measure with Fanuc machines
- Report: replace “TRACER” with “Laser”
- Several bugfixes

Trac-Cal 4.8 - Build 8 (07.01.2022)

- Integrated new TracMan version into the installer (1.8.38.24279)
- Scale and work piece expansion coefficients
    - Check for reasonable range extended from 0 to 14 to -2 to 30
- Leica LFM connection:
    - License check was also checking the old license, now only the actual one is checked
- Hexagon AT Report now available
- New machine Model for gantry dual reader machines
- Fanuc, online rotary axes measurement
    - Feed for rotary axes movement is now smaller than feed for the linear axes movement
- Automated measurement:
    - File name generation using machine serial number and date reworked
- Linear axes report adapted to new temperature model selection/usage
- Show license information: dongle number added to output for information

Trac-Cal 4.8 - Build 7 (19.11.2021)

- Integrated new TracMan version into the installer (1.8.37.24078)
- Added new Dongle Runtime to installer
- Siemens Online Interface
    - Make sure Parameter to move the machine is set on controller

    - Reworked short path movement for rotary axes, using incremental movement
- Error map, Siemens CEC (linear and rotary axes): added option to output data in imperial units
- Sequential MultiTrace: make sure paths of all positions are equal before starting the measurement
- Fixed error in online measurement with 2D model: an offset in the unused axis lead to errors when reading the measured data

Trac-Cal 4.8 - Build 6 (06.10.2021)

- Integrated new TracMan version into the installer (1.8.33.23802)
- Siemens Online/OnthFly Interface
    - Establishing a connection was not possible due to wrong trigger parameter handling.
    - The functionalities for creating and copying subprograms to the controller failed in some cases.
    - Automatically measurement - Subprogram
      Added a short delay for prefix/suffix in the case they are empty (to avoid interpolation buffer errors on the machine controller).
- Check data
    - The display of dLmax was incorrect due to wrong usage of new temperature model.
- Leica LMF Interface
    - The stable probing measurement routine was not functioning anymore due to missing handling of the work piece temperature.
- Heidenhain Interface
    - Enhanced error handling.
- Model 2D Kinematics
    - Results window – Show all squareness errors.
- Rotary axes – Planning
    - Fixed error in case of reopening the window without planning linear axes positions beforehand.
    - Do not round data to integer values as this might lead to positions outside the machine volume.
    - Fixed possible error when pressing the button “find reflector positions”.
- Etalon LaserTRACER Interface
    - Reactivated the option to read out angular positions of the motor controller.
- Testo Saveris Interface
    - Write necessary parameters into the Windows registry during the installation for 32 and 64bit applications.
- Zeiss Caligo Interface
    - The number of machine positions to read during measurement time shall be 10 as default.
- Zeiss Calypso Interface

    - Fixed error when reading the machine serial number (use CMMNr() or CMMSerialNumber() dependent on the CMMOS version).
- Dongle option software anonymization
    - Make sure the user defined icons and images truly exist before trying to load them. Otherwise use default settings.

Trac-Cal 4.8 - Build 5 (03.09.2021)

- Integrated new TracMan version into the installer (1.8.27.23619)
- Kinematic model 2.5D
    - Measurement:
      Fixed error that appears when opening the measurement window.
    - Configuration:
      Fixed error that appears when adding an additional frame.

Trac-Cal 4.8 - Build 4 (19.08.2021)

- Integrated new TracMan version into the installer (1.7.97.23549)
- Check data window
    - Select measured positions automatically after reading measurement data
- Automatic measurement, Heidenhain
    - Fix errors for reading files
- Loading configurations
    - Create missing objects if necessary
- General
    - Fixed general window error

Trac-Cal 4.8 - Build 3 (23.07.2021)

- Integrated new TracMan version into the installer (1.7.95.23467)
- LineCal
    - Added the option to measure orange lines, too
    - Enhanced measurement routine for MultiLine
    - Enhanced logging functionalities
- LaserBar interface
    - Standstill and movement detection did not work properly in some cases
- Automated measurement, errormaps
    - Set errors to zero at origin is only allowed if zero is inside the machine volume
- Heidenhain PlugIn interface
    - Reopening the axes names window caused an error
- Heidenhain interfaces
    - Enhanced error handling
- Check data window

    - When the point selection functionality was activated in some cases the plots were not updated properly
- Automated measurement, errormaps
    - Added the option to add an additional compensation point in case axis start/end is not reached
    - Added the option to cancel the creation of the errormaps
- CMMOS / OnTheFly interface
    - With temperature compensation model A the measurement could not be started anymore
- Linear axes, result window, display measuring lines
    - Squarenesses were not displayed in ISO convention if selected
- Linear axes, setup window, extreme values
    - Display elevation for Etalon X-AX Laserbar
- Linear axes, MultiTrace models, path generation
    - Reworked check for all planned positions to have equal frames and paths
    - Do not ask user what to do, just rework the data and show a message
- Linear axes, MultiTrace, result GUI, summary
    - In one certain case the window was not opened correctly
- Linear axes, sequential Multilateration, result window:
    - The measured points were marked as continually measured, whereas they should be marked as statically measured
- Online measurement, automatic adaption of threshold standstill
    - Do not perform the automatic adaption in case of timeout due to not enough machine positions captured

Trac-Cal 4.8 - Build 2 (05.05.2021)

- Integrated new TracMan version into the installer (1.7.87.23129)
- OnTheFly, calculation with incomplete positions
    - Fixed error, did not work properly
- Automated measurement, Siemens error map settings
    - Check for complete data when loading older configuration files
- Automated measurement, Heidenhian, move to corner points
    - Fixed possible dead lock when using prefix/suffix here
- Automated measurement, reading measured data again
    - Make sure filter parameters are used correctly and now OK positions are set for usage
- Online rotary axes measurement, check if position reached
    - Check for 360° was not working in all cases
- Zeiss Caligo interface
    - Added option to change the feed in the settings
- OnTheFly, Hexagon DC controller
    - Reworked reading of triggered data to allow higher frequencies

Trac-Cal 4.8 - Build 1 (01.04.2021)

- RELEASE VERSION