



Changelog

Further information can be found on the [GasTurb website](#), updates and manuals are available in the [Download section](#).

GasTurb 15

Update 7 - 28.05.2026

- **Corrected Electric Fan Nozzle Calculation:** Fixed an issue where off-design changes in nozzle area were not correctly reflected in the station calculations. This could result in incorrect nozzle static properties. The station calculations now properly account for variations in nozzle area.
- **Corrected Fuel Cell Humidity Calculation:** Previously, the water ratio at the fuel cell cathode inlet was calculated based on total conditions together with the user-defined relative humidity. The relative humidity calculation is now consistently based on static conditions.
- **Corrected Fuel Cell Water Balance:** Fixed an inconsistency in cases where liquid water was present at the fuel cell cathode outlet. Condensed water was correctly removed at the fuel cell outlet station but could incorrectly reappear at the subsequent station. The mass balance is now handled consistently across stations.
- **Minor Bug Fixes and Performance Enhancements:** General improvements and optimizations for better software stability and performance.

Update 6 - 17.03.2026

- **Extended Fuel Library:** A new option *Show more fuels* has been added to the fuel selection drop-down list in the *Maps and Connections* group of the Design Point and Off-Design Point Input window. Additional fuels now available include H_2 , CH_4 , a new *Jet A1*, and a sample aromatics-free *Biofuel*. Mixtures of these fuels (specified in vol.-%) can also be selected. More information is provided in the updated [manual](#).

- **Improved Integration of Custom Fuels:** Custom fuels can now be appended to the list of built-in fuels by selecting *Load custom fuels* in the fuel selection drop-down list. A sample custom fuel collection (*DemoCustomFuels.gtb*) is provided in the directory %APPDATA%\GasTurb15\CustomFuels¹. This file can be edited using any text editor. Properties files (*.prp) for each specified fuel must reside in the same directory as the custom fuel collection (*.gtb). Users who already work with custom *.prp files in GasTurb and have questions regarding this change are welcome to [contact us](#).
- **Minor Bug Fixes and Performance Enhancements:** General improvements and optimizations for better software stability and performance.

Update 5 - 10.02.2026

- **Fixed Compatibility Issue with Windows Update KB5034441:** GasTurb now includes a fix to prevent a potential license access error caused by Windows Update KB5034441 (see the official [Wibu product alert](#)). Although the issue did not occur during our internal testing, the fix has been applied to ensure stable operation on systems where this Windows update is installed.
- **Fixed Windows 11 Accent Color Display:** Corrected an issue where the title bar button colors were not displayed properly when Windows accent colors were enabled in the system theme settings.
- **Updated Electric Fan Demo File:** Revised default values for fan design parameters and thermodynamic station Mach numbers.
- **Refined Gas Properties for Fuel Cell System Calculations:** Previously, interpolation of gas properties from tabulated data introduced minor inaccuracies in fuel cell system calculations (hydrogen mass flow error below 0.5 %). Gas properties are now calculated using polynomial formulations (McBride et al., *NASA Glenn Coefficients for Calculating Thermodynamic Properties of Individual Species*, NASA, 2002), improving the accuracy of fuel cell system analyses in GasTurb.
- **Minor Bug Fixes and Performance Enhancements:** General improvements and optimizations for better software stability and performance.

Update 4 - 22.12.2025

- **Option to Continue Batch Jobs with Non-Converged Points:** Introduced a new option that allows batch jobs to continue even if non-converged points occur. Previously, batch jobs stopped automatically when the 11th point failed to converge. A warning dialog is now displayed, allowing continuation, and the total number of non-converged points is reported at the end of the batch job.

¹This folder can be opened by pasting the path into the Windows Explorer address bar.

- **Improvements to AnSyn (Analysis by Synthesis) Mode:** Reading of cycle files from the AnSyn window has been corrected; previously, this could result in multiple error messages. In addition, iterations deactivated in the Input for Iteration (AnSyn) window are now correctly displayed when opening the output of an AnSyn cycle. Previously, calculations were performed correctly, but deactivated iterations were still listed in the output window.
- **Corrected Details Output for Operating Lines:** Examining the details output for individual points of an operating line now correctly distinguishes between cases with and without Automatic Bleed. In addition, the Details button is now always enabled for maps shown in the Operating Line window.
- **Corrected Reset to Standard Maps Functionality:** The Standard button in the Component Maps window now correctly resets all scaling factors. Previously, the scaling factors were always reset to 1 instead of the scaling factors calculated for the map reference point.
- **Corrected Excel Export Formatting:** Removed an unintended line of undocumented values that previously appeared between the Input and Output sections in some exported Excel files.
- **Minor Bug Fixes and Performance Enhancements:** General improvements and optimizations for better software stability and performance.

Update 3 - 01.09.2025

- **Corrected Map Scaling Error:** Fixed an issue where component maps were incorrectly re-scaled when navigation between windows followed the sequence: Off-Design Input → Main Window → Off-Design Input (without opening the Design Input window).
- **Improved Excel Export:** Resolved a problem where outputs were missing in the Mission Output section of exported Excel files. Additionally, the confirmation dialog in the Cycle Result window is now always visible.
- **Minor Bug Fixes and Performance Enhancements:** General improvements and optimizations for better software stability and performance.

Update 2 - 24.07.2025

- **Improved Parametric Study Result Plots:** Resolved an issue where non-converged points were incorrectly displayed in two-dimensional parametric studies during off-design calculations.
- **Refined Cathode Mass Flow Calculation for Fuel Cell Configuration:** Updated the oxygen mass ratio in air to improve the accuracy of cathode air mass flow calculations.
- **Minor Bug Fixes and Performance Enhancements:** General improvements and optimizations for better software stability and performance.

Update 1 - 03.07.2025

- **Fixed Floating License Issue:** Previously, expired local licenses (such as the initial 14-day trial provided during installation) prevented access to a valid network (floating) license. This issue has been resolved.
- **Corrected GasTurb 15 PDF Manual:** Fixed an issue where certain equations were missing or incorrectly displayed in some PDF viewers.
- **Enhanced Convergence for Electric Propeller with Fuel Cell Configuration:** Improved numerical stability when significantly increasing system output power. Previously, condensation calculations could fail to converge under these conditions. Now, optimized iteration boundaries ensure robust convergence.
- **Resolved Mission Input and Output Window Issues:** Corrected the ordering of input parameters for electric systems and fixed missing result outputs for gas turbine analyses.
- **Minor Bug Fixes and Performance Enhancements:** General improvements and optimizations for better software stability and performance.

Initial Release - 12.06.2025

- **Initial Release of GasTurb 15**
- For a summary of new features, see the [GasTurb 15 – Feature Overview \(PDF\)](#).
- For a comprehensive description, refer to the *What's New in GasTurb 15* chapter in the [GasTurb 15 Manual \(PDF\)](#).