

## ChangeLog

### CFturbo 10.3

#### Version 10.3.4

17.07.2018

ID	Severity	Category	Summary
9322	crash	Blade properties	Changing the span count can lead to program crash (for rare blade configurations).
9320	crash	Blade edges	Blade geometry generation cannot handle extreme blade dimensions robustly.
9316	crash	Blade edges	Entering an invalid ellipse axis ratios during edge design leads to crash.
9357	major	Meridional contour	Hub discontinuity inside blade region erroneously detected.
9352	major	Finishing	Outlet RSI connection faces for vaned stators are not contained in Flowdomain Solid faces.
9318	major	Finishing	Turbine blades are not extended correctly at inlet during finishing.
9281	major	Export	Activating RSI Connections sometimes fails to create RSI geometry.
9360	minor	Blade properties	Bladeangles for Stator component not correctly initialized for inner spans.
9334	minor	Export	Simerics: Basic filename used for export should have no special character limitations.
9324	minor	Blade profiles	Context menu commands for graphical design curves can sometimes apply to the wrong curve.
9323	minor	Meridional contour	Context menu commands for graphical design curves can sometimes apply to the wrong curve.
9313	minor	Export	Export dialog: Missing information about automatic solid trimming during export.
9308	minor	Export	Wrong command for prism-layer creation in TCFD export.
9296	minor	Blade edges	Trimming on leading-/trailing edge option redundant for designs with 'tangential thickness' application.
9290	minor	Help	NACA4 coefficient is slightly incorrect.
9287	minor	Main dimensions impeller	Cordier-diagram marker sometimes placed incorrectly.
9285	minor	Main dimensions impeller	Alternative speed parameter is missing in Batch Mode dialog.
9284	minor	Blade sweep	Axial position parameter is missing in Batch Mode dialog.
9082	minor	Export	OpenFOAM: Sometimes impeller segments cannot be triangulated.
9346	tweak	Batch mode	Fix multiple cosmetic issues of the Batchmode dialog.
9312	tweak	Import Geometry	Missing user warning that the project will be closed, when opening the import dialog.
9294	tweak	Global setup	Clarify warning messages about specific speed.

9286	tweak	Blade sweep	The "Undo/Redo" command in Designstep-dialogs sometimes doesn't refresh the dialog completely.
9226	tweak	General	Clarify warning message about "Invalid Characters" in Export dialog.
9099	tweak	Main dimensions impeller	More information about estimated pressure differences for axial fans.

## Version 10.3.3

06.06.2018

ID	Severity	Category	Summary
9227	crash	Volute inlet	Designing a stand alone volute leads to program crash if no project specific impeller license is available.
9267	major	Export	Simerics: Meshing of flow domain is incomplete in some rare situations.
9265	major	Mean lines	Relative splitter position ignored during project storing/loading and Project Undo operations.
9262	major	Finishing	Changes to the "Model finishing" parameters do not correctly register as project modifications.
9247	major	Blade properties	"Blade angles" page of dialog may become blocked when certain error conditions occur.
9236	major	Meridional contour	3D geometry generation may fail for Geometric contours with degenerated parts.
9223	major	Mean lines	Context menu in TM-design diagram can become inaccessible in some situations.
9274	minor	Export	Simerics: Output of turbomachinery expressions not enabled on recirculation interfaces.
9270	minor	Export	Simerics: Gap values for inlet and outlet interfaces are not read correctly during project load.
9264	minor	Mean lines	Relative angular position of unlinked splitter blades is missing in report tree.
9248	minor	Performance prediction	Failure of the "save to file" option for "additional curves" in diagram.
9234	minor	3D graphic	Random graphical properties lost for some model parts during project update.
9228	minor	Export	Export dialog: Deselecting all components does not work in some cases.
9213	minor	Export ICEM	ICEM export parameters dialog: Grid layout is broken (GUI issue).
9208	minor	Export	ANSYS TurboGrid: Airfoil designs export incorrect positions for leading and trailing edge.
9205	minor	Export	Inventor: Export of degenerated (infinitesimal) geometries must be avoided.
9201	minor	Export	Solidworks: Missing secondary flow path geometry.
9143	minor	Export	Solidworks Export: Geometry of solid contours missing.
8121	minor	Finishing	For blades with sharp edge geometry, the "fillet" option should be blocked.
9144	minor	3D graphic	Flow domain solid of unbladed stator components shows inconsistent graphical state.
9257	tweak	Help	Some some export interfaces may link to incorrect parts of the German help document.
9240	tweak	Mean lines	Incorrect layout settings for Stanitz&Prian result grid.
9237	tweak	Export	Simerics: "results saving frequency" default value leads to slow simulations.
9202	tweak	General	Misleading Warnings intended to guide meridional design must be clarified.
9146	tweak	Meridional contour	Disabled secondary flow path information was saved and restored upon activation.
9233	feature	Export	Perform automatic model finishing if precondition for export interface.

9077	feature	Export	Turbomachinery Expressions (Leakage, Mass Flow, etc.) missing from Simerics MP-/Pumplinx Export.
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## Version 10.3.2

01.05.2018

ID	Severity	Category	Summary
9182	crash	Mean lines	Bugreport: Opening Meanline dialog with references causes access violation in Lift Coefficient calculation.
9133	crash	Batch mode	Deleting export interface causes error in some situations
9203	major	Export	Simerics: secondary flow path interfaces are not exported
9197	major	Export	Simerics: wrong calculation of simulation time
9173	major	Main dimensions stator	Update logic contained in Dialog instead of Object, makes consistent Batchmode behavior impossible.
9127	major	Performance prediction	Performance prediction for reference designs doesn't work
9183	minor	Batch mode	Clear parameter configuration before reading.
9156	minor	Batch mode	List of Export interfaces is not restored when loading a Batchfile in the Batchmode dialog.
9108	minor	General	Better approximation of "green" surface area
9119	minor	Export	DXF export interface: allow export of meridian contours with corners
9168	minor	Export	TCFD: don't write number of periodic segments for volutes
9169	minor	Export	Autodesk Inventor: disable export unit as export parameter
9186	minor	Export	Simerics: Missing saturation pressure and temperature values for simulations with cavitation
9187	minor	Export	Simerics: wrong inlet total pressure value
9147	minor	Volute sections	Reference designs are hidden after updating dialog
9153	minor	Mean lines	Remove none ASCII characters from parameter caption
8891	minor	Main dimensions stator	Missing Error message of MainDimStator
9162	minor	Performance prediction	Glitches in the diagram of the Performance prediction.
9117	minor	3D graphic	Reference 3D geometry does not use pre-defined color
9136	minor	Help	Misleading information about RSI connection
9128	minor	Meridional contour	Default button for axial extension is missing
9105	minor	Meridional contour	Missing live update of "Cross section area"
8945	minor	Main dimensions stator	Warning not up to date
9135	minor	Export	Autodesk Inventor: meridional contour with more than one curve is not imported correctly
9195	tweak	General	Update link leads to main web page instead of download area
9100	tweak	Help	More help content about "measure distance" required
9154	tweak	Help	Missing help link for dialog Batch mode/ Optimization
9129	tweak	Volute sections	Display of y-axis makes no sense due to assumed radial extension

9086	tweak	Main dimensions impeller	Warning display with wrong height
9125	tweak	Meridional contour	Stator inlet and outlet seem to have context menu
9155	tweak	Performance prediction	Enable saving cuves as text file
9123	text	Help	Add examples for batch mode command line
9150	feature	Export	Autodesk Inventor: export of secondary flow path
8265	feature	3D data	Blade overlapping not detected.
9140	feature	Export	CreoParametric: export of solid contours
9138	feature	Export	Autodesk Inventor: export of solid contours

## Version 10.3.1

05.04.2018

ID	Severity	Category	Summary
9020	major	Main dimensions impeller	Blade angles differ in version 10.2 and 10.3 for compressors
8994	major	Blade profiles	Reset of blade thickness curve causes exception
9009	major	Volute inlet	Wrong Offset calculation at volute inlet in special situations
9067	major	Meridional contour	Leading and trailing edge position not available in Batch mode
9081	major	Batch mode	Loading *.cft-batch in batch mode dialog does not work
9059	major	Functions	Loading user-defined function file not possible
9079	major	Fluid	Fluid properties can't be calculated
9051	major	CFD setup	Fusing of RSI connection fails for unvaned stators.
9018	major	Blade properties	Blade shape option for linked splitter not saved in *.cft file
9023	major	General	File location of fluid and profile files is not saved
8996	minor	Volute diffuser	"z/r growth": negative value input not possible
9052	minor	Export	Numeca Autogrid: meridian contour is not fully exported
8733	minor	Meridional contour	Secondary FlowPath initialization not reasonable
9070	minor	Setup	Density.cftde is not part of setup
9087	minor	Main dimensions impeller	Missing batch mode parameter for rel. energy transmission and alternative speed
9088	minor	Blade profiles axial	Last cell content is missing in profile manager
9084	minor	General	<Ctrl> + <Z> does not work always in designstep dialogs
9029	minor	Volute sections	Stepanoff empirical factor should be deactivated if cu is specified directly
9058	minor	Export	TCFD: wrong value for parameter bladeTrailingEdge-toInterfaceDistance
9024	minor	Model settings	Ruled surfaces: number of points on blade sides for export is fixed
9054	minor	Export	Creo-Parametric: main profile data are not exported

9062	minor	Export	AutoGrid: tip curve for splitter is wrong scaled
9056	minor	Meridional contour	Wire of shroud casing wall is not updated correctly for unshrouded impellers
9019	minor	Blade properties	Documentation is wrong linked
9035	minor	Mean lines	Ruled surfaces: splitter leading edge is not curved despite of settings
8951	minor	Export	ANSYS BladeGen: Blade edges are not rounded
8998	minor	Import Geometry	Import of axial impellers: wrong inlet diameters
9017	minor	Meridional contour	Missing warning for ruled surfaces if blade edges are not straight
9022	minor	Mean lines	Remove ruled surfaces warning if only two mean lines
9026	minor	Export	TCFD: splitter of double volutes is not exported
9034	minor	Blade profiles	Thickness exponent is useless for ruled surfaces blade
8997	minor	Main dimensions impeller	Missing warning for invalid global setup values
9085	tweak	Fluid	Unfitting report items for perfect gas fluids
8961	tweak	Main dimensions impeller	Insufficient user guidance to identify incorrect Parameter values.
9055	tweak	Export	Point based export interfaces: point coordinates near zero are written with superfluous precision
8974	tweak	3D graphic	Shroud of unshrouded impeller
9049	tweak	3D graphic	"Rotate impeller" is not running smoothly
9003	tweak	Volute spiral	Circle of impeller has wrong diameter for radial turbines.
9008	tweak	Main dimensions impeller	Missing warnings for missing parameters in axial turbine design
9032	tweak	Volute spiral	Blind volume flow description missing in the manual
9072	text	Export	TCFD: Hint for invalid file name characters incorrect
9036	feature	Meridional contour	3D tip surface creation
8980	feature	Volute spiral	Evaluate alternative correlations for volute inlet diameter and width
9073	feature	3D graphic	Copy geometric properties to clipboard
8694	feature	General	Provide universal reusable Implementation for then conversion of 3D Blade data into mt space.
9061	feature	Export	Creo-Parametric: export meridian contours designed with more than one curve
8995	feature	Export	VistaTF: number of quasi orthogonal lines as export parameter