



MADYN 2000, Error Report April 5th 2017

No.	Release	Error description	Workaround	Status
1	4.3.6 and before	In the newly introduced feature to consider the thermal deformation in the floating ring bearings the nonlinear bearing and squeeze film damper forces are not looked up correctly. The error is rather small except for the case of reference temperatures considerably below the inlet temperature.		Will be fixed in version 4.3.7
2	4.3.3 and before	For the special case, that a DBS is used with an SFD <u>and</u> RSB the eigenvalue analysis is not running correctly.	Use a RSB or a RFB with imported data combining the properties of the SFD and the RSB.	Will be fixed in version 4.3.4 or 4.3.5
3	4.3.3 and before	RFB calculation with the oil supply condition “unsealed defined flow” in combination with 2-phase flow is not converging well.	For the case with a large defined flow, the analysis without 2-phase flow gives good results.	Under investigation and will probably be fixed in version 4.3.4
4	4.3.0	In the newly introduced feature to consider the deformation in floating ring bearings with any reference temperature, results in the GUI are not listed correctly. They are considered correctly in all analyses.	Consider a reference temperature according to the inlet temperature of the outer film as in previous versions.	Solved in version 4.3.1
5	4.3.0	In the newly introduced feature to consider the deformation in floating ring bearings with stationary ring (squeeze film damper) the speed dependence is not considered correctly for the outer film. Only linear analyses are affected.		Solved in version 4.3.1



6	4.1	Dynamic Bearing Support DBS with imported state space matrices: In the special case, that the order of the input and outputs of the state space system does not correspond to the order of the SBS and its coordinates (i.e. 1 st input/output at 1 st SBS dir. 2, 2 nd input/output at 1 st SBS dir. 3, 3 rd input/output at 2 nd SBS dir. 2, 4 th input/output at 2 nd SBS dir. 3 ...) a mismatch occurs between dynamic characteristic and location.	Make sure, that the order of the input and outputs of the state space system corresponds to the order of the SBS and its coordinates.	Solved in version 4.2.4 There is still a problem for harmonic response analyses, which will be solved in version 4.2.5 and 4.3, respectively.
7	4.0	In case a force is applied directly at a bearing for a shaft in shaft connection, the bearing force is not calculated correctly.	Apply a force at a node close to the bearing.	Will be solved in next version after 4.2.4
8	4.1	For the case a stiffness of GSP is set to "inf" (rigid boundary condition) the GSP forces are not calculated correctly in case forces are also applied to the stations affected by the GSP.	Use a very high stiffness instead of "inf".	Will be solved in next version after 4.2.4
9	4.2	Magnetic bearing controller optimization: The sensitivity goal did not work.		Solved in 4.2.3
10	4.2	Magnetic bearing controller optimization: Optimized parameters cannot be applied to the system after an optimization.	Save the system and exit. After reopening the system the parameters can be applied.	Solved in 4.2.3
11	4.2	Magnetic bearing controller optimization: Some Goals cannot be plotted.		Solved in 4.2.3
12	4.2.0	Print of shafts to printer or file did not work in the case, if the newly introduces thermal material data were empty.	Copy the content to a WORD or other document.	Solved in 4.2.3



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13	4.1	Transient analysis type n(t) does not work properly for constant speed, e.g. inputs for time [0 1] and speed [20% 20%] in some cases (e.g. if the same speed is used in the Campbell diagram). A speed of 100% is taken instead 20%.	Input slightly different speeds, e.g. [20% 20.1%]	Solved in 4.2.2
14	4.2.0	Batch import and export does not work for some cases		Solved in 4.2.1
15		Shaft export to text files via SIF with conical section and non-conical superimposed section: The superimposed section is written twice to the text file, which is not correct.		Solved in 4.2.1