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## MADYN 2000, Error Report April 20th 2022

| No. | Release        | Error description   | Workaround   | Status                         |
|-----|----------------|---|--|--------------------------------|
| 1   | 4.5 and before | In case of several FDC with different offsets: The offset of 1st FDC is applied to all FDCs.  |  | Will be fixed in version 4.5.9 |
| 2   | 4.4 and before | FDC coefficients for negative rotation are not added correctly to system matrices. The signs of the cross-coupling coefficients must change, which is not done automatically. | Export the coefficients, change the sign of the cross-coupling coefficient manually and reimport them.   | Fixed in version 4.5.7         |
| 3   | 4.4.13-16      | In case a prestressed shaft is connected with a GSP to another shaft containing inf for some coordinates, the stiffening effect of the prestress is wrong.                    | Use high stiffness values instead of inf.  | Fixed in version 4.5.0         |
| 4   | All versions   | In transient analyses the direction of rotation for an unbalance excitation remains positive in case of a shaft with negative rotation.                                       |  | Fixed in 4.4.9                 |
| 5   | All Versions   | Hot spot stability analysis (Morton effect) for fluid film bearings including thermoelastic deformation: The deformation is combined in a wrong way with the clearance.       | Hot spot stability analysis can be done without consideration of the thermoelastic deformation and adapting the clearance to the deformed bearing. | Fixed in version 4.4.5         |
| 6   | All versions   | REB used as shaft in shaft connection: In case the outer shaft has high rotational deflections, the calculated REB moments are not correct.                                   |  | Fixed in version 4.4.4         |



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| 7 | 4.3 and before   | TRA result deletion with linear bearings: Results of transient analysis were not deleted in case of bearing changes.  |  | Fixed in version 4.3.13         |
|---|------------------|---|--|---------------------------------|
| 8 | 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. |  | Fixed in version 4.3.7          |
| 9 | 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. | Fixed in version 4.3.4 or 4.3.5 |