Deltares

Release notes

D-Foundations 22.1.1 19-11-2021

Fixed bugs

MFO-1733	Shallow Foundations: The implementation of Squeeze was still based on the original NEN (NEN 6744), which required that the foundation layer itself is a non cohesive layer, followed by a cohesive layer just beneath that layer and within 20 cm of the actual foundation level. This is now corrected for the description in NEN-EN 2016. The demand of a non cohesive squeeze layer has been dropped. This means that for the determination of h_{sq} (height or rather thickness of the squeezed layer) a cohesive foundation layer must be taken into account. So in that case h_{sq} starts at foundation level rather that at the top of the cohesive layer below foundation level. Some of the benchmarks are modified for changes in the squeeze model.
MFO-1731	Shallow Foundations: test for punching through (*'toets op doorponsen'*) is implemented better. An extra check is added on the foundation level if the *'punching'* level is still above the toe of the berm. If not, the situation must be handled as if the whole foundation is placed on a horizontal surface with as level the level of the toe of the berm.
MFO-1671	Shallow Foundations: The determination of a_{e} (influence width) for the drained situation is corrected. It did depend on the φ of the foundation layer where it should depend on the iterated φ value.
MFO-1768	Shallow Foundations: The determination of the calculation case (A, B or C) for an undrained situation was not always correct.
MFO-1742	Shallow Foundations: Unrealistic values for *Cc* resulted in an unclear error message at the end of the calculation. The message is improved.
MFO-1766	Shallow Foundations: Small corrections in calculation of angle α for λ_{c}.
MFO-1771	Tension Piles: When calculations are made with different pile types and grouping per pile type per pile group is not possible, a correct error message is now generated (known issue).
MFO-1668	Tension Piles, Verification: When using very low pile loads the calculation failed (known issue).
MFO-1661	Tension Piles, Verification: Added *Loads on Piles* to the input part or the report.
MFO-1660, MFO-1670	Tension Piles: A few text corrections were made in the report.
MFO-1667	Tension Piles: In specific situations an *'access violation'* could occur when a pile type was deleted in the User Interface.

MFO-1669	Bearing Piles: Deleting pile types in the User Interface was not handled correctly.
MFO-1765	In some cases a *'range check error'* could occur in the *Calculation* window after a switch to another model.
MFO-1659	The generation of pile numbers during the calculation was not stable. This did not affect the results, but the message in the report could vary, which could be confusing.
MFO-1657, MFO-1747, MFO-1719, MFO-1720, MFO-1653, MFO-1722, MFO-1718, MGEOLIB-1057, MGEOLIB-1032, MGEOLIB-1044, MGEOLIB-1063	Small corrections in the User Interface.
MINSTALL-957	Small corrections in the user manual of the *Service Tool*.
MINSTALL-991	After de-installing common files 21.1, it was not possible to properly de-install or reinstall *D-Foundations*.
MINSTALL-976	The name of the default installation folder of the examples was incorrect.
MINSTALL-961	In the *Start* menu of Windows, the de-installed version of *D-Foundations* was still present.

Improvements

MFO-1606	Tension Piles: Implemented import and export of pile types, like it was already possible for model *Bearing Piles*.
MFO-1632	Verification report, Tension Piles: The maximum and required rotations are added to the verification report for benchmarks with a non-rigid foundation.
MFO-1741	User manual: Corrected the description of the steps in tutorial 6 to gain the expected results.

MFO-1703, MFO-1686, MFO-1684, MFO-1694, MFO-1685, MFO-1683, MFO-1680, MFO-1687, MFO-1652, MGEOLIB-1062, MGEOLIB-1053, MGEOLIB-1046	Small improvements in the User Interface.
MGEOLIB-1038, MGEOLIB-1041	Various error messages are added or improved.
MGEOLIB-989, MGEOLIB-1049	An extra option *Use compression* was added to the *Export Options* window. Turning this option off can solve the problem with an *'Integer Overflow'* error when generating a report. By default this option is off.
MINSTALL-980, MINSTALL-802	Installation and de-installation of multiple versions of *D-Foundations* are now handled.
MINSTALL-983	After *D-Foundations* is installed, a shortcut to the examples is now available in the *Start* menu of Windows.
MINSTALL-994, MINSTALL-995	In the *Service Tool*, the default location for *company data* is improved. It is now the personal documents folder specified by Windows.
MINSTALL-996	In the *Service Tool*, the option *'Same company data for all users on this machine'* has been removed.
MINSTALL-985	Updated license dlls "dac2.dll" and "dauth.dll".

Limitations

MFO-1734	Model *'Bearing Piles EC7-B'* is outdated (known issue). Since the Belgian standard will significantly change according to report no. 20 of the WTCB and the investment for an update is too big, the Belgian standard is no longer supported and therefore completely removed from *D-Foundations*.