

Release notes

D-Geo Pipeline 22.2.1

27-06-2022

New feature

MDR-1831,
MDR-968

The pipe stress analysis includes the additional stress due to abrupt settlement difference (called “Abrupt zakkingsverschil” in Dutch) at the transition between the drilled and the laid parts, according to NEN 3650-1: 2020. To use this new option, refer to tutorials 16 and 17 of the User Manual. For background information, refer to section “28.7 Strength calculation for Abrupt Settlement Difference” of the User Manual.

Fixed bugs

MDR-1795

An unexpected error message “Access violation” appeared when the top of the pipe was situated above the surface level (Known issue).

MDR-1930

An unexpected error message “Range check error” could appear when opening the Report for Micro-tunneling model with very small subsidence.

MDR-1846

An unexpected error message “Invalid floating point operation” appeared during a HDD calculation where modulus E100 was used and negative effective stress was present.

MDR-1928

An unexpected error message “Floating point division by zero” appeared when the friction angle was zero in a layer situated below the undrained/drained border.

MDR-1850

An unexpected error message “Floating point division by zero” appeared when a vertical was situated along a vertical layer separation.

MDR-1933

An unexpected error message “Floating point division by zero” appeared when the Young’s modulus of the steel was 0.

MDR-1760,
MDR-1813

In the Direct Pipe and Micro-tunneling models, an incorrect factor was applied on the minimal support pressures in undrained conditions and also on the maximum support pressure.

MDR-1887

During a Direct Pipe calculation with the European standard, incorrect safety factors were applied for the calculation of σ_t in load combinations 1A and 1B.

MDR-1762

Calculation was performed even if no verticals were present.

MDR-1794

Calculation was performed even if the pipe was partly in the air.

MDR-1537	The “Check on calculated stresses” was incorrect in case the calculated stress was equal to the allowable stress.
MDR-1819, MDR-1764, MDR-1791, MDR-1826, MDR-1972, MGEOLIB-1132, MGEOLIB-1110, MGEOLIB-1087	<p>Several problems in the <i>Report</i> have been solved:</p> <ul style="list-style-type: none"> • the reference to the Dutch norm NEN 3650 and NEN 3651 was incorrect (2012 instead of 2020) • incorrect friction coefficients were displayed when the Input Data section was not shown • for Construction in trench and Micro-tunneling models, section “Soil Mechanical Parameters” contained data about traffic load but traffic load is not an input • for Micro-tunneling model, the horizontal bearing capacity was missing in section “Soil Mechanical Parameters” • in section “Check on calculated stresses”, the name “DamageFactor” has been changed into “Factor of Importance” • print problems related to page orientation and paper size setting
MDR-1765	Entering a straight line in pipeline configuration was sometimes not possible (unexpected error message).
MDR-790	The option <i>Exporting results as csv...</i> was available for Construction in trench model.
MDR-1563	Functioning of the “Same scale for X and Y” button was confusing in Top View window.
MDR-1825	The display of info bar setting was not remembered in “Stresses Geometry” window.
MDR-1796	A negative modulus of subgrade reaction could be calculated and displayed in the Report.
MDR-1854	When switching between <i>Input/Geometry</i> tab and <i>Top View</i> tab, image got distorted.
MGEOLIB-1002	In <i>Geometry Limits</i> window, the entered geometry limits were sometimes unexpectedly reset by the program.
MGEOLIB-987	In the <i>Program Options</i> window, <i>License</i> tab, the type of license was not always correct when the license borrowing has expired, allowing to perform a calculation even if no license was present.
MDR-1761, MDR-1927, MDR-1849	<p>Several problems in the User Manual have been solved:</p> <ul style="list-style-type: none"> • the equations for the calculation of the total soil stress were incorrect; • in section “4.4.1 - Boundaries Selection”, the color of the boundaries were incorrect. • the Note at the end of paragraph 4.6.1.2 was incorrect: to model a horizontal micro-tunneling, an angle of 0.0001 should be used (not 0).

<p>MINSTALL-901, MGEOLIB-978, MGEOLIB-979, MGEOLIB-985, MGEOLIB-1000, MGEOLIB-1018</p>	<p>Small corrections in the messages displayed during installation and borrowing of license.</p>
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Improvements

<p>MDR-1745, MDR-1962, MDR-1847</p>	<p>German translation of the Report is improved.</p>
<p>MDR-1799</p>	<p>In <i>Soil Materials</i> window, the functioning of button <i>Add from NEN 9997-1</i> is improved (refer to section 4.2.2 of the User Manual for more information).</p>
<p>MDR-1860</p>	<p>In <i>Engineering Data</i> window (HDD), the functioning of the checkbox <i>Pipe always filled (implosion)</i> is improved.</p>
<p>MDR-1901</p>	<p>During a batch calculation, the result (succeeded/failed) during the input validation and calculation is now written in the batch log file.</p>
<p>MGEOLIB-1046</p>	<p>The <i>Same scale for X and Y axis</i> option (as part of <i>Project Properties</i>) is better handled and remembered when saving a project.</p>
<p>MGEOLIB-989, MGEOLIB-1036, MGEOLIB-1037, MGEOLIB-1049</p>	<p>An extra option <i>Use compression</i> was added to the <i>Export Options</i> window (default is false). Turning this option off can solve the problem with an "Integer Overflow" error when generating a report.</p>
<p>MGEOLIB-973</p>	<p>When opening the Report, a warning message is displayed if the available paper width is not enough for the required print width.</p>
<p>MGEOLIB-1136</p>	<p>When an input field is disabled, the background is grey (instead of white).</p>
<p>MGEOLIB-995</p>	<p>Messages displayed when printing without printer are improved.</p>

Limitation

<p>MDR-1817, MGEOLIB-1056, MGEOLIB-1005, MGEOLIB-1019, MGEOLIB-1054</p>	<p>All MGeobase Database functionality is removed (option to select a database in <i>Tools/Program</i> Options; option to import soils in <i>Soil/Materials</i>; option to import geometries using <i>Geometry/Import</i> from database)</p>
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