PS3D 2.0.11 Release Notes (Mar-29-2023)

Bug Fixes in Postprocessing -> Time History

1. Angle values were incorrectly multiplied with the deg-to-rad conversion factor (PI/180). Affected releases: since 2.0.7.
2. Angle and angular velocity of the rigid body were incorrectly calculated. Affected releases: since 2.0.8.

PS3D 2.0.10 Release Notes (July-2019)

Bug Fix

On some systems with Windows 10, 2D graphics (Diagram, Projectile, …) weren't shown anymore after a 3D graphic (Target, Simulation,…) was shown.

PS3D 2.0.6 – 2.0.9 Release Notes

Non-public customized versions.

PS3D 2.0.5 Release Notes (Apr-30-2011)

Minor changes in the demo version.

PS3D 2.0.4 Release Notes (Apr-13-2011)

Bug Fix

Fixed a problem with saving Time Histories/Profiles (*.dat) files.

PS3D 2.0.3 Release Notes (Feb-05-2010)

Bug Fix

Saving projectiles caused presentation errors in the graphic pane (repeated display of the projectile design) and incorrect data (mass balance) in the textpane. Affected releases: since 2.0.0

PS3D 2.0.2 Release Notes (Sep-07-2009)

Bug Fixes

1. Hole profiles in target blocks were not correctly positioned when the block was oriented different to its standard orientation. Affected releases: probably all builds since 2003.
2. The program crashed when both possible hole profiles were active. Affected releases: 2.0.0 and 2.0.1.
3. The material model for metals was incorrect. Affected releases: 2.0.0 and 2.0.1
4. The "Advanced Options" parameters were not listed. Affected releases: 2.0.0 and 2.0.1.
5. In the data type "State", the Menu Items in the View Menu as well as the buttons "Reset View", "Shift Mode", Rotate Mode", and "Zoom Mode" were wrongly deactivated.

Energy Balance

A relative energy error is now heading the output list of a simulation. A large error indicates inaccurate results.

To compare energy errors obtained with different solvers (elastic-plastic, rigid, rigid with time step control) is not meaningful.

Time Step Control

A new solver with a controlled adaptive time step has been implemented for rigid projectiles. It is in a beta status. With the menu *Simulation/Analysis Options* it can be set in the dialog by checking the box labelled "Enable Time Step Control".

The time step safety factor should be set 0.7. Note that the number of iterations is usually not inversely proportional to that factor.

Projectile

In the "Projectile Option Dialog" the regular pattern of surface can be switched off to work with an alternating pattern. This distributes the surface points more evenly on the projectile.

PS3D 2.0.0 Release Notes (Jul-08-2009)

Copy Protection

From 2.0.0 on PS3D runs exclusively with USB dongles. The older parallel dongles are no longer supported.

Windows VISTA

Setup routines and online help have been modified to be compatible with VISTA.

Session Files

- The menu *File / Save session* can now be used to save a complete session. When a session file is opened, workspace windows are created and their contents are restored.
- The material database is not included in the session file. There is always only one active database file.

Projectile and Target Menu

- The Undo and the Redo function is implemented to help setting up a projectile or a target model.
- A projectile design can now be exported and pasted in the NUMERICS engineering tool SPLIT-X.

Simulation Options

- In the menu *Simulation / Target Material,* a target material can be replaced in the simulation mode. Earlier, the material of a target could only be replaced in the target mode in the menu *Target / Modify* by selecting each target block and assigning the material. For target models with more than one block made of the same material, the new option is more comfortable for the user because all blocks of the same material are assigned with only one command.
- In the menu *Simulation /Parametric Analysis,* parameters for a target block like dimensions or materials strength can be selected for a parametric analysis.

Postprocessing Options

- The penetration process of a projectile impact can be stored as a movie in avi format.

Settings

- The menu *Settings / Global Options* is removed in this menu. Global Options can now be defined in the menu *Simulation / Advanced Options*.

Views

- 3D graphical output can be rotated, shifted and zoomed by mouse actions:
  - Alt + left button: Shift
  - Alt + Ctrl + left button: Rotate
  - Alt + Shift + left button: Zoom
- An opacity parameter can be set in the Display Options for the Target (Target and Simulation Mode) e.g. to observe the penetration path or e.g. to see the position of the bars in a reinforced concrete target.
- In the Display Options, axes can be defined for a better view on the model dimensions.
- Activated targets can be masked and unmasked.

- A clipping mode is implemented to show cross sections in various cutting planes of the model.

Online Help
- HTML-help has replaced the former help format.
- Manuals can be opened via the Help menu.

Documentation
- The User's Manual has been updated.