Diffpack Pre- and Postprocessing Toolbox

Diffpack Pre- and Postprocessing Toolbox (based on GiD) – developed to have a general interface for the creation and import of complex geometries and meshes and for the postprocessing of results.

Geometry Options
This new toolbox provides you with an interface that gives you the freedom to define your geometry by using for example
- Points, straight lines, nurbs lines, polylines
- Nurbs surfaces, parametric surfaces
- 2D-Objects like rectangles, polygons, circles
- 3D-Objects like spheres, cylinders, cones

Meshing Options
It offers full meshing possibilities, for example
- Structured or unstructured meshes
- Quadratic elements with 4, 8 or 9 nodes
- Triangle elements with 3 or 6 nodes
- Tetrahedra, hexahedra or prism elements

Furthermore, this new interface also allows you to import meshes and geometries from other industry standard applications, for example IGES files, Parasolid files or NASTRAN meshes.

Calculation Process
This new interface also provides you with functionality to choose your own Diffpack application.

To define the Diffpack settings the Diffpack GUI opens within the new Pre- and Postprocessing interface. The process can be started easily, and the results are automatically written in the required file format.

Postprocessing
The Diffpack Pre- and Postprocessing Toolbox also gives you the opportunity to view the results of several analyses/steps.

Possible displays of your results include
- Scalar view of results (contour fill, contour range, contour lines, min/max values, iso surfaces)
- Vector view of results (mesh deformation, display of vectors and stream lines (e.g. for particle tracing))
- Line diagrams (scalar line diagrams and vector diagrams)
- Graph lines (XY-plots)
- Animation of the current result visualization

Altogether this new toolbox offers a variety of functions to enable the deployment of a very convenient pre- and postprocessing for your Diffpack solver.