

New Features in MineSight® 3D v.5.00



The 2009 Update CD will include MineSight 3D (MS3D) v 5.00. This new version of MS3D is loaded with new enhancements, some of which are highlighted in this article. This is part 1 of a two part article to introduce you to some of the new features. Look for Part 2 in next month's newsletter

Model View Coding

Model coding from surfaces has been implemented in MS3D v.5.00. To code your 3DBM, GSM, or GSF, you'll add the surface to a Geometry Set and then decide whether to code above or below the surface (Figure 1).

Other changes to model coding include a total revamping of the coding on the Polygons page (Figure 2). When coding 3DBMs and GSFs, the dialog changes make coding from polygons much more intuitive and easier to use.

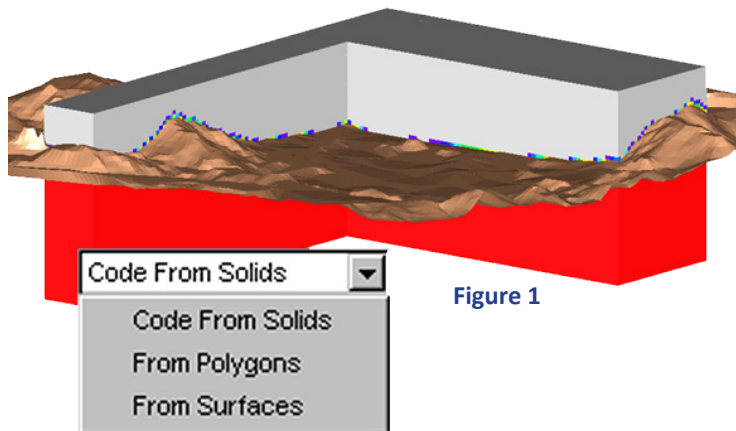


Figure 1

Figure 1 shows the new model coding **Code From Solids** choice, a 3DBM and the surface (top) used to make the model.

Figure 2 shows the revamped **Model Coding | Polygons** page. Notice the **Polygon coding options** section, the options that were formerly dropdown options are now radio button options.

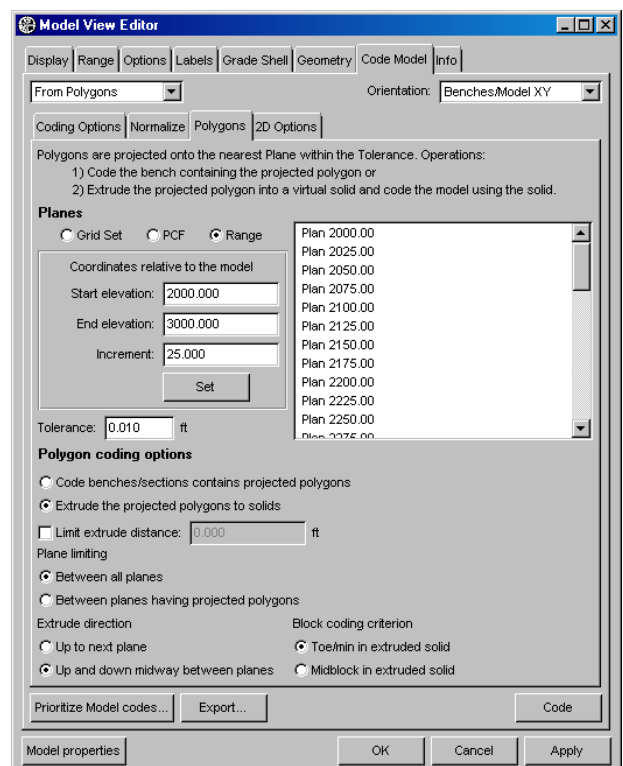


Figure 2

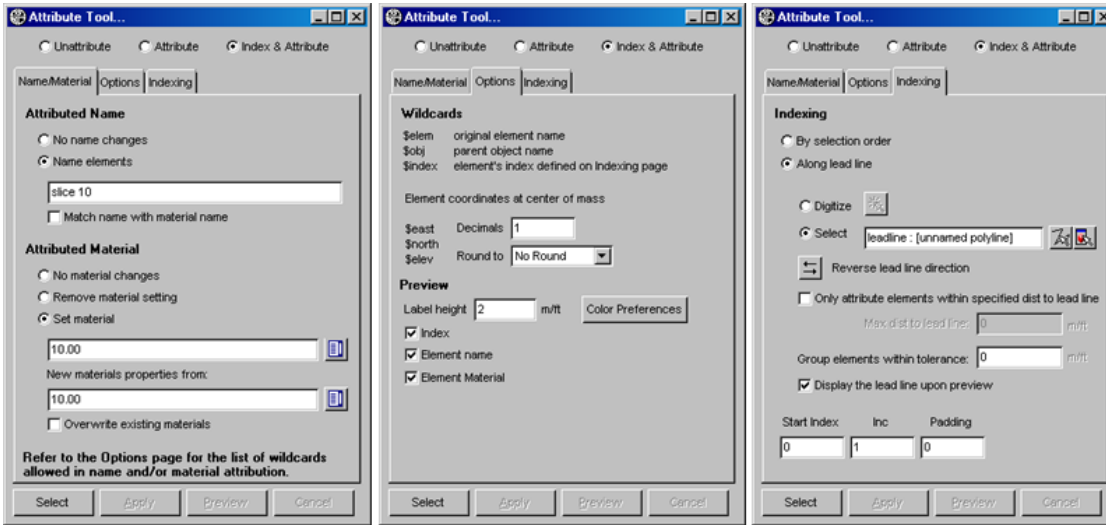


Figure 3

Figure 3 shows the Attribute Tool's three pages.

Attribute Tool

The **Element | Attribute** function has been greatly enhanced and renamed the **Attribute Tool**. Similar to the Autoslicer's naming functionality, this tool allows you to quickly attribute a group of existing polygons.

The **Attribute Tool** now has three pages (Figure 3). You can use wildcards for both name and material (\$index, \$elem, \$obj, \$east, \$north, and \$elev) and new materials can be created on-the-fly with the properties defined from existing materials.

Indexing can be used for ordering the selected elements in two different ways; elements can be indexed in the order of selection or following a lead line direction. The lead line can be digitized, picked through the OCB, or selected from the viewer, and its direction can be reversed any time. In addition, selected elements can be filtered based on their distance to the lead line.

Prompt for Attribute on Create

Attribute on Create, a handy new option on the **Element** menu lets you preset element attributes for points and polylines before they are digitized (Figure 4).

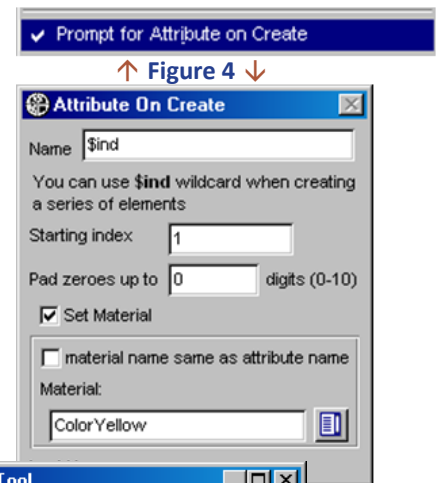


Figure 4

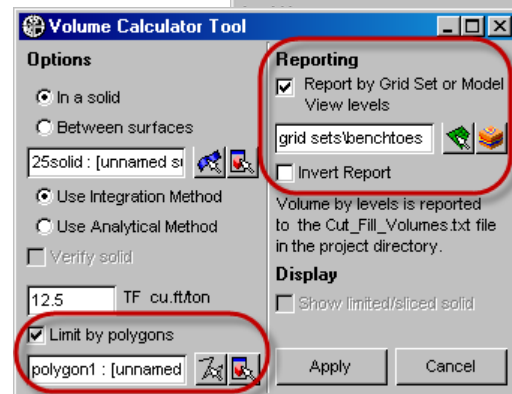


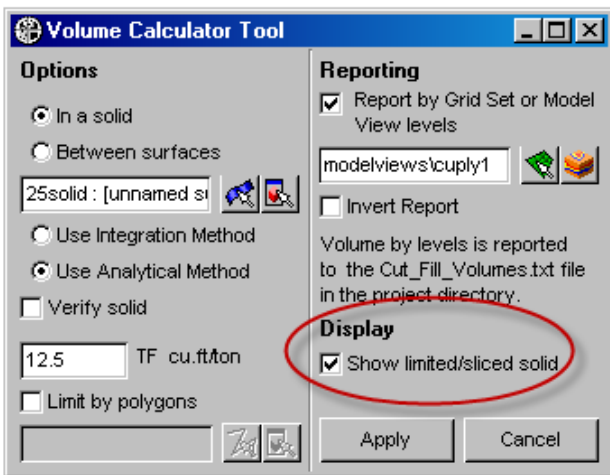
Figure 5

Volume Calculator Tool

Two new options were added to the **Volume Calculator Tool** to report the volume by Grid Set or Model View levels, and to limit by polygons (Figure 5). When reporting by a Grid Set or Model View levels, the volumes are reported to the file **Cut_Fill_Volumes.txt** and the **.txt** file opens in Notepad (or whatever program **.txt** files are associated with on your computer).

Figure 4 shows the new **Prompt for Attribute on Create** option and the new **Attribute On Create** dialog.

Figure 5 shows the **Volume Calculator Tool** dialog with new options outlined in red.



If you are calculating the volume of a solid, reporting by Grid Set or Model View levels, and use the **Analytical** calculation method, you can also show the levels in a virtual solid (Figure 6).

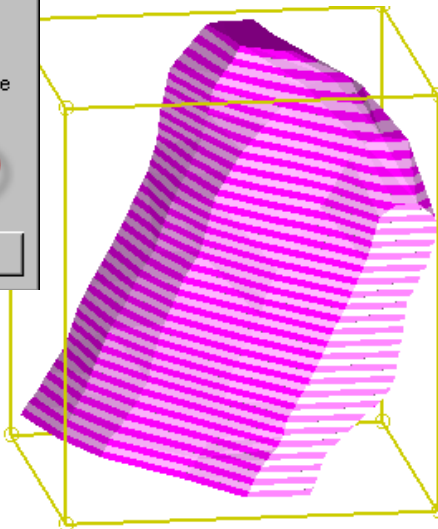
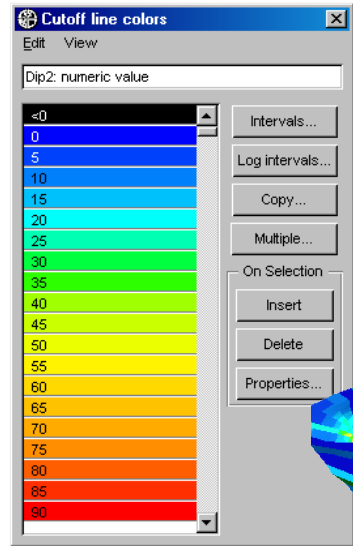


Figure 6 shows the **Volume Calculator Tool** dialog with the new **Show limited/sliced solid** option and the virtual solid colored by level slices.

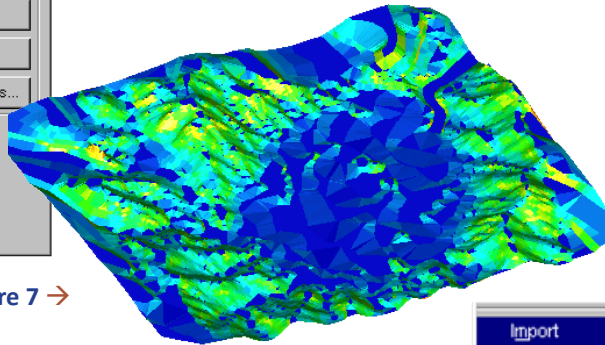
↑ Figure 6 →

Color Surfaces By Dip Angle

The new **Color Surfaces By Dip Angle** display option allows you to temporarily color the individual faces on a surface by their dip angle (Figure 7). You'll need a color cutoff item with intervals (from 0 -



90°) and a surface selected from the viewer. The colors are not permanent. To revert the object's color back to the original set in its **Object Properties**, just close or refresh the surface.



↑ Figure 7 →



Figure 7 shows a surface color coded using the new **Color By Dip Angle** option on the **Surface** menu.

Figure 8 shows the new "Vulcan Survey (.dgd.isis)" choice available from the **Data Manager** dropdown menu.



Figure 8

More Great New Features

More options have been added to aid importation of data from Vulcan™ software. You will be able to create a CSV file from a Vulcan™ model file using a new standalone program. You can also directly import Vulcan™ .dgd.isis survey files into MS3D by navigating **Data Manager | Import | Vulcan...** (Figure 8).

For Grail script writers, the Surface Intersector, and standalone engines have been added to the Grail library. The file import library now includes four additional file types: SHL, RG, SRV, and DXF. And MPython was upgraded to be compatible with Python™ v.2.5

Finally, as of MS3D v.5.00, the acQuire™ enabled version (MS3DACQDSS) is the standard release version!



Look for these and more new tools, functions, and options in MS3D v.5.00 on the 2009 Update CD. More great new features will be discussed in Part 2 of this article in next month's newsletter.

