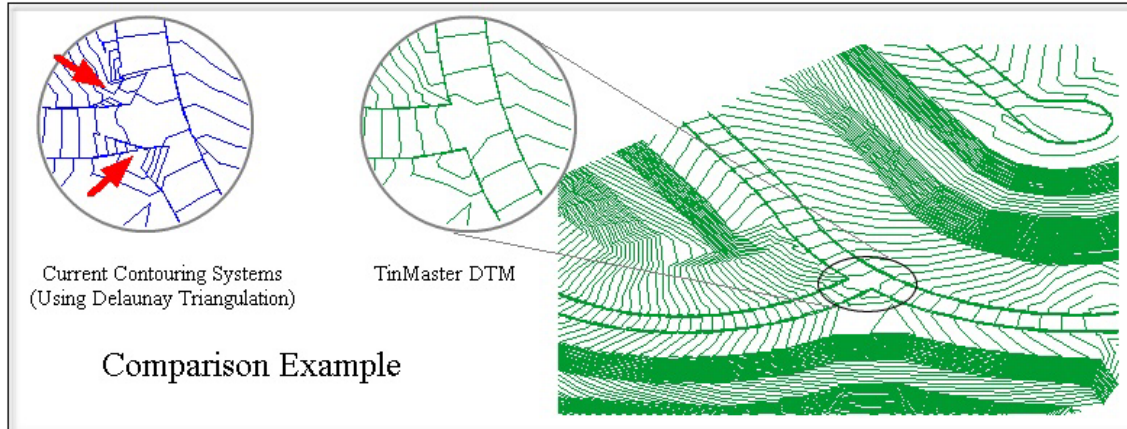


Editorial Spotlight

New technology in DTM opens new Business opportunities for Surveyors



TIN Master DTM. Faster, Easier TIN Editing For inside or outside AutoCAD®

The construction industry is rapidly moving toward automated machine control systems for grading. These new construction systems provide superior job control and huge savings in earthwork construction. They also open up a major new market for survey and engineering services.

Machine Control requires accurate TIN Models
In the past, Digital Terrain Models (TIN's) have not been particularly accurate. They were primarily used to create contour maps or to compute earthwork or cross sections - where errors could be corrected in the final drawings. The TIN itself was not the final product. The new machine control systems use Digital Terrain Models (TIN's) as the basis for controlling the location of cuts and fills. The accuracy of the TIN model has now become critical. The machine control system will shape the ground to conform to the surface represented by the TIN. If the TIN is wrong, the machine will cut the ground to the same wrong shape. Once the dirt has been moved, there is no inexpensive way to correct it. TIN's for machine control must be far more accurate than in the past.

This has created a new need for good TIN modelers. Contractors often turn to surveyors for TIN's because they have the knowledge of the ground surfaces and the expertise to produce accurate models. Until now, however, software tools have been in their infancy, and it has been quite difficult, even for experts, to produce accurate TIN's.

The vast majority of problems with TIN's are caused by the mis-triangulation of points. Most surveyors have used at least one of the traditional DTM systems, and most have experienced the problems inherent in those systems. Some systems attempt to solve this

problem by inputting breaklines or modifying data points to force the triangulation. This is time-consuming and cumbersome, and unless carried to the extreme, still doesn't produce a TIN accurate enough for automated machine control.

New TinMaster DTM produces accurate TIN's in a fraction of the time. Lamutt & Associates, Inc. has recently developed a new DTM software called TinMaster DTM which makes TIN modeling dramatically faster and easier. The new software, distributed by AGT, Inc., effectively solves the triangulation problem. Users just "point and shoot" at bad contours or triangles, and the TIN is locally re-triangulated. New contours are instantly displayed on screen. TinMaster DTM also contains a complete suite of commands to perform other TIN editing processes. Users can produce TIN's accurate enough for machine control and still be cost effective.

TinMaster DTM can be used Stand-Alone or as an Add-On to other systems. As a stand-alone system TinMaster DTM will create TIN's from any point data stored as ASCII files. Or it can read data directly from AutoCAD and automatically extract the necessary data from AutoCAD 3D entities. It is a valuable addition to any contouring or earthwork system. TIN's from any system which writes triangles to AutoCAD can be edited in TinMaster DTM.

TinMaster DTM is available from AGT, Inc., the premier civil engineering software source, based in Atlanta. TinMaster DTM is very affordable and normally pays for itself in time savings on the first project. (see the opposite page for pricing and ordering information.)