

HDS Division of Leica Announces Cyclone 5.3

The High-Definition Surveying Division of Leica Geosystems AG (Switzerland) has announced the full commercial release of Cyclone 5.3 software. Cyclone 5.3 streamlines workflows for creating as-built and topographic survey deliverables from data sets captured by High-Definition Surveys for Civil Infrastructure, Plant and other markets. Cyclone 5.3 also features new tools for creating even more accurate deliverables and for more comprehensive project QA/QC.

With Cyclone 5.3, professionals working with laser scan data on transportation related projects can now quickly compute and report both vertical and horizontal clearances for overpasses, bridges, interchanges, and overhead sign structures. The new tools not only let users derive minimum clearances faster, but also help ensure more accurate clearance results, i.e. that absolute minimum clearances within laser scan data are found and reported. A new polyline segmentation tool also enables users to more precisely set boundaries of TIN meshes from scan data. On the automation front, new tools allow users to conveniently create useful vertical sections from scan data without requiring an alignment reference and to automatically place vertices, selected using Cyclone's popular Virtual Surveyor tool, into Cyclone ModelSpaces.

Cyclone 5.3 lets users automatically create 3D models of pipe networks (automatic pipe run) from laser scan data, instead of having to model one pipe section at a time. By linking scan data directly via SDNF and PCF translators to standardized steel and piping tables, users are ensured of even more accurate 3D as-built models.

Users can now import and export results directly in LandXML format, the industry's premier data exchange standard, for efficient, seamless data transfer with products used by Land Development, Civil, and Survey professionals. In addition, Leica System 1200 interoperability allows export of data for stakeout purposes. For plant applications, users are now able to take advantage of industry standard SDNF and PCF formats for directly creating intelligent 3D models for steel and piping from High-Definition Surveys.

Cyclone 5.3 also provides several general quality and efficiency enhancements for scanner operation, point cloud registration, and selection of point cloud regions for processing into deliverables.

For scanning, Cyclone 5.3 offers Leica HDS4500 users further increased confidence in data quality via both automated calibration checking using black/white targets and automatic user notification of scheduled calibration. Leica HDS2500, HDS3000, and HDS4500 users can now also choose to segment scan data by distance from the scanner, reducing the risk of using data that is outside formal range specifications.

Finally, more options and a friendlier interface have been added to Cyclone's popular family of tools for cutting point clouds into useful sub-segments that users want to focus on.