



Business Center - HCE

TAKEOFF PACK PLUS

THE COMPLETE TOOLBOX FOR SITE TAKEOFF AND ESTIMATING

Win more business with Business Center - HCE from Trimble by preparing earthworks and construction material quantity takeoffs quickly with expanded detail and sharper accuracy. The Takeoff Pack Plus contains all of the tools needed for site takeoff and estimating.

Going beyond the basic office-to-field interactions, Business Center - HCE with the Takeoff Pack Plus can also enhance your estimating and bidding.

- ▶ Perform site takeoffs from CAD or Adobe® PDF data and create 3D constructible models to analyze work balances
- ▶ Create detailed estimation data for material quantities and manage topsoil quantities
- ▶ Use the same 3D constructible model with Site Mass Haul capabilities to efficiently manage and optimize earthworks costs

KEY FEATURES | MODULES

Core Product Functionality

Business Center - HCE software core functionality does much more than just import and export.

- ▶ Creation, editing and visualization commands
- ▶ Import AutoCAD DXF/DWG, Microstation DGN, ICM, LandXML, ASCII points, files from many Trimble systems or other third party systems
- ▶ Create and edit alignments, site calibration, surfaces and points, and breaklines to refine surfaces
- ▶ Calculate volumes between surfaces and measure the bearing and distance between objects
- ▶ Cost-efficiently find and fix errors before they are sent to the field by visualizing and editing in 3D
- ▶ Export to many file formats for maximum versatility

The Core Product is available as a free download, add-on modules extend the functionality of Business Center - HCE.



Key Benefits

Business Center - HCE contains powerful tools to help you quickly and easily create accurate, integrated 3D constructible models for sites, corridors and marine applications. Make better decisions, decrease costly mistakes, and increase efficiency in the office and on the job site.

- ▶ Win more bids by preparing earthwork and construction models quickly and accurately with expanded levels of detail
- ▶ Increase profit by optimizing the creation of site and corridor models
- ▶ Rapidly create and edit, generate reports and publish information
- ▶ Reduce rework by ensuring data is clean, up-to-date and delivered in the right format to get the job done
- ▶ Reduce drive time by effectively and seamlessly managing data between the office and field
- ▶ Works seamlessly with Trimble® SCS900 Site Controller Software, Trimble GCS900 Grade Control System, Trimble Earthworks Grade Control Platform, Trimble PCS900 Paving Control System, Trimble CCS900 Compaction Control System and Cat® AccuGrade™ Grade Control Systems



Image Manager Module

The Image Manager Module provides the ability to import, georeference and place images. Imported images can be draped onto surfaces and generate 3D views and presentations of your project. Adobe® PDF files can be quickly converted to CAD data to allow for fast model creation.

- ▶ Georeference and automatically convert Adobe® PDF files to CAD, including vectors
- ▶ Toggle background map to visualize how your design interacts with Mapbox, OpenStreetMap
- ▶ Add/remove image boundaries to easily merge data from multiple Adobe® PDF sheets
- ▶ Copy View to clipboard
- ▶ Automatically tile images to increase display speed
- ▶ Capture 3D and screen images for use in other applications



Surface Tools Module

The Surface Tools Module adds functionality for creating and editing both surfaces and alignments, essential to find and fix errors before they are sent to the field for construction.

- ▶ Add and remove surface boundaries for accurate volume calculations
- ▶ Review as-staked corridor reports
- ▶ Update cut/fill volumes automatically and quickly, even with large data sets
- ▶ Clip lines
- ▶ Densify an alignment-based surface
- ▶ Drape image objects over surfaces
- ▶ Process feature codes

Create and edit:

- ▶ Point cloud regions and points from CAD objects
- ▶ CAD points from scan points
- ▶ Cut/fill maps
- ▶ Linestrings from points
- ▶ Stored cross sections
- ▶ Surface ties, edge breaklines and grids
- ▶ Station offset elevation reports
- ▶ Alignment superelevation



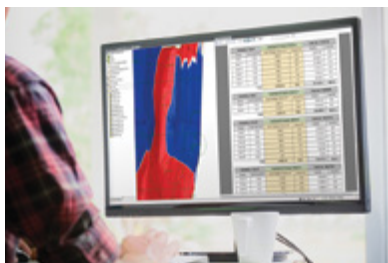
Takeoff Module

Save time and decrease the learning curve by using one piece of software to apply site improvements to specify materials and depths, and get an accurate report of quantities and costs for site takeoffs.

- ▶ Send takeoff modeling to the field for stakeout and grading
- ▶ Analyze earthwork balance
- ▶ Validate site improvement areas
- ▶ Build takeoff surfaces and categorize takeoff layers
- ▶ Compute region volume
- ▶ Configure subgrade adjustments
- ▶ Track region outline
- ▶ Use excess topsoil

Create, edit and define:

- ▶ Area/length/count and boring log reports
- ▶ Boundaries by site improvement
- ▶ Custom reports
- ▶ Areas of interest
- ▶ Strata
- ▶ Topsoil stripping areas
- ▶ Site regions
- ▶ Over Excavation



Site Mass Haul Module

Reduce costs and improve profits by efficiently moving earth only once. The Site Mass Haul Module helps determine how much to move, from where, to where, and what it will cost to get it all done.

- ▶ Archive and auto-balance mass haul
- ▶ Convert CAD data to haul roads
- ▶ Mass haul balance view and editor
- ▶ Define site materials and edit color mapping
- ▶ Create cut/fill maps, earthworks sites, haul roads, site mass haul analyses and site mass haul reports
- ▶ Material processing reports

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