

We believe **QSCad** is the best CAD Measurement system available, check it out for yourself!

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DRAWING COMPATIBILITY AND SETUP Compatible with the latest CAD dwg and dxf formats (AutoCAD 2004, 2006, 2007/2008, 2009) Supports Measurement from PDF, Scanned & Image files Automatic Calibration and checking routines for CAD drawings Manual Calibration for Scanned and Image files Supports Drawings containing XRefs Supports the display of and snapping to MLines Supports Imperial or Metric Drawings Enables measurement in Imperial or Metric	1 111111		Linear Measurement Basic linear measurement using mouse clicks as coordinates Linear measurement using 'snapping' functions Single/Separate lengths measurement Close' linear measurement shape back to original point Undo last point facility Linear measurement by selection of lines Linear measurement with User-defined Offset Area Measurement	******	
WORKING WITH THE DRAWING Zooming & Panning Zoom in and Zoom Out using toolbar buttons Zoom in and Out using Mouse Wheel Zoom to a Window	111		Basic area measurement using mouse clicks as coordinates Area measurement using 'snapping' functions Undo last point facility Add a void to an Area Area measurement by selection of lines Area measurement by the selection of a circle Area measurement with User-defined Offset	*****	
Dynamic Zooming with Instant refresh Return to up to 10 previous 'Zooms' Pan (move drawing) in any direction using toolbar buttons Pan Dynamically by 'grabbing' drawing and moving Activate Dynamic Panning 'hot-key' Pan and Zoom even when a dialog is open	*****		Numeric Measurement Create and save user-defined markers Basic numeric measurement using mouse click to select items Identification and measurement of items drawn as 'blocks' in CAD drawing Select/deselect 'blocks' to be measured individually	1111	
Views Save the Current 'View' of a drawing Create a 'View' from a Window Select saved 'Views' from a hotkey Overlay drawings to identify changes/differences Overlay Scanned and CAD drawings Open Multiple drawings simultaneously	*****		Select/deselect 'blocks' to be measured by defining an area Check whether an item is a 'block' Identification and measurement of items identified by 'text' Snapping Snap to endpoint, midpoint, nearest line or intersection Snap to arc	111 111	
CAD Drawing Layers and Format View drawings in both Paperspace and Modelspace View drawing in Black and White or CAD colours Increase resolution to 'smooth curves' Turn on and off CAD drawing layers Turn off CAD drawing layers by selecting an item on that layer Restore CAD layers to original state Change all CAD layer colours to black Change all CAD drawing text and lines to black	*******		ADVANCED MEASUREMENT Measurement Setup Create and use Master Lists for Standard Measurement Layers Create and use Master Lists for Standard Descriptions, shading etc. Create and user Master Lists for Standard Markers Measurement Components Create user-defined components	• • • • •	
Change CAD layer colours Rotate drawing Set user-defined highlight colour Create unlimited Measurement layers BASIC MEASUREMENT	****		Create and use a Master Library of Standard Components Create and use components on an individual drawing Select Component Descriptions from List of Items previously measured Change the component and change all items using this component Create user-defined template components including variables	~~~~	
Generally Direct Entry of Measurement Description Selection of Measurement Description from list of items previously measured User-defined colours, shading, and line styles Entry of Additional Dimensions to enable additional calculations e.g. Area or Volume Designate a measurement as a 'Deduct' Interactive hatching during measurement Start Marker placed at origin of measurement	1 1 1 1 1 1 1		Repeats Repeat a measured area elsewhere on the drawing Repeat a linear measurement elsewhere on the drawing Repeat a linear measurement at centres elsewhere on a drawing Repeat numeric measurements at centres elsewhere on the drawing Repeat and rotate a linear measurement Repeat and rotate an area measurement Repeat and flip an area measurement	111111	

Measurement Tools

Automatically copy a measurement result to the clipboard Automatically display the quantity after each measurement Create and save Project Dimensions for use elsewhere Make a Quick Linear Measurement and add to Project Dimensions Make a Quick Area Measurement and add to Project Dimensions Draw your own measurement guidelines Draw your own measurement guidelines and define an offset Calculate a curve Radius with a single click Add Text Notes to a Drawing Add Voice Notes to a Drawing Add Text to a Drawing Create a Take Off List Calculate the Angle between two lines **GRAPHICAL OUTPUT**

Measurement References

Print Drawing with Unique ID allocated to each measurement Print Drawing with Description allocated to each measurement Print Drawing with Quantity displayed for each measurement Print Drawing with Area and Perimeter quantity displayed for each measurement Select Font for Measurement References 1 Select Text Height for Measurement References 1 Move a Measurement Reference Option to position Measurement Reference after each measurement Legend Create one or more legends from the measurements within the drawing シンシン Select which items should appear in the legend Define the symbol size and the text height for legend items Position the legend on the drawing Move a legend Include quantity totals for each item in the legend Drawing Header Position a drawing header on the drawing Choose to include Project Title, Drawing Title, Visible Layers and Current Date Move a drawing header Edit a drawing header to select fonts, etc. Add your company logo to the drawing Printing a Drawing Print to any Windows Printer Print Complete drawing Print an Area of the drawing Print the Current View Print to Fit Paper Print to Scale Print to span several sheets Full CAD engine printing functionality User defined margins Window and Full Page Print Previews BASIC RESULTS Create a Detailed Summary of measured items Create a Consolidated Summary with like items combined Select measurement layers to include in the Summaries Change the measurement layers included whilst viewing the Detailed Summary Full Audit trail from Summary back to measurements with Show Me facility Include Perimeters for Area Measurements Include calculations from Additional Dimensions where entered

Easily identify items generated by a Component Combine measurements generated by a Component with those generated normally

- Multiply all displayed measurements by a factor
- Display Metric and Imperial Quantities on Consolidated Summary

BASIC RESULTS (Cont'd.)

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Round Quantities on Consolidated Summary Copy Items from the Summary to the Windows Clipboard for pasting elsewhere

Print Detailed and Consolidated Summaries

Export Detailed and Consolidated Summaries to Excel Export Consolidated Summary for use in other Masterbill products

Add your company logo to Summaries

DATA ANALYSIS

Allocate user-defined filter(s) as part of the Measurement process Allocate user-defined filter(s) retrospectively by selection Allocate user-defined filter(s) retrospectively by defining an area Display details of any allocated user-defined filters on the Detailed Summary Display only measurements that meet user-defined filters criteria on Detailed Summary Produce Consolidated Summary based on user-defined filters criteria Special 'Select' Layer which may be populated with similar items or selected items Detailed Summary of items copied to 'Select' layer Consolidated Summary of items copied to 'Select' layer Graphical Output of items copied to 'Select' layer ADVANCED RESULTS Create Summaries from Multiple Drawings (e.g. Floors 1-10) Apply multiplication factors to drawings in a Multiple Drawing Summary Quantify a revision using Multiple Drawing Summary

EDITING MEASUREMENTS

Edit a single measurement by selecting
Edit multiple measurements by selecting
Edit multiple measurements by defining an area
Edit all items with the same description
Move measured items
Copy measured items
Copy individual or multiple items to another layer
Rotate measured items
Delete a single measurement by selecting
Delete multiple measurements by selecting
Delete multiple measurements by defining an area
Recycle Bin layer for all deleted measurements
Restore deleted items from the recycle bin
Edit Text
Change Text Sizes
Edit a point in a length measurement
Edit a point in an area measurement
Trim Linear Measurements to a line or area
Extend Linear Measurements to a line or area
Find Measured Item using measurement reference
WORKING WITH REVISIONS
Create a new revision of the drawing with a new measurement file
Create a new revision of the drawing re-using existing measurements
IMPORT / EXPORT FACILITIES
Export a complete project with all drawings and data files
Export a single drawing together with its data file
Import a complete project with all drawings and data files
Import a single drawing together with its data file
Export 'coloured up' drawing to DWG file
'Offline Working' Facilities
Copy Measurements between drawings
HELP SYSTEM
Windows Help system including index and search facilities
Show Me' links from Help system to System Videos located on the

Full Manual Available in PDF format



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QSCad v3 Siteworks takes Cut and Fill Measurement to a whole new level.

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SITEWORKS SETUP Overlay and Align Existing and Proposed drawings	1		Rock Levels Enter rock levels by selecting depths on the CAD drawing Enter rock levels/depths manually by identifying where they apply	1	
Specify the calculation glid centres to suit the project/site Specify the centres at which to sample contours Specify the minimum number of points acceptable for the measurement of an area Select the depths categories to be used for excavation measurement	5		Specify a user-defined area(s) where rock levels apply Amend previously entered rock levels/depths Delete previously entered rock levels/depths	55	
with presets for SMM7 CESMM3 MMHW(4)	111		General Import levels information from a file created in another drawing Export levels information to a file for use in another drawing PROPOSED CONSTRUCTION AND LEVELS	5	
PDM(T) ARM3 Specify the depth categories to be used for filling measurement Specify which siteworks information will be displayed together with colours etc.	555		Construction Details Create multiple user-defined libraries of standard Construction Details Create a user-defined drawing library of standard Construction Details	55	
Specify Low and High parameters for siteworks information to trap errors EXISTING SITE INFORMATION	1		Stores complete Construction Build-up including Descriptions and Depths to enable complete construction to be measured in one action Standard Library of Descriptions to assist in creation of Construction Build-ups Automatic inclusion of compaction items for granular materials	5 5 5	
Existing Levels - Spot Heights Enter existing levels by selecting spot heights on the CAD drawing Enter existing levels manually by identifying where they apply Specify an existing level for a user-defined area Amend previously entered levels Delete previously entered existing levels by selecting individual levels Delete previously entered existing levels within a user-defined area Delete all previously entered existing levels Import Finished Levels from a previous drawing as Existing Levels			Measurement Siteworks area measurement using mouse clicks as coordinates Siteworks area measurement using 'snapping' functions Undo last point facility Siteworks area measurement by copying/converting a 'Basic' area Assign Finished levels by selecting levels on the CAD drawing Assign Finished levels manually by identifying where they apply Assign Finished levels by interpolation between two known levels		
Existing Levels - Contours Enter existing levels by selecting and importing Contours Enter existing levels by tracing/drawing Contours Interpolate Contours to the levels grid Amend previously entered Contours Delete previously entered Contours Topsoil Depths Enter topsoil depths by selecting depths on the CAD drawing Enter topsoil depths manually by identifying where they apply Specify a user-defined area(s) where topsoil depths apply Amend previously entered topsoil depths Delete previously entered topsoil depths			Measurement Validation / Checking Display Interpolated Finished Levels for a selected Siteworks Areas Display Interpolated Finished Levels for all Siteworks Areas within a user-defined area Display Interpolated Finished Levels for all Siteworks Areas Display Interpolated Finished Levels for all Siteworks Areas Display Interpolated Finished Levels points that are more than a specified distance from an entered value for selected Siteworks Areas Display Interpolated Finished Levels points that are more than a specified distance from an entered value for all Siteworks Areas within a user-defined area Display Interpolated Finished Levels points that are more than a specified distance from an entered value for all Siteworks Areas Display Interpolated Finished Levels points that are more than a specified distance from an entered value for all Siteworks Areas Obtain all levels information for a selected random point on the drawing Calculate average Evicting Level for a user-defined area	1111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Minimum Site Strip Enter minimum strip depths by selecting depths on the CAD drawing Enter minimum strip depths manually by identifying where they apply Specify a user-defined area(s) where minimum strip depths apply Amend previously entered minimum strip depths Delete previously entered minimum strip depths	1111		Calculate average Topsoil Depth for a user-defined area Calculate average Minimum Strip Depth for a user-defined area Calculate average Water Table Level for a user-defined area Calculate average Rock Level for a user-defined area RESULTS Create a Detailed Summary of measured items Select measurement layers to include in the Summarian	1111 11	
Water Table Levels Enter water table levels by selecting depths on the CAD drawing Enter water table levels/depths by identifying where they apply Specify a user-defined area(s) where water table levels apply Amend previously entered water table levels/depths Delete previously entered water table levels/depths	1111		Change the measurement layers to include in the Summaries Change the measurement layers included whilst viewing the Detailed Summary Full Audit trail from Summary back to measurements with Show Me facility Print Detailed Summary Export Detailed Summary to Excel	5 5 5 5 5	

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RESULTS (Cont'd.)		
Produce a Draft BQ in SMM7 format Produce a Draft BQ in CESMM3 format Produce a Draft BQ in MMHW(4) format Produce a Draft BQ in POM(I) format Produce a Draft BQ in ARM3 format Separate Minimum Site Strip quantities in Draft BQ Annotate Descriptions in Draft BQ Round quantities in Draft BQ Create and print a Grid Point Schedule detailing all known information for each and every grid point GRAPHICAL OUTPUT		
Siteworks Information		
Create, display and print Grid Point Information on the drawing Create, display and print Cut and Fill Lines for selected Siteworks Areas Create, display and print Cut and Fill Lines for all Siteworks Areas	555	
Legend		
Create one or more legends from the measurements within the drawing Select which items should appear in the legend Define the symbol size and the text height for legend items Position the legend on the drawing Move a legend Delete individual or multiple items from a legend	\$ \$ \$ \$ \$ \$ \$	
Drawing Header	,	
Position a drawing header on the drawing Choose to include Project Title, Drawing Title, Visible Layers and Current Date Move a drawing header Edit a drawing header to select fonts, etc.	• • • •	
Printing a Drawing Print to any Windows Printer	1	
Print Complete drawing	1	Q
Print an Area of the drawing Print the Current View	1	
Print to Fit Paper	1	
Print to Scale Print to span several sheets	1	
Full CAD engine printing functionality	1	
User defined margins User defined line widths	1	
Window and Full Page Print Previews	1	
Siteworks Graphics		
Shade and Print the plan to show values for Existing Levels	5	
Topsoil Depths	1	ō
Minimum Site Strip Levels Water Table Levels	1	
Rock Levels	1	ē
Finished Levels	1	
Cut and Fill	1	ū
Create and Print a 3D model, Section or Contour display to show	1	
Topsoil Depths	1	
Minimum Site Strip Levels Water Table Levels	1	
Rock Levels	1	
Finished Levels	1	
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DATA ANALYSIS

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Allocate user-defined filter(s) as part of the Measurement process Allocate user-defined filter(s) retrospectively by selection Allocate user-defined filter(s) retrospectively by defining an area Display details of any allocated user-defined filters on the Detailed Summarv Display only measurements that meet user-defined filters criteria on Detailed Summary Special 'Select' Layer which may be populated with similar items or selected items Detailed Summary of items copied to 'Select' layer Consolidated Summary of items copied to 'Select' layer Graphical Output of items copied to 'Select' layer Ability to carry out 'what if' calculations by moving and recalculating Siteworks Areas EDITING MEASUREMENTS Edit a single measurement by selecting Edit multiple measurements by selecting Edit multiple measurements by defining an area Edit all items with the same description Move measured items Copy measured items Rotate measured items Delete a single measurement by selecting Delete multiple measurements by selecting Delete multiple measurements by defining an area Recycle Bin layer for all deleted measurements Restore deleted items from the recycle bin Edit Text Change Text Sizes Edit a point in an area measurement RECALCULATION Recalculate selected Siteworks Areas Recalculate selected Siteworks Areas within a user-defined area Recalcualte all Siteworks Areas OPTIMISATION Optimise the Proposed Levels by Volume (balancing Cut and Fill) Optimise the Proposed Levels by Cost Specify the following Optimisation Settings... The centres above and below the proposed levels to use for optimisation calculations Excavation costs for each depth category Excavated material Disposal Costs Minimum Site Strip Disposal Costs Extra over cost for excavating below Water Table level Extra over cost for breaking up Rock Additional Filling Types for each type of construction Filling Costs for filling under each type of Construction Recalculate ten possible siteworks scenarios based on Optimisation Settings View an Optimisation summary detailing the quantities and costs of the Cut and Fill based upon the Optimisation Settings HELP SYSTEM Windows Help system including index and search facilities Show Me' links from Help system to System Videos located on the QSCad website Manual available in PDf format USER MANAGEMENT

Release the Siteworks module licence so that others may use it. Find out who is using the Siteworks module licence.

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QSCad v3 Drainage is full of new and improved features

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DRAINAGE DETAILS/SETUP Use Standard Library of Details or add user-defined details for Drainage Pipes Circular Concrete Manholes Rectangular Concrete Manholes Brickwork Manholes Deep Plastic Manholes	1111		RESULTS (Cont'd.) Covers and Frames Surface Finishes Fittings Produce user-defined Combined Summary or BQ from above categories GRAPHICAL OUTPUT	1111	
Plastic Inspection Chambers Circular Concrete Catchpits Concrete Soakaways Plastic Cellular Soakaways Petrol Interceptors Covers and Frames Surface Finishes	111111		Legend Create one or more legends from the measurements within the drawing Select which items should appear in the legend Define the symbol size and the text height for legend items Position the legend on the drawing Move a legend Delete individual or multiple items from a legend	*****	
Fittings Define Non-SMM trench widths for deep excavation EWS Define existing site Rock Levels/Depths Define existing site Water Table Levels/Depths Define default Cover types for each Surface Finish MEASUREMENT	~~~~		Drawing Header Position a drawing header on the drawing Choose to include Project Title, Drawing Title, Visible Layers and Current Date Move a drawing header Edit a drawing header to select fonts, etc.	* * * *	
Measure Individual Manholes etc. on the drawing by plotting and providing required information Measure Individual Fittings etc. on the drawing by plotting and providing required information Measure Drain Runs by plotting and providing required information Measure Drain Run branches by plotting & joining to other Drain Runs. Specify where a Drain Run changes Surface Finish Specify details at start and finish of Drain Run Specify the details of any Backdrops Specify Working Space measurement when measuring a Manhole Calculate Inverts based on known points and falls RESULTS	> > >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		Printing a Drawing Print to any Windows Printer Print Complete drawing Print an Area of the drawing Print the Current View Print to Fit Paper Print to Scale Print to Scale Print to span several sheets Full CAD engine printing functionality User defined margins User defined line widths Window and Full Page Print Previews	*********	
Produce a Fully Detailed Drainage Schedule for Drainage Pipes Circular Concrete Manholes Rectangular Concrete Manholes Brickwork Manholes Deep Plastic Manholes Plastic Inspection Chambers Circular Concrete Catchpits	******		DATA ANALYSIS Allocate user-defined filter(s) as part of the Measurement process Allocate user-defined filter(s) retrospectively by selection Allocate user-defined filter(s) retrospectively by defining an area Display details of any allocated user-defined filters on the Detailed Summary Display only measurements that meet user-defined filters criteria on Detailed Summary	1111	
Plastic Cellular Soakaways Plastic Cellular Soakaways Petrol Interceptors Covers and Frames Surface Finishes Fittings Produce a Draft BQ in SMM7, CESMM3, MMHW(4), POM(I), and ARM3 formats for Drainage Pipes Circular Concrete Manholes			EDITING MEASUREMENTS Edit a single measurement by selecting Move measured items Rotate measured items Delete a single measurement by selecting Recycle Bin layer for all deleted measurements Restore deleted items from the recycle bin Edit the details at the start and finish of a Drain Run Recalculate Drainage Measurements after Editing	1111111	
Rectangular Concrete Manholes Brickwork Manholes Deep Plastic Manholes Plastic Inspection Chambers Circular Concrete Catchpits Concrete Soakaways Plastic Cellular Soakaways Petrol Interceptors	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		HELP SYSTEM Windows Help system including index and search facilities Show Me' links from Help system to System Videos located on the QSCad website Manual available in PDf format USER MANAGEMENT Release the Drainage module licence so that others may use it. Find out who is using the Drainage module licence.	555 55	

