


CADWorx Electrical & Instrumentation Design Suite®

Frequently Asked Questions



Contents

| | |
|--------------------------------|-----------|
| General Information | 3 |
| CADWorx Electrical | 6 |
| CADWorx Raceway | 11 |
| CADWorx Instrumentation | 12 |
| Protogen | 14 |
| Training | 17 |
| Online Resources | 18 |



General Information

What is the CADWorx Electrical & Instrumentation Design Suite (EIDS)?

CADWorx Electrical & Instrumentation Design Suite is a feature rich set of electrical and instrumentation, design, and CAD tools used in over 50 countries round the world.

CADWorx Electrical & Instrumentation Design Suite is a family of products, including:

- CADWorx Electrical
- CADWorx Instrumentation
- CADWorx Raceway

All products above are included as part of CADWorx Electrical & Instrumentation Design Suite, but each product can also be purchased separately.

Note: This document includes FAQs for all the products listed above.

Who are SCADA Systems Ltd?

CADWorx Electrical & Instrumentation Design Suite is provided through a partnership with SCADA Systems Ltd. SCADA Systems was founded in 1988. SCADA Systems has been active supplying turnkey control systems in the Australasian market since then. As part of an in-house requirement, control and power systems applications were developed.

What are the main benefits of using CADWorx Electrical & Instrumentation Design Suite?

CADWorx EIDS greatly increases efficiency by using its in-built tools to automate repetitive tasks forced upon the designer, such as automatic circuit cross referencing, project wide global attribute editing and automated wiring diagram construction. Labor costs in your design projects can be significantly reduced by these efficiency gains. CADWorx Electrical increases accuracy by checking for circuit errors such as inconsistent cross sheet continuations, open circuits, short circuits and duplicated tag use. Accuracy improvements reduce “sheet flipping” checks and the “rework” associated with errors. This leads to obvious cost reduction in your design projects.

Which industries are supported by CADWorx Electrical & Instrumentation Design Suite?

CADWorx EIDS is adaptable to the design needs of many different industries, including:

- Electrical Panel Manufacturers
- Electrical Engineering Consultants
- Machine Manufacturing
- Power Generation
- Process Plants

Is the product hardware locked?

No. It is software locked - requires an authorization code.

Can the software be run on networks?

Yes. The software can be completely standalone OR completely server based.

Are software locks required for each machine running the software on a network?

Server Based - floating network licenses are available.

Is CADWorx EIDS compatible with AutoCAD LT?

No.

What CAD Platforms is CADWorx EIDS compatible with?

CADWorx EIDS is compatible with BricsCAD v22 and AutoCAD 2024, 2023, 2022, 2021.

Do these products run on MicroStation?

No. We do however supply an accurate export function that converts all DWG files to DGN (MicroStation version 8) for those customer that need this output format.

What database do you use? (Interpreted as “How do you store database data?”)

We use dbase 3 compatible files for report files, specification catalog files and for interfacing project data with external database packages already used on end user sites. Project data is stored in MS Access or MS SQL Server databases, and we are continually adding support for these RDBMS's as an alternative to dbase files.

What database do you use? (Interpreted as “Do you use a database programming package e.g. DBASE or MS ACCESS to create and run your applications?”)

We use our own API for reading and writing dbase 3 compatible files, and ODBC for reading and writing from MS Access and MS SQL Server databases.

What database do you use? (Interpreted as “Can we, the end user, use a database programming package e.g. DBASE or MS ACCESS to create applications or link our existing applications, used with your programs?”)

Yes. If you wish to access our input data (catalogs), maintenance/project database, or output files (reports) you can use ANY package that can read and write DBASE 3 files. Project data in an MS Access or MS SQL Server database can be read or manipulated using packages that support ODBC or similar RDBMS access methods.

To what standards do the included symbols conform?

Electrical symbols conform either to the international IEC standard, or the American ANSI/IEEE standard. Instrument symbols conform to the ISA standard.

Which standards are included with the software in CADWorx Electrical?

Customers receive symbol libraries conforming to all the above standards.

What is the difference between IEC and ANSI/IEEE?

ANSI is the American National standard. It differs significantly from IEC. It is gradually being merged with the IEC standard, which is becoming a true international standard. We are bold enough to suggest that 20 years from now ANSI will be a subset of IEC (this has already occurred with BS - British, JIS -Japanese, AS -Australian and many others). The USA is one of the only western leaders, which has not completed the transition.

Is the software written in LISP?

Some of the software (<1%) is written in LISP, but only in those areas intentionally left open to user customization (drawing defaults, attribute settings etc.). Most (99%) of the software is written in C/C++, which is the fastest option available in terms of software speed.

Can I do my own development using LISP, ADS, ARX and ObjectARX?

Yes, to a certain extent. There are several LISP files open to user modification, and LISP may be utilized when customers wish to write their own macros. The products have often been described as very open.

Can I use my own layers?

Yes. Additional layers may be added to suit the customer's needs. Some CADWorx Electrical layers are reserved by CADWorx Electrical and should not be modified.

Can I decide which colors I use when drawing?

Yes. The only restrictions as to which colors to use are those imposed by AutoCAD.

Can I use any linetypes or thicknesses?

Yes. The only restrictions as to which linetypes and thicknesses are used, are those imposed by AutoCAD.

Am I able to use Polylines, as well as lines?

CADWorx Electrical uses line segments only to represent conductors. Polylines should be used for other construction.

Are Polylines used for 3d construction (in CADWorx Raceway)?

All CADWorx Raceway construction must be, and is, done with AutoCAD 3d Polylines and solids.

Are imperial units available for CADWorx Electrical?

Yes. CADWorx Electrical is available using either metric or imperial units.

Can I get both?

Yes. Both are on the Same CD and Run from the same license.

Are CADWorx Electrical symbols etc. the same size in metric and imperial?

No. Metric and Imperial packages function identically BUT cannot be mixed due to drawing scales, error margins etc.

Regarding metric vs. Imperial, what about CADWorx Raceway?

CADWorx Raceway can handle metric and imperial units and is fully scalable. You can mix units in a CADWorx Raceway model if desired. CADWorx Raceway can convert imperial units to metric and vice versa during construction and analysis operations.

Does CADWorx Electrical use extended entity data?

Yes. Minimal use for Status Data – which is not used by many customers.

Does CADWorx Raceway use extended entity data?

Yes. CADWorx Raceway uses extended entity data.

What is extended entity data?

Extended entity data is user definable data, which AutoCAD may attach to any AutoCAD entity (line, arc...).

What does CADWorx Raceway use extended entity data for?

CADWorx Raceway uses extended entity data to attach specifications and tagging information (+ parametric) to CADWorx Raceway objects on a CADWorx Raceway drawing.

Do we use 3D blocks in CADWorx Raceway?

Users can now add 2D blocks (for a component “facia” or plan view) or 3D blocks, as they wish, to represent their components inside CADWorx Raceway. The block is overlaid on the parametric shape to give a more “realistic appearance”. Vendor supplied libraries can be used directly for this purpose.

CADWorx Electrical

What is CADWorx Electrical used for?

CADWorx Electrical is a drafting and analysis package for automating the creation of. Schematics, One Line diagrams, Loop diagrams, Terminal strip diagrams, Wiring diagrams, Materials Reports, Cable and Wire reports.

What does it do for me?

It will significantly reduce project time. Santos Oil in Australia achieved a 50% time reduction in project time. This saving was in comparison to using base AutoCAD and a symbol library. It will assist you in standardizing company - wide and ensure you are using current standards. It will make your drawings intelligent. It will allow you to integrate your designs with your company database system. It will reduce your in-house software development costs.

How does it work?

A collection of hundreds of software tools for drawing automation, reporting and database integration PLUS a full standardized symbol library.

List the reporting facilities?

Bill of Materials, component quantity lists, coil and contact cross referencing, error summary, wire label list, cable and cable core schedules, and panel wire schedules.

Can RELAY cross-referencing information be loaded on to a drawing?

Yes, automatically. There are also a number of options available as to the style of cross-referencing.

Can RELAY contacts be picked from a list once a coil is inserted/duplicate Tags checked online?

Yes, automatically.

What about termination schedules and diagrams?

Termination reports may be generated OR pictorial terminal strips and wiring diagrams can be constructed automatically.

Is there any automation of drawing?

Yes, a number of semiautomatic drawing routines are provided, including 3 phase, ladder and instrument loop drawing routines.

Are we locked into any particular way of drawing?

No. In fact the flexibility of the package tends to be one of its greatest assets. More detailed answers are found in the General Product FAQ.

Does CADWorx Electrical draw both horizontally and vertically?

Yes.

Does CADWorx Electrical break lines for symbol insertion?

Yes.

Does the package do automatic wire numbering?

Yes.

Does it produce wiring diagrams automatically?

Yes.

How are device tag names generated in CADWorx Electrical?

All cable, wire, device and other tag names are fully user programmable - Including auto increments.

Is there any LOAD or FAULT CURRENT electrical analysis performed?

No. CADWorx Electrical is supplied with a simple method of attaching analysis data to one line diagrams, for use with EDSA analysis software.

EDSA is the Number 1 package in the USA for this purpose.

Is Protogen a separate module to CADWorx Electrical?

Yes. Protogen can function without CADWorx Electrical.

Is CADWorx Raceway a separate module to CADWorx Electrical?

Yes. CADWorx Raceway is sold as a separate package.

Can I create my own symbols?

Yes. You can add symbols to any part of CADWorx Electrical.

Can I modify CADWorx Electrical symbols?

Yes. You can alter symbols in any part of CADWorx Electrical.

Can I use existing symbols that I have already created?

No. The graphic part of existing symbols may be used when creating new CADWorx Electrical symbols. CADWorx Electrical requires that attributes conform to a set pattern. Your blocks are unlikely to conform.

Can I use existing symbols that I have already created with minor modification?

Yes. The graphic part of existing symbols may be used when creating new CADWorx Electrical symbols. You must also make your symbols attributes conform to a set CADWorx Electrical pattern.

Can I replace CADWorx Electrical borders with my own?

Yes. We find that all customers replace CADWorx Electrical borders with their own.

Is the style of cross-referencing modifiable?

Yes. The customer may modify the style of cross referencing. I.e., cross-referencing may be horizontal, vertical, and map style, contiguous or zonal.

Is there any drawing management with the package?

No. CADWorx Electrical is fully compatible with several commercially available drawing management packages.

What are catalogs?

Lists of component and conductor specification data stored in database files. The files are DBASE 3 format. The specifications can be real manufacturer data or GENERIC commonly used parts.

How are they used?

When inserting a symbol or editing the specification of a symbol, CADWorx Electrical catalog selection is offered. You may select a new specification from a list of compatible components the catalog will offer you. The catalog data chosen will be attached to the symbol you are working with.

Why use them?

It appears to make the drawing process slower.

At first catalogs appear to an unfamiliar user to be slow.

Once you calculate the time taken to type “400V” and “20A” 300 times (the number of fuses used in your project) and compare it with typing in a FULL specification ONCE and picking it with your mouse 300 times. You realize the reasons for using the catalogs. You only ever need to enter a specification ONCE for a component. (Another bonus: your drawings become fully documented and intelligent for Bill of Materials cross-referencing etc.)

Do you supply real catalogs?

Some. As we are selling the package in over 50 countries, it is impractical to supply and maintain catalogs for all users. We have developed catalogs for some of the major component suppliers. Contact SCADA Systems for more information.

Can we create our own catalogs?

Yes. We supply catalogue prototypes for easy file creation.

Can we add new specifications to catalogs within a drawing session?

Yes.

Can we use catalogs relevant to a particular project?

Yes. In fact, this is what we recommend. This reduces the time taken to select components.

What are the database maintenance tables?

Database maintenance tables are database files extracted from a drawing or set of drawings. Discrete files are produced according to the type of electrical component i.e. wires, cables, terminals, devices. These files represent an IMAGE or SNAPSHOT of all of the components used in your set of drawings at the time you requested the data.

How do we use them?

You may edit these files, performing MASS/GLOBAL specification and tagging changes with CADWorx Electrical tools or a third-party database package (external to AutoCAD). Once your editing is complete CADWorx Electrical can transfer all your changes back to the drawing files. This can save large amounts of time spent opening drawings in AutoCAD for minor text and attribute edits.

How many drawings can we work on at one time?

Up to 4000.

What form are the reports?

They are generated as DBF format files.

How many drawings can be included in one report?

Up to 4000 drawings.

Can we customize the format of the reports?

Yes. As they are standard DBF database files, the manner in which they are presented is up to the user.

Can coil and contact cross-referencing information be loaded on to a drawing?

Yes, automatically. There are also a number of options available as to the style of cross-referencing.

What about other reports?

Yes. Any DBF file may be loaded on to a drawing, with user defined presentation style.

Is there any error checking?

Yes. CADWorx Electrical will check for duplication errors and catalog mismatches, e.g., relay coils with extra contacts, open circuit, short circuit.

What about terminal strip generation?

Termination reports may be generated as a DBF format file. Termination information may be represented as a terminal strip drawing - created automatically.

Can I use ACCESS to manage database files?

Yes. We would recommend that Access be used as an alternative database package. Access is a relational database and can be used to link all of the CADWorx Electrical database files as attached tables. You may create your own applications under Access to manage CADWorx Electrical Data.

Can I customize CADWorx Electrical menus?

Yes. The user can modify menus.

Can I do my own development using LISP?

Yes. All CADWorx Electrical LISP files are open to user modification, and LISP may be utilized when customers wish to write their own macros.

To what standards does CADWorx Electrical conform?

The electrical symbols conform to IEC, or IEEE/ANSI, while the instrument symbols conform to the ISA standard.

What revision management does CADWorx Electrical have?

Revision "milestone" tracking, control with auto-project backup AND revision-revision comparison reporting.

CADWorx Raceway

What is CADWorx Raceway Used for?

Creation of Panel layout diagrams/models, Creation of Plant layout raceway system diagrams/models, Materials lists for the above, Interference checking for the above, Automatic cable and wire routing for the above.

Why do these jobs in 3D?

Adding the third dimension allows accurate interference checking and visual arrangement of models AND allows Report Lengths and Routes for all cables, report all existing routes and their full path of segments (each piece of tray, conduit making up a route), Report each segment's cable cross section and its CABLE FILL percentage.

Can CADWorx Raceway Automatically create Wiring Loom/Wiring Harness diagrams?

Yes. You need circuit diagrams and trunking layout, CADWorx Raceway will do the rest.

Can we use CADWorx Raceway with CADWorx Electrical?

Yes, the output data from CADWorx Electrical (device lists, cable lists) can be used as input data for Panel and Raceway models. CADWorx Raceway can handle metric and imperial units and is fully scalable. You can mix units in a CADWorx Raceway model if desired. CADWorx Raceway can convert imperial units to metric and vice versa during construction and analysis operations.

Can I produce 2D views of my Models easily?

Yes. Both CADWorx Raceway and AutoCAD provide simple methods of doing this.

What reports does CADWorx Raceway produce?

CADWorx Raceway produces all files in DBASE 3 format, they are Bill of Materials, Updates existing cable schedule and wire schedule with length and route data, Route cross sections, Route or Pulling List.

Can I customize CADWorx Raceway menus?

Yes. The user can modify menus.

Can I do my own development using LISP?

Yes. All CADWorx Raceway LISP files are open to user modification, and LISP may be utilized when customers wish to write their own macros.

Briefly describe Cable route optimization

All cables in a plant and their source and destination panels or devices must be listed in a database file. You must build a plant model of all raceway systems with CADWorx Raceway construction functions. You can then run the cable routing program, which will: Auto routes all cables. (Assign the shortest compatible AVAILABLE route to each cable), accurate cable length reporting. 2D causes major approximation and hence costing and materials errors occur.

CADWorx Instrumentation

What is CADWorx Instrumentation used for?

CADWorx Instrumentation new “data-centric” Instrument design and documentation system. Used for the automated production of instrumentation documents such as, Data Sheets, Loop Diagrams, Hook up Diagrams, Wiring /Terminal Strip diagrams, Instrument Index report, Bill of materials report, Cables Schedule report, Interconnection reports and many other documents.

Why do these jobs in a database system?

Repetitive diagrams such as loops and hookups and documents such as data sheets and instrument index’s are ideally suited to tabular work procedures. Using CAD and text formats is slow and error prone for these large arrays of repetitive data.

Does it integrate with CADWorx Electrical Cable block diagrams and lists?

Yes.

Does it integrate with CADWorx Electrical parts lists catalogs?

Yes.

Does it integrate with CADWorx Raceway cable routing, plant layout and raceway layout?

Yes.

Which databases does it use?

SQL server or MS-Access.

Can it “live link” to P&ID data?

Yes, live SQL/Access tables can be hooked to internal instrument components and modified as required.

Can I statically import P&ID data?

Yes SQL/Access/Excel/TXT tables can be statically imported.

Can I statically export data?

Yes SQL/Access/Excel/TXT tables can be statically exported.

Can I modify the table structure and add tables?

Yes.

Can I use my own OR the internally supplied EXCEL based data sheets?

Yes.

Can I build by own diagram symbols/ components?

Yes.

Is it a “multiple user”, “concurrent access” system?

Yes.

What documents does it produce?

- Automated production of Instrument Data Sheets. (In MS-EXCEL Format)
- Automated production of Instrument Index report
- Automated production of Bill of materials report
- Automated production of Cables Schedule report
- Automated production of wire interconnection lists
- Automated production of conductor/core interconnection lists
- Automated production of USER defined reports
- Project Management and Revision tracking
- Automated project drawing index list
- Automated materials quantity summary report
- Automated wire label / ferrule lists
- Tag name duplication cross referencing report
- Automated warnings summary
- Revision comparison reports for all parts and connections

What standards does IM use?

ISA is native however the standards are flexible and can be modified.

What user management does IM have?

There are 3 levels of user security - “Admin” thru to “viewing only”. All or a subset of user defined events can be logged for user tracking.

What revision management does IM have?

Revision “milestone” tracking, control with auto-project backup AND revision-revision comparison reporting.

Protogen

What is Protogen?

A Prototype based drawing generation package. Protogen is used for cloning drawings, which have similar graphical content and variable text content. (E.g. Instrument loop diagrams, Hook ups OR data sheets). You can create a prototype or template drawing which contains the base graphic, and link database fields to text or attributes in the template. Once a template is complete, you can use Protogen to make multiple copies of the base graphic and load your database data to the copies ...without starting AutoCAD.

Can I generate a plant or panel layout in 2D or 3D with Protogen?

Yes, Protogen is fully compatible with CADWorx Raceway model templates.

Is it a separate module?

Yes, Protogen can be installed and run without CADWorx Electrical.

Can I buy Protogen without buying CADWorx Electrical?

No. Protogen is supplied only with CADWorx Electrical.

When do I use Protogen?

Protogen should be used in any situation where a customer requires multiple copies (“clones”) of a drawing, with similar graphical content and variable text content/annotation. (Loop diagrams, motor starters, data sheets...)

Can I modify a drawing that has been created using Protogen?

Yes. Drawings created using Protogen are fully open to AutoCAD or CADWorx Electrical and may be modified as in a normal AutoCAD/CADWorx Electrical session.

If my drawings are not exactly the same graphically, but very similar can I use Protogen?

Yes, This is very common in practice. Clone as much of the drawing as you can then open the drawing to finish the non-clonable parts. If you clone 30% of a drawing over several sheets you will get the following benefits: Drawing uniformity, Time saving.

Can I use many tables in one database?

Yes.

Can I change the graphical appearance of the drawings from the database?

Yes.

Can I split my templates into many parts then assemble/create varying diagrams, all controlled from within the database?

NEW: The database can now be relational, and the template diagrams can consist of many small parts. This allows you to create one (or many) complete diagram's, completely designed in your database.

Can Protogen update data on drawings that have been revised in AutoCAD?

Yes, Protogen retains its links to clones even after manual AutoCAD editing.

Can Protogen update data on databases from data on drawings revised?

Yes, Protogen can move data both ways even after manual AutoCAD editing.

Can I use many prototypes (or templates) with one database?

Yes, for instruments for instance flow, temperature and pressure loop prototypes may be used with the same database.

Can I enter one item of key information and have many text parts of the drawings change?

Yes, Protogen can link a database column to many points on the drawing allowing “key” numbers to retag many components on the drawing (e.g. M20, S20, CB20). Protogen also allows mathematical tagging i.e. place the first wire number or rung number on a drawing and have all of the others calculated mathematically from it (e.g. Wire1, Wire2, Wire3 ...).

How do I create a template?

Templates are created using either base AutoCAD or CADWorx Electrical.

What is involved?

To create a template the following steps are necessary.

1. Draw the template using either AutoCAD/BricsCAD or CADWorx Electrical.
2. Text and attributes on the template that are to be linked to a database must be defined. (This is a matter of typing a simple field-name inside # signs, to the text or attribute.

We have supplied an application inside of CADWorx Electrical to automatically link database columns with your drawing. This is called PROTOEDIT.

Does Protogen need CADWorx Electrical to run?

No. Templates can be created using base AutoCAD or AutoCAD Lite.

So, I can use Protogen for non-electrical drawings?

Yes, Protogen is often used in conjunction with nonelectrical templates. Examples are - using Protogen to create a template for a customer border, or data sheets.

Are there advantages obtained in using Protogen in conjunction with CADWorx Electrical?

Yes. CADWorx Electrical can: Significantly reduce the time required to produce a template. Analyze data, produce materials and connection reports and terminal strips from the Protogen produced set of clone drawings.

How do I define the fields in the template drawing, which I wish to link to the database?

Instead of typing in the final data to an attribute type the following formula - “ # <fieldname>, <fieldwidth>, <fieldorder> # “

Do I have to define the field order and field width?

No - but it is advised. If the field order and field widths are not defined as above, Protogen will assign random order and 20-character width. In most cases you will wish to control your database structure and define these items.

Can I use the same field (e.g. a TAG) many times on the same template?

Yes.

If I have used the same field twice on my template do I have to define width and order in both instances?

No. The field width and order need only be defined once, the second time just use “ # <fieldname ># “

What is the maximum width of a field?

60 characters.

What is the maximum number of fields allowed using Protogen?

There is no limit, Dbase however will allow a maximum of 128 fields. Microsoft Access and Protogen accept files with 256 fields.

Can I use any text fonts in a Protogen produced drawing?

Yes.

Can I link AutoCAD block attributes to database fields?

Yes.

Can I link AutoCAD text to database fields?

Yes. But not MTEXT.

How do I create a database file for use with Protogen?

Protogen can create a database file for you to match the fields you have defined in your template.

Can I create a database file manually instead?

Yes. To do this, create a .DBF file (for example with Dbase) which contains identical fields or a superset of the fields in your template. The file must have any name.

Can I modify the database file structure manually after creation?

Yes. Use the right button option.

Is one database file required for every template?

No. A database can be made to suit as many templates as desired.

Can I create a super template?

Yes. Many customers create “Super Templates”. These contain a global set of fields, only some are used on each template. This gives the same format to all template database files.

Can I create batches of multiple clones?

Yes. Protogen can be “fed” a file containing a list of clones to make from several templates. Protogen will create all clones in a single action.

Can I use other database packages to edit my database files?

Yes. We would recommend that Microsoft Access be used as an alternative database. Access is a relational database and you can link all of your Protogen template database files.

Training

Do I need to be Electrically competent to drive CADWorx Electrical & CADWorx Raceway?

Yes. The products have been designed to be used by electrical staff. Drafts-people, who are only Tracers, will find the product hard to understand due to the use of electrical terminology.

Do I have to be a proficient AutoCAD user to use CADWorx Electrical & Protogen?

It is certainly desirable to be familiar with using AutoCAD.

AutoCAD has several hundred commands, however using CADWorx Electrical you commonly use only 20 to 30 of them (e.g. COPY, ERASE, MOVE, STRETCH, SAVE etc.). CADWorx Electrical removes the requirement to know the full repertoire of AutoCAD commands, saving you time.

Do I have to be a proficient AutoCAD user to use CADWorx Raceway?

It is certainly desirable to be familiar with using a CAD platform. CADWorx Raceway performs much of the difficult 3d construction and analysis work required in your plant and panel layout. You do However need to know the 20 - 30 base CAD commands, e.g., COPY, ERASE, MOVE, STRETCH, SAVE etc. CADWorx Raceway also requires that you understand CAD 3d techniques and terms e.g., MODEL SPACE, PAPER SPACE, VIEW PORTS etc. The CADWorx Raceway manual has a section devoted to teaching 2d people the 3d basics of CAD.

Where is SCADA Systems product training undertaken?

This depends on the dealer. Training may either occur at the dealers office, at a SCADA Systems office or in the customers drawing office. We are currently working on an internet based training system.

How long does it take to be trained to operate CADWorx Electrical?

For Electrically competent persons it takes from 4 to 5 days. Low levels of AutoCAD familiarity or English familiarity can make this longer by 1-2 days.

What is involved in training for CADWorx Electrical?

Training is best broken into 2 parts. First part 3 days... Navigating and Using the product, Second Part 2 days... after some product exposure...Advanced topics - Customization, database work.

How long does it take to be trained to use CADWorx Raceway?

For Electrically competent persons, 4 to 5 days - depending on customer AutoCAD familiarity.

What is involved in training for CADWorx Raceway?

The product is simple in structure and easy to become familiar with. The 3d construction and analysis aspects are the areas that electrical people find hardest to cope with.

This usually takes 4 to 5 days.

Online Resources

How can customers keep informed of up-to-date product-related information?

Sign up for specific solution updates via the [Subscription Management Centre](#) to stay updated on the latest offerings, news, events etc.

Where can customers find useful information and other resources related to CADWorx EIDS?

Visit the [Resource Center](#) then filter resources using the 'Type' drop-down.



About Hexagon

Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications.

Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Asset Lifecycle Intelligence division helps clients design, construct, and operate more profitable, safe, and sustainable industrial facilities. We empower customers to unlock data, accelerate industrial project modernization and digital maturity, increase productivity, and move the sustainability needle.

Our technologies help produce actionable insights that enable better decision-making and intelligence across the asset lifecycle of industrial projects, leading to improvements in safety, quality, efficiency, and productivity, which contribute to Economic and Environmental Sustainability.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 24,000 employees in 50 countries and net sales of approximately 5.5bn USD. Learn more at hexagon.com and follow us @HexagonAB.