vectorCAD

CAD-Software - fast and precise!

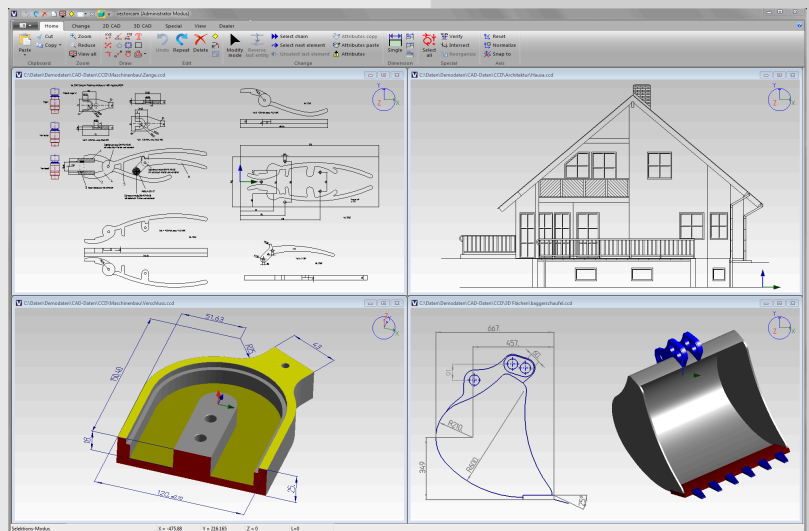## With highest precision fast and safe designing, constructing, planning and dimensioning

vectorCAD convinces not only by simple and fast operations, but as well captivates with its extraordinary high functionality. For both, CAD-beginners or CAD-experts, the **vectorCAD** facilitates professional working without long practice periods.

Why prefer vectorCAD?

- ✓ Superior price-performance ratio
- ✓ Easy handling
- ✓ Quick and precise
- ✓ Wide performance range
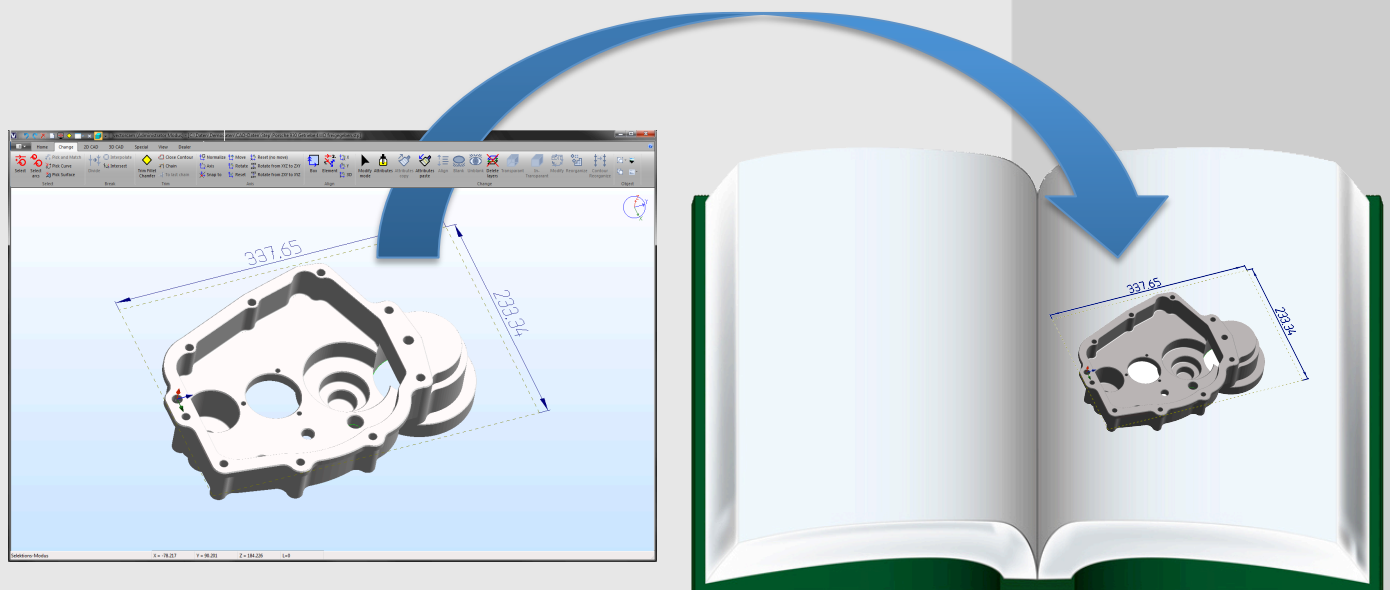- ✓ Flexible use in all fields

Increased productivity by vectorCAD

The "Object-Action-Principle" integrated in the **vectorCAD** enables quick results for the user with fewer clicks. If one or more drawing tools once activated, several actions, for example trimming or copying and pasting, etc., can be carried out without activating these again.

vectorCAD creates links easily

The expanded compatibility between **vectorCAD** and Microsoft© Windows® allows easy data exchange to several further programmes, simply by using the copy and paste functions of the Windows clipboard. In this way you can import **vectorCAD**-drawings to a word processing programme or database or, vice versa, an Excel table, for example, can be transferred as piece list to the **vectorCAD**-drawing.

This so called "OLE-Connection" realizes the most varied applications easily.

Interfaces (Import/Export)

For the smooth data exchange with external CAD-systems, photo rendering software, etc., following interfaces are included in scope of delivery:

- STEP   (*.stp,*.STEP)
- IGES   (*.igs, *.IGES)
- DXF   (*.dxf)
- STL   (*.stl; Stereolithography)
- XYZ   (*.XYZ; Point coordinates)
- PLC   (*.PLC; free programmable interface)
- Rhino 3D   (*.3dm; Rhino)
- BMP/JPEG/TIFF   (BMP/JPEG/TIFF; pixel-oriented pictures)
- BRep   (*.BRep; Open Cascade)
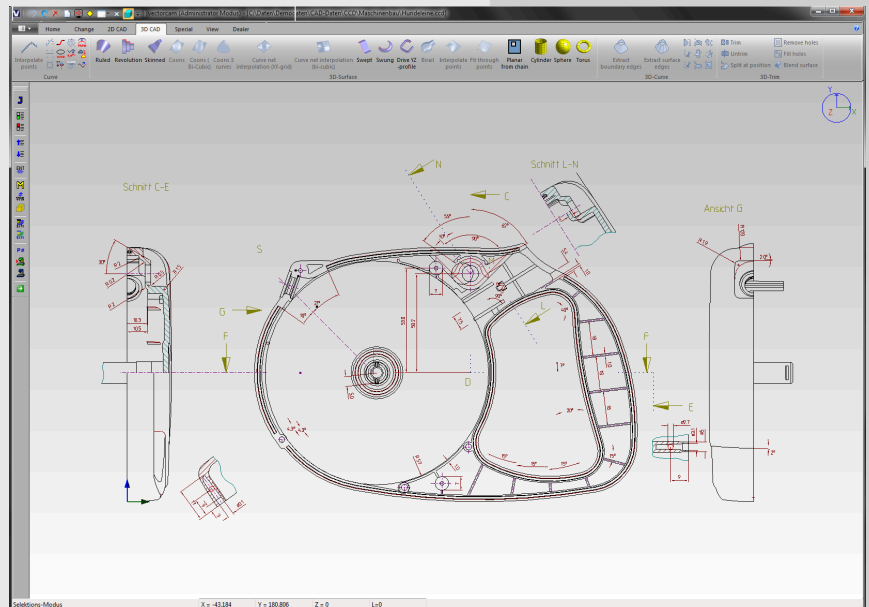- Windows clipboard

Fields of application

vectorCAD can be applied in numerous fields and areas:

- Mechanical engineering
- Toolmaking
- Automotive industries
- Aerospace industries
- Metal processing industries
- Metal cutting industries
- Plant engineering and construction
- Architecture
- Apparatus construction
- Illustrations
- Documentation
- Furniture industries
- Survey technology
- Design
- and much more

Efficient 3D-surface modelling

- Rotated surface, freeform surface, cone surface, net surface, flat surface, XY-profile surface, swung surface, birail surface, surface made of 3D-points, swept surface, spheres, cylinders, rings, etc.
- Generation of transitions in complex areas by blending of surfaces with tangential transitions
- Generation of a flat surface by selecting any kind of closed contour, with or without islands
- Trimming of individual surfaces with/upon curves and surfaces
- Generation of edge curves of individual surfaces or generation of outer edge curves

- Transformation of surfaces into Bézier elements
- Trimming/Untrimming
- Lengthening and splitting of surfaces
- Simple generation of blocks, spheres, cylinders and other shapes
- Z-sectioning of 3D-areas after input of desired depth cutting
- Modelling, editing and manipulating of surface models that are rendered realistically (OpenGL)
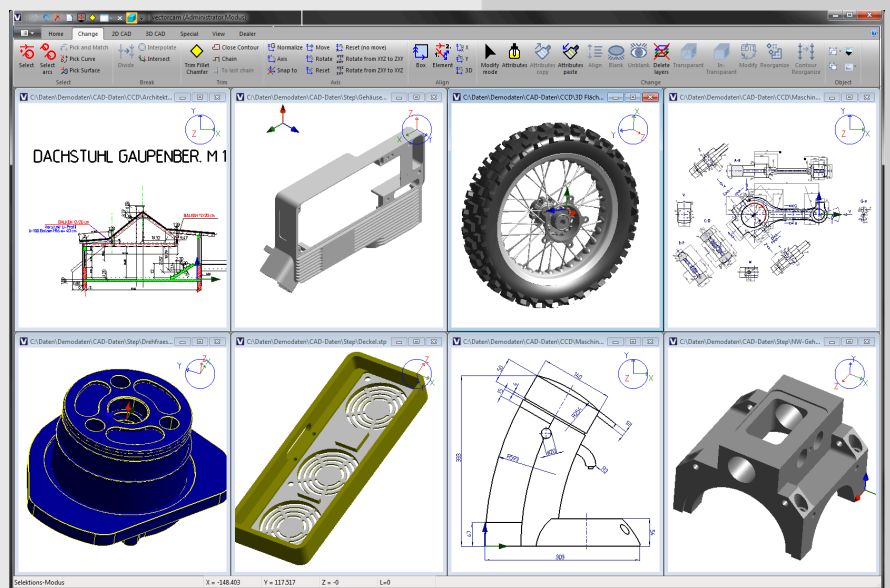
Large variety of 2D/3D-drawing functions

- Functions of drawing points, lines, circles or splines, also in 3D
- Efficient radian, circle and rounding functions with rounding of particular edge or all edges within a string of elements
- Multifarious functions for creation of splines
- Time-saving generating of arc fillets and/or chamfers
- Flexible geometry editing
- Changing of line width, type and colour, global or of a particular element
- Copying and pasting of each element
- Layer technique: free choice of name, showing/hiding
- Lengthening of lines, arcs and splines, also dynamically
- Trimming of single elements
- Quick moving, mirroring, scaling or rotating of elements
- Moving of single elements or curves by a given distance
- Undo / Redo
- Windows clipboard to connect **vectorCAD** with other Windows programmes

2D/3D Dimensioning tools

- Automatic dimensioning
- Tools for datum, chain, angular, diameter, radius, coordinate and points dimensioning in horizontal, vertical or parallel manner as well as tools for insertion of text and additional specification notes such as tolerance data and more
- Simple dragging and positioning of dimension texts and arrows as well as changing their attributes while drawing
- Printing and plotting in full colour
- Lines and hatches library
- Selection methods
- Quick access to general functions via right mouse button
- Intelligent linking of elements allows selection of a sequence of geometry elements at once or individually, from element to element, forwards or backwards
- Restriction to selected types of elements, colours, layers, types of lines is possible
- Support and establishment of component groups in case of complex constructs
- Selecting elements via a rectangular window (inside, outside or touching)
- Selection of equal elements, for example in case of bores with same characteristics: diameter, colour, layer, etc.
- User-selectable grid for detailed construction
- Geometrical analysis: Direct analysis of any element regarding to size, position, element type, contour length and further characteristics
- Determination of the number of elements which are placed above the other
- Automatic surface area calculation of closed contours with or without islands
- Direct output of the element properties by simple double-clicking, which can then be modified
- Distance measurement between points and the angle between lines in 2D or 3D
- and a lot more ...

Special applications

- Various CAM software modules for professional CNC-programming of drilling, milling, turning, wiring, laser machining, cutting, etc. while up to five controlled CNC-axis are optionally available
- Variant construction by programmable geometry interface
- Individual programming according to customers requirements

System requirements

- 32- or 64-bit Windows® Vista / 7 / 8
  or MAC OS® with Parallels® Desktop
- Upwards Pentium processor
- Upwards 2 GB working memory RAM
- 500 MB free hard disk space
- 17" monitor, upwards 1024x768 Pixel resolution
- Open GL able graphics card upwards 512 MB memory
- CD-Drive
- 2/3-button Mouse
- Supports 3D-space mouse of 3Dconnexion®

Languages available:

English, German, Dutch, French, Italian, Spanish, Czech and Hungarian

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Free trial version **vectorCAD:**

www.vectorcam.com/demoversion