

1. ZWCAD Mechanical 2012 is a set of brand new mechanical design system developed based on the CAD platform, featuring customizability, practicability, easy operation, openness and alike and giving you greatly improved work efficiency.
2. ZWCAD Mechanical 2012 contains five national standards: GB, ANSI, ISO, DIN, and JIS, In addition, it supports user customization so that users may to customize their own environment in order to fit their needs.
3. The system maintenance tool allows you to define your own title, BOM list, additional list, code, paralist and can set the content and style, etc..
4. Frame size settings: Mechanical 2012 provides a number of national standard frame sizes for users to quickly and accurately select the desired size and set up a drawing environment.
5. Frame customization: Users can set custom frame settings to define their own frame style and the greatly enhance the standardization.
6. Frame Style: The system allows you to quickly set frame styles, to partitioned or unpartitioned frame, and vertical or horizontal placement, just by one step.
7. Drawing scale: different from the past, the system supports automatic selection of drawing scale. When users select an entity, the program will automatically calculate the commonly used drawing scale.
8. When the drawing scale changes, the dimension symbols in the drawings will accordingly change, so that the dimension is much more beautiful.
9. After selecting the drawn graphics ,users may select the option of Frame Auto Move to Placed Entity in the frame setting, and the system will automatically generate a frame and place the entity at the center.
10. It offers a variety of titles, BOM lists, additional list, codes, and paralists for users to quickly browse and select the desired content as needed.
11. Integration table based completion of the title makes things more convenient and faster. (Similarly to additional lists and paralists.)
12. The system provides 6 balloon dimensioning types, including international common types, 'Round Balloon', 'Open Balloon', 'Straight Balloon', 'Two Textual Lines Straight Balloon', 'Two Textual Lines Round Balloon' and 'Polygon Balloon' for user-friendly choices.
13. The system allows you to quickly modify the types of dimension balloon and bring them in line to give readers a consistent drawing.
14. If dimension is wrong or repeated, users may modify the balloon value by the modification command.
15. Users may give the balloon alignment command to arrange the balloons in a drawing in horizontal or vertical direction so that the balloon arrangement is tidy.

16. Users may give the Renumber Balloon command to arrange the balloons in the drawing in a particular order.
17. When the balloons in a drawing have been modified, users may give the Hide Balloon command to hide them for convenient modification and view. After modification, users may give the Show Balloon command to bring out the hidden balloons.
18. When filling in or processing the BOM list, user may use resources, namely, directly pick up and utilize standard parts in the drawings and data from other DWG files.
19. Super edit: Double-click or select the contents already drawn and set, and input 'V' for quick edit.
20. The selection of center hole direction: after the selection of the drawing of the center hole straight line and the insertion point, if the cursor is above the straight line, then the center hole direction is right, and vice versa for the left.
21. Input 'D' and the smart dimension option allows you to quickly dimension straight line, radius, diameter, and angle, without going to the trouble of selecting other dimension forms from the menu.
22. In the dimensioning process, input 'C' to bring up the rapid configuration options, including geometry type, units and tolerances, etc..
23. When dimensioning diameter or radius, input 'O' to quickly select dimension style.
24. When selecting a dimension line location, input 'H' to set the dimension line horizontal location, 'V' for vertical position, and A for alignment with dimension.
25. When performing any type of dimension, users may select other types of dimension as prompted.
26. During the baseline or continuous dimension, users should select the start point (namely, the first baseline or continuous dimension).
27. Center is not the only location option for text dimension. ZWCAD Mechanical provides six common locations and when selecting 'Free', users may specify the dimension text location as they want.
28. When dimension is in process, users are not allowed to add Chinese description, for the system has built-in common symbols.
29. The system provides four kinds of dimensioning tools, 'Dimension combination', 'Inserting dimension', 'Dimension alignment' and 'Dimensional check'.
30. If selected dimensions are not adjacent, the combined size is the limit position of two dimensions.
31. The selected targets for size combination include linear dimension, angular dimension, etc., and different types of dimension cannot be combined.
32. To tidy up the dimensions in a drawing, size alignment will provide you with such a function to specify the alignment point location and align all selected dimensions.

33. The dimensional check function allows users to quickly find the highlighted erroneous dimensions in a drawing for users to update and modify.
34. The symbol dimension allows users to choose any location as a dimension target, and if not attached to an entity, drag it freely.
35. Super edit drawings allows users to modify and update data in the symbols.
36. In dimensioning symbols, if an entity is selected (i.e., attached to the entity), then user can only drag the symbol dimension in the tangential direction along the entity and but cannot get it off the entity.
37. To detach the symbol dimension attached to the entity, users may super edit the symbol dimension by just selecting the Detach option in the Leader tab.
38. To make attach symbol dimension to an entity, users may super edit the symbol dimension by just selecting the 'Attach' option in the Leader tab, as prompted to select the entity to be attached to, and follow the prompt to attach the dimension.
39. When section line, direction symbol, or detail view is dimensioned, the symbol name will be automatically added as the setting is done.
40. The descriptions for styles in direction symbol configuration are as follows: [VIEW_NAME] is the content filled in for direction view, [VIEW_SCALE], view scale, \P is to execute carriage return and \O is to add an overline for text thereafter.
41. The descriptions for styles in detail symbol properties are as follows: the [DETAIL_LABEL] is the content in view name in basic view. ([DETAIL_ABSSCALE]) is the content in Specify by Absolute or Specify by Factor in the selected zoom area ratio. \P is to execute carriage return and \O is to add an overline for text thereafter.
42. Users may call the professional word library by Ctrl + left mouse button, Insert, Ctrl + W wherever a cursor appears. User may double-click the content and insert the content into the cursor input.
43. ZWCAD Mechanical 2012 provides a powerful BOM list feature with PDM, ERP and other software interfaces so users can directly read related resources.
44. When super editing multiple targets, the finally displayed edit targets are the finally established targets.
45. In the balloon dimensions for the two textual lines, the specific contents in square brackets in top and bottom texts are as follows: RELPOS represents balloon, RELQTY, quantity, COMPNAME, code, COMPDES, name, COMPMAT, material, COMPUMIS, unit, COMPWT, piece weight, COMAPWT, total weight, COMPITEM, part type, COMPTTERM, thermal treatment, COMPTSUP, surface treatment and REMARK, remarks.
46. Multi-line balloon dimension: after balloon dimension, add one or more lines of balloon in the displayed 'Balloon Input' dialog box, click 'OK' and receive the prompt for direction, select directions to complete the multi-line balloon dimension.

47. ZWCAD Mechanical hotkey: SS-intelligent line drawing; DC-Mirror line drawing; H-section line; PX-parallel line; CZ-vertical line; QX-tangent; GQ-common tangent.
48. ZWCAD Mechanical hotkey: GD-pipeline; CF-perpendicular bisector; JD-angle line; PF- bisector (bisectorangular bisector); ZX-centerline; BL-waviness line; JX-rectangle.
49. ZWCAD Mechanical hotkey: V-super-edit; JSQ-engineering calculator; TB-pick up tabular data; ZDPT-automatic arrangement drawings; JDX-rupture line; ZDF-breaking symbol; DAD-cut; YS-dynamic extension.
50. ZWCAD Mechanical hotkey: CC-surface text; XW-FCFrame; JZ-datum identifier; XD-taper & slope dimension; ZXK-center hole dimension; BJ-circlemark; BGF-elevation symbol; HJ-welding symbol.
51. ZWCAD Mechanical skills: ESC hotkey can quickly end the current command. F2 hotkey will quickly switch between the graphics window and text window. Ctrl + e at the cursor can quickly rapid call the engineering calculator function.
52. The super symbol library of ZWCAD Mechanical contains eight kinds of common types, such as, hydraulic and pneumatic symbol graphics (YQFH), electrical symbol library (DQFH) kinematic symbol (JGFH), fixture library symbol (JJFH), technical form drawing library (BGFH), design summary form drawing library (HZFH), metal structural part (JSFH), parameterized dummy sample library (YYFH).
53. We are the first provider of construction line and construction circle so that users can draw them without a complex calculation and measurement.
54. The drawing tools provide four kinds of functions to draw circles and arcs, and contain various possible circles and arcs, so that it takes users a few clicks to complete precise drawing.
55. ZWCAD Mechanical provides the four special dimension functions, dimension combination, inserting dimension, dimension alignment, and dimensional check respectively, to provide more efficient operation after dimension modification and check.
56. In the construction tools, the single-hole drawing function provides three kinds of common ways to draw holes much easier, to be specific, hole, double hole, and threaded hole which made hole graphic drawing more easy.
57. Data in the design drawings is an extremely important aspect of engineering design. ZWCAD Mechanical provides 3 ways to pick up tabular data, namely, 'Pick up Tabular Data', 'Batch Data Pickup', and 'DWG Data Exploration'.
58. When editing title, BOM list, and paralist, users may pick up and save tabular data through resources, and when editing BOM list, users are provided with an additional function, Pick up Standard Parts.

59. The batch data pickup function allows users to, without opening the drawings, pick up and summarize the data from a batch of drawings, clearly see the relative relations among the drawings and greatly enhance data processing efficiency.
60. Users may use the 'Pick up Tabular Data' function to pick up data from old drawings by first setting the titles of tables in the drawings and specifying areas to pick up data and import them to new drawings.
61. 'DWG Data Browse' allows users to, without opening the drawings, explore the data in the drawings, and export relevant data therein to text files for convenient use.
62. The Word Library feature provides the library of professional terms such as mechanical terms, electrical terms, and common symbols, etc.. It is extremely easy and open to the users, who can add its own terminology and call it at any time.
63. The Attribblock definition gives users multiple alignment methods to select for fields, allows users to add an auxiliary field to an entry and enable expression drive among fields, therefore the feature has a data processing capability.
64. The system provides a faster layer transformation method. 9 common layers are associated with numbers so that, once graphic objects are selected, users can switch to the specified layer by inputting the corresponding number.
65. After exported, the series parts support the BOM list data pickup and super edit features.
66. Users may double-click to modify symbol dimension, dimension, text, title, BOM list, frame, etc., and again double-click to edit objects.
67. ZWCAD Mechanical provides a setting environment with abundant options, all integrated in the 'Style Configuration', including the 'Loaded' and 'System Library' for users to set as the case may be.
68. The dimensioning system of ZWCAD Mechanical takes drawings size as a control parameter, and automatically export text symbol meeting engineering requirements on printing devices.
69. The super symbol library provides a number of symbol types, including, 'hydraulic and pneumatic symbol', 'electrical symbol', 'mechanism symbol', 'fixture library', 'technical form drawing library', 'design summary form drawing library', 'metal structural part', and 'parameterized dummy sample library'.
70. As for the contents in 'Properties', the graphics, exported from the symbol library, supports the BOM list data pickup and super edit functions.
71. The style library sync tool can automatically synchronize the local data with that of the official website and automatically update the configurations contents, symbol library, part library and other data.