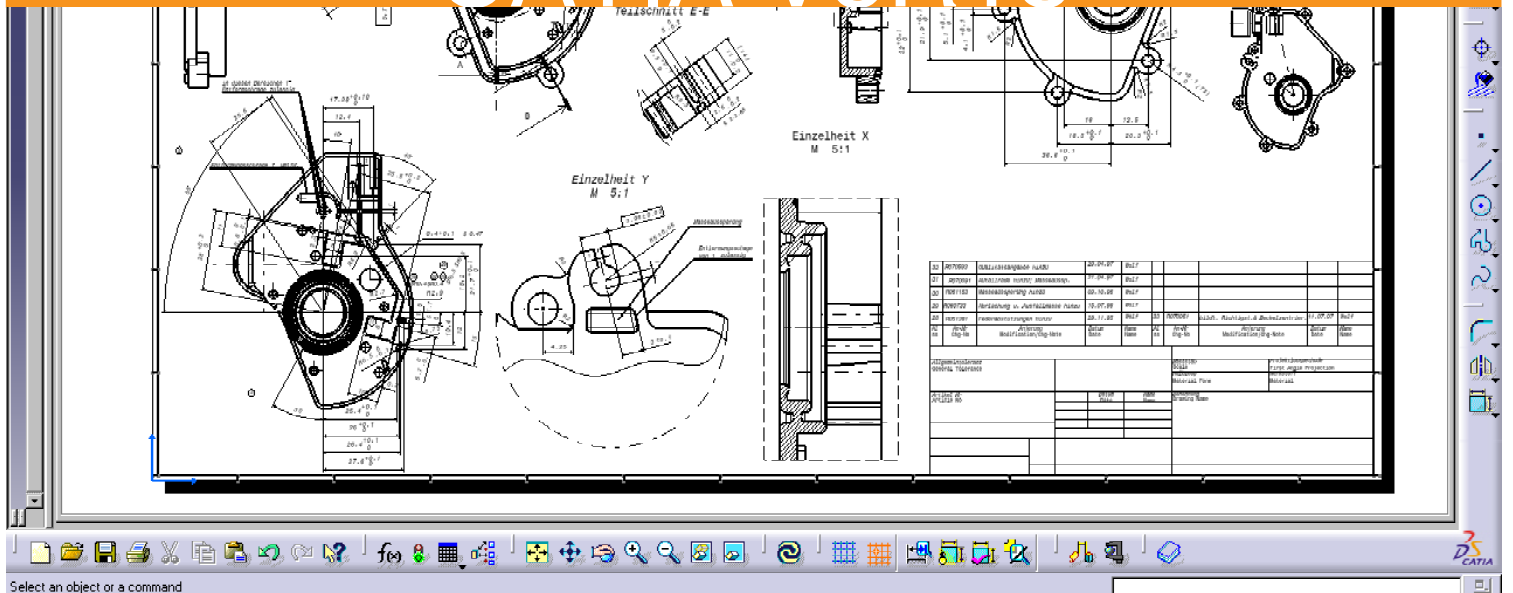


Mechanical Design

CATIA - Interactive Drafting 1 (ID1)

CATIA V5R18





Mechanical Design

CATIA - Interactive Drafting

Address 2D design and drawing production requirements

Product overview

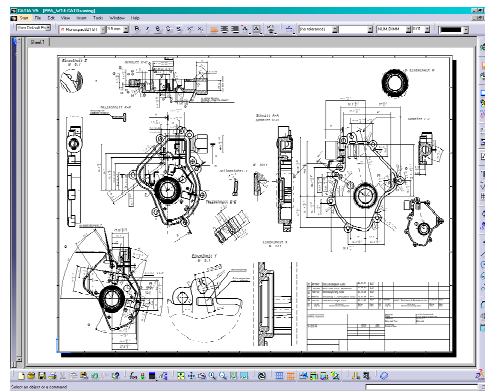
Interactive Drafting is a new generation CATIA product to address 2D design and drawing production requirements. It offers a highly productive, and intuitive, interactive drafting system. It also enriches Generative Drafting with both integrated 2D interactive functionality and with a productive environment for drawings dress-up and annotation.

Product Highlights

- ❑ Highly productive 2D design capabilities, including dynamic sketching copilot, and variational solving
- ❑ Definition and reuse of 2D components through management of external catalogs
- ❑ Easy to use, complete and integrated dimensioning capabilities
- ❑ Comprehensive set of associative annotations, text, and dress-up on 2D views
- ❑ Fully compliant with latest revisions of major international standards
- ❑ Integrated with Generative Drafting and Part Design to offer customers an easy and smooth evolution perspective from 2D- to 3D-based design methodologies

Product Key Customers Benefits

Productive 2D design capabilities



CATIA Interactive Drafting 1 (ID1) offers a productive 2D design environment that provides dynamic sketching, variational solving with constraint management and explicit geometry creation. This includes all 2D wireframe elements required to create views (points, lines, circles, ellipses, splines, rectangles, arc, and 2D contours). Predefined contours are used to speed up productivity (slot, hexagon, keyhole, rectangle). The drawing copilot accelerates the creation of 2D geometry, which auto-detects geometric conditions on existing geometry, either created with CATIA Interactive Drafting 1 (ID1) or generated with the CATIA Generative Drafting products.

Integrated Dimensioning

Quick dimensioning creation and modification capabilities are based on a smart user interface, including automated geometry recognition, contextual menus, direct manipulation and mouse position. A comprehensive set of dimension parameters enables a variety of dimension types and representations. Dimensions can also be

used as dimensional constraints to modify the 2D geometry.

Associative annotations for 2D Views

A full set of Geometric Dimensioning and Tolerancing features (GD&Ts), (datum features and datum target) are provided. Additional annotations such as balloons, roughness symbols and notes with word processing capabilities such as auto-wrapping and complex formatting are also included.

Intuitive WYSIWYG (What You See Is What You Get) and 'edit in place' features speed the creation of drawing notes. User can create GDT or text with 3 different modes (free, horizontal, vertical) that allows him to quickly create and position annotations.

Associative Dress-up for 2D Views

A full set of associative dress-up features supports centerline, axis/symmetry lines, thread lines, area-fill, and mark-up arrows. Also provided - a Flexible creation of area-fill, by automatic detection of closed contours or explicit selection of elements to define the contours.

Checking and Analysis tools

Integration of the DMU Space Analysis measuring tool provides a complete set of exact measurement between 2D elements. Dimension Analysis tool enables to graphically visualize the status of dimensions (Non up-to-date, Non associative, Fake, Driving, True Length, "converted to graphic"). Elements searching capabilities through their attributes such as dimension values, dimension types and text strings. Automatic generation of Holes dimensions table can be created for a selected area.

Full Standards Compliance

Most CAD drawing standards such as ISO, ANSI, and JIS are supported by default. ID1 provides the ability to define and add new standards. The support of the DXF and DWG formats enables reading and writing of those files. Full NLS compliance and DBCS support is included.

Integrated with generative Drafting and

Part Design

An easy and smooth transition from 2D- to 3D-based design methodologies is assured. 2D geometry can be reused to generate 3D feature sketches by copying and pasting it as a 2D contour in the Part Design sketcher. Views generated from 3D (with CATIA Generative Drafting) can be combined with 2D views. Views generated from 3D can also be associatively dimensioned, annotated and dressed-up with CATIA Interactive Drafting 1 (ID1).

Integrated with Knowledgeware applications and tools

Formulas and parameters can be used, defined and displayed in the tree view. Dimension values can be used as parameters allowing, for example, create a relationship between two driving dimensions. Besides, Knowledge Expert is integrated for drafting validation.

Drawing Structure Editor

The Drawing Structure Editor makes changes to drawings, sheets and views. The editor is easy to manage using Cut, Copy, Paste, Drag and Drop functions.

Productive Windows Native User Interface

CATIA Interactive Drafting 1 (ID1) provides an icon based, flexible and scalable approach, using pull down menus and panels, contextual menus, keyboard shortcuts, and macro recording editing and replay.

A permanent tool bar give access to most commonly used parameters for creating or modifying elements (such as text, dimension, or geometry). Specifications of already existing annotation elements can be reused as a standard for creation of other annotation elements (such as graphic attributes or dimension standards). Windows user interface standards include pull down menus, messaging, on-line help, select-action approach, multi-windowing, and icon docking reorganization.

Windows NT OLE support includes embedded or linked OLE compliant

documents (such as Excel and TIF format) in V5 drawings and embedded V5 drawings in OLE compliant documents.

Browse and Import CATIA Version 4

Drawings

Using the CATIA V4 Integration 2 (V4I) product, existing V4 drawings can be browsed, and V4 drawings can be imported, modified and completed in V5 with copy and paste.

Prerequisites

CATIA Interactive Drafting 1(ID1) product can be ordered as part of a configuration or as an add-on product to a configuration. For more details refer to the CATIA Application Portfolio.

ABOUT CATIA V5R18

CATIA is Dassault Systemes' PLM solution for digital product definition and simulation.

plm.3ds.com/CATIA

