SAP PLM Interface to Autodesk® Inventor® 2018

Product Data Management with SAP PLM

Product Lifecycle Management is crucial and begins early in the product development phase. In this process the direct connection of MCAD and ECAD with SAP allows for convenient management of data generated in CAD systems and makes all this information consistently available in the SAP ERP/PLM system to all stakeholders. Users and departments such as procurement, production and manufacturing benefit extensively by having access to this information early on in the process. SAP SE provides with SAP Product Lifecycle Management (PLM) the option to directly link from CAD engineering to SAP PLM by using integrated management of all information created over the life cycle of a product.

SAP PLM Integration to I AUTODESK[®] INVENTOR[®]

As SAP's long-term development partner, CIDEON exclusively develops the SAP PLM integration to Autodesk Inventor. The integration enables the efficient management of all data that is created during the engineering process with Inventor in SAP. It makes design data available to the company even at the early stages in the life cycle while keeping the engineers

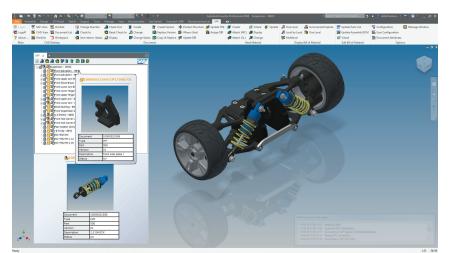


Fig.: Inventor with SAP PLM menus, panels and message window.

in their familiar design environment. The link between Inventor and the SAP system allows for administration of all components which have been designed. Users have access to CAD data which coordinated through versioning and is PLM. status administration with SAP By that users can to work on one component at the same time without data loss by avoiding inconsistencies (concurrent engineering). This translates into efficient engineering and speeds up the product development process while ensuring timely completion of the design, engineering & downstream tasks.

Simple Management of CAD structures

Inventor assemblies and drawings including all related documents are managed as structures in SAP PLM. This process ensures that appropriate original files are directly linked from Inventor to SAP. All authorized users have access to the original documents stored in a central data base - *one single source of the truth* - which allows for companywide collaboration. Users can track the development process and apply their appropriate changes. This reduces the number of redundant operations, and with the integrated SAP Change Management, a change history is always available for the documents.



PROCESS CONSULTING

ENGINEERING SOFTWARE

IMPLEMENTATION

FRIEDHELM LOH GROUP

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Highlights

Ideal interface for Inventor users

- Comfortably operating with SAP directly in Inventor the familiar work environment for design engineers
- Easy UI and navigation with a comprehensive overview of all required SAP information
- Direct access to SAP objects, e.g., Documents, Material Master, Bill of Material, Change Master, ...
- Integrated Viewing

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Fig.: SAP CAD Desktop with Inventor assembly structure.

Simplified product development processes

- Access to design data is coordinated through versioning so multiple users can easily work on assemblies simultaneously at any time
- Avoidance of doubled data collection
- Continuous release and approval processes
- Current drawings, models and view files (other departments) are available at any time
- Direct operations from Inventor e.g., create SAP Documents, Material Masters, BOMs, etc.
- SAP object authorizations protect data from unauthorized access

Functional Overview

Document Management System (DMS)

- Automated routine activities, such as creating and updating SAP Document Info Records
- Comprehensive version control functionality in DMS, including digital signature
- Content server for all Inventor files and other formats
- Storing of all related CAD & non-CAD files in SAP

Document structure function

- Generate and update SAP document structures from Inventor assemblies
- Check-In / Check-Out of all assembly original-/additional files
- Block editing of checked-out documents

Text field maintenance

Automatically via material master, document info record, change history, classification and other SAP information

Parts lists and BOMs

- Automatic generation of SAP Material Masters using information from Inventor, e.g., iProperties
- Assignment of parts to associated documents
- Automatic derivation of parts lists from Inventor structures

Search capabilities

- Search by match-code, object links, where-used reports, classification, queries or in folder structures, assemblies, BOMs, ...
- Search result as preview or list with Excel-like filtering in all columns

