

www.cyco.com

Innovation You Can Use

Cyco AutoManager®



Improving Productivity for SolidWorks® Users

An overview of the key features and benefits of Cyco AutoManager® Meridian and Cyco AutoManager® TeamWork delivering proven, mission-critical productivity gains for SolidWorks customers.

| | |
|---------------|----------------------------------|
| Document type | White Paper |
| Version | 1.1 |
| Date | December 12, 2003 |
| Author | Cyco Software Product Management |

Table of Contents

- 1 Introduction
- 2 Managing Projects within a 3D Modeling Environment
- 3 Key Features and Benefits
- 4 Concluding Thoughts
- 5 More information
- 6 Cyco Software

1 Introduction

As 3D modeling technology continues to increase in both sophistication and adoption, it promises to transform the entire field of mechanical engineering. Offering an entirely new level of design versatility and workday efficiency, 3D modeling is helping to bring high quality products to market with unprecedented speed – and with unprecedented levels of data management complexity.

The purpose of this whitepaper is to provide a snapshot overview of the significant benefits that Cyco Software, the world leader in engineering data management solutions, offers to users of SolidWorks, a leading 3D modeling solution.

2 Managing Projects within a 3D Modeling Environment

As the mechanical engineering market shifts to fully embrace the benefits of 3D modeling technology, engineering projects move from the domain of the individual designer to an enterprise-wide endeavor.

While the benefits of accessibility and timeliness are inherent in an enterprise approach, a number of critical issues arise:

- Collaboration and Ownership – diverse teams across the organization, such as design, manufacturing, procurement, marketing and sales, must collaborate in new and more efficient ways. Ownership of responsibilities and tasks must be clearly defined, i.e. in establishing and finalizing customer wants, confirming deliverables, design ownership.
- Accuracy – with an enterprise system, the probability of multiple versions surges. Particularly with complex jobs, the likelihood of costly errors increases significantly.
- Transition Planning – the transition from the 2D to the 3D environment can be extremely stressful and non-profitable. A smooth transition requires careful, efficient and easy data management within both environments.

These common challenges can be easily eliminated by deploying specialized, flexible, best-of-breed 3D document management systems from Cyco Software – Cyco AutoManager Meridian for enterprise collaboration and Cyco AutoManager TeamWork for departmental operations.

3 Key Features and Benefits

Ensuring higher levels of day-to-day efficiency, shorter learning curves and smoother transitions, Cyco AutoManager Meridian and Cyco AutoManager TeamWork are the leading data management solutions for SolidWorks customers, as well as for many other major 2D and 3D design systems including Autodesk Inventor and Bentley Microstation. The many features and benefits include:

3.1 Time Savings and Ease of Use with Automatic References

Moving documents between projects and folders often requires users to manually re-aligning the file references, involving painstaking and time-consuming efforts. With the AutoManager 2003+ products, all the files are managed in the vault. Parts and sub-assemblies can be moved from folder to folder, automatically retaining references to the parent / child documents.

3.2 Authorized Access and Editing for Enhanced Security

SolidWorks allows users to edit a part drawing from within the assembly that uses it. Design teams, however, need to ensure that only authorized users have edit access to that specific part drawing. The changed part may then ripple through and update any number of existing assemblies.

Cyco AutoManager Meridian and Cyco AutoManager TeamWork will only allow users to edit documents that are checked out. With this security functionality, the system will confirm if a specific SolidWorks user has access to start a change on the part document. Users who are not authorized by the system will not be allowed to edit the part drawing and will be prompted to check out the document for change.

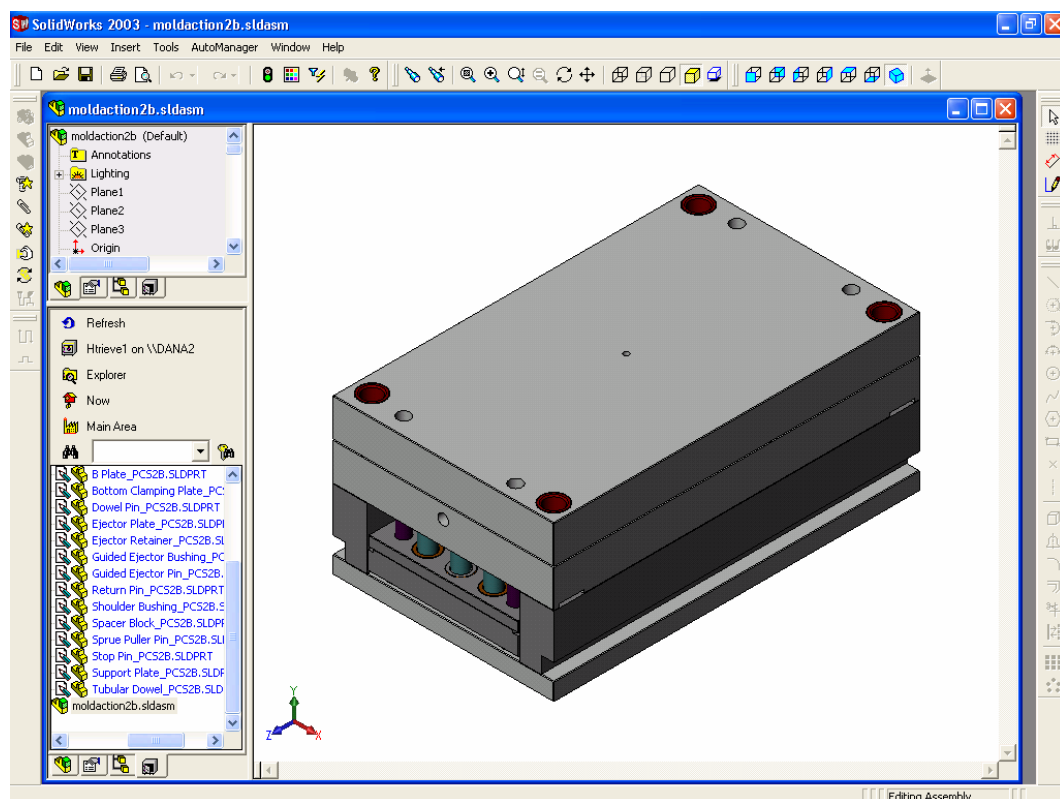


Figure 1 - All your document management data, directly available from within SolidWorks

3.3 Simplified Tracking and Revisions for Improved Accuracy

When modifying a part /assembly in SolidWorks, all documents that reference that document will automatically be updated to reflect the change. A single change within one document can, however, fundamentally affect many other documents that may have not gone through the approval cycle.

To address this gap, Cyco AutoManager Meridian and Cyco AutoManager TeamWork offer two new advanced features: 'Derive' and 'Replace'.

'Derive' allows mechanical designers to create a copy of a document with a reference to the original file, enabling users to track similar assemblies / components that might share the same problem. 'Replace' allows users to create a new version of a document while keeping the previous revision online. All as-built assemblies can still reference the old design while new assemblies can use the new version.

3.4 Quick Property Exchanges for Optimal Data Synchronization

Quickly exchange Cyco AutoManager properties to and from SolidWorks properties, from inside SolidWorks. These will automatically be updated when opening an SolidWorks assembly, part or drawing document (.slddrw) file that includes a titleblock.

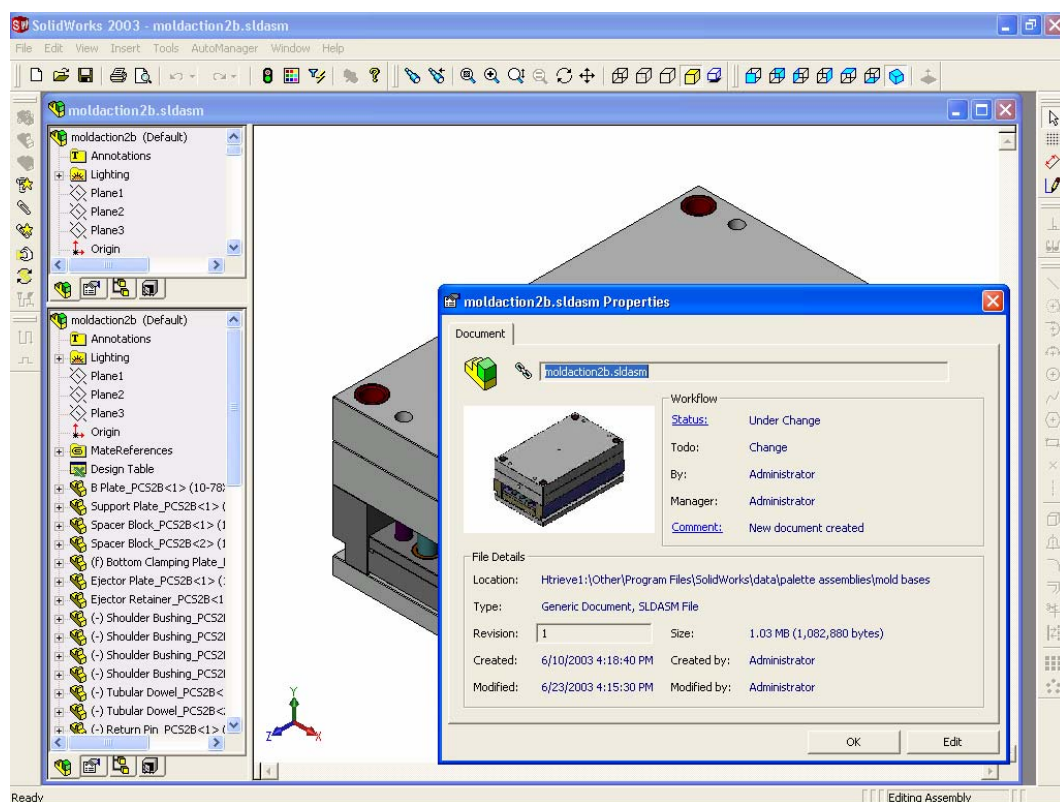


Figure 2 - AutoManager allows you to view and edit the document management properties directly from within SolidWorks

3.5 Information Sharing for Cost and Time Savings

Within SolidWorks, only SolidWorks users are able to access information on SolidWorks drawings and models. Team members who are not SolidWorks users but do make critical decisions regarding the manufacturing and modification process, such as Project Managers, Sales, QA and Stock-control, are locked out.

With Cyco AutoManager Meridian and Cyco AutoManager TeamWork, all information including document properties, approval status, assembly breakdowns, where used, and reference analysis for all SolidWorks documents is available to all employees in real-time. This results in the right information at the right place at the right time – saving time and money and reducing manufacturing mistakes.

3.6 Convenient Display of Assembly Structures for Comprehensive Overviews

Cyco AutoManager Meridian and Cyco AutoManager TeamWork for SolidWorks maintain and display the status of each part, including active, in progress, and retired parts. Plus, complete 'Assembly Structure' breakdowns and 'where-used' lists for components are also available for non-SolidWorks users.

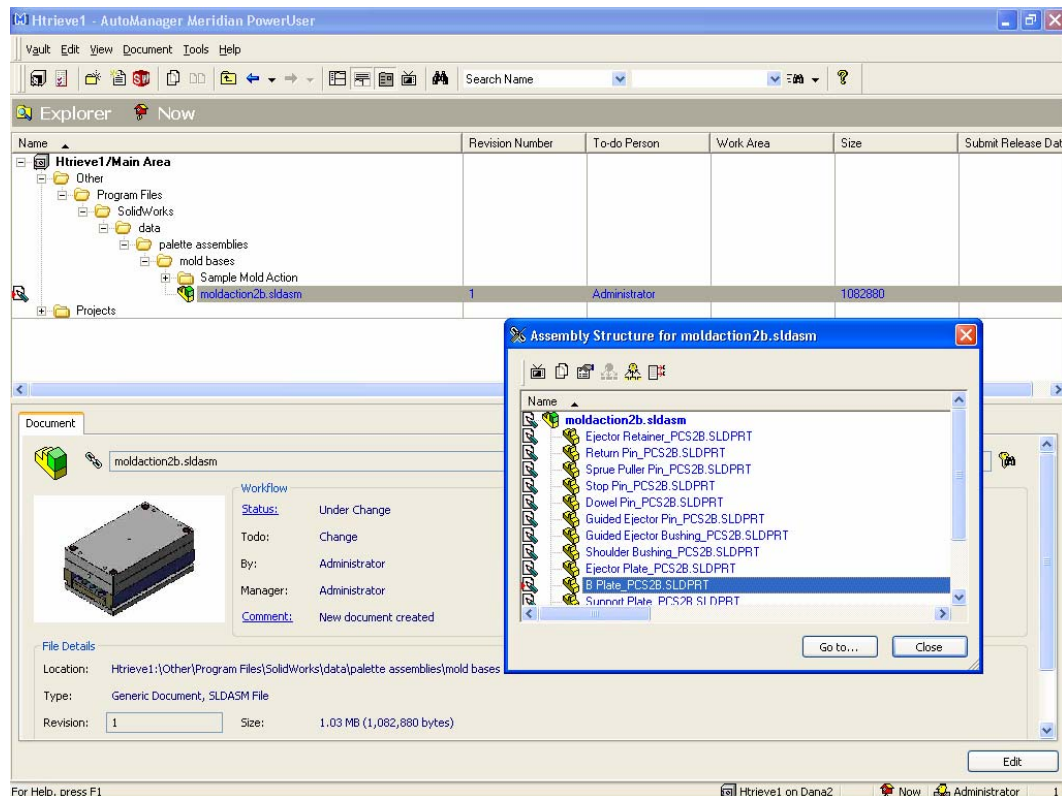


Figure 3 - AutoManager software allows you to see the full assembly structure directly from the AutoManager software

3.7 Quick Import for Easy Integration

Cyco AutoManager Meridian and Cyco AutoManager TeamWork for SolidWorks have a special assembly import tool that imports current SolidWorks assemblies and parts into the Cyco Software data management system. All links between parts and assemblies will be copied and maintained in the secure document vault.

3.8 Support for configurations

SolidWorks allows you to have multiple variants of a part or sub-assembly using the SolidWorks configuration feature. AutoManager conveniently shows you exactly which configuration was used when browsing or displaying the assembly structure of a drawing.

3.9 Seamless Prompts for Accurate Information Management

Every time a new component is created in SolidWorks with its 'Create Component' feature, a Cyco AutoManager window will pop up, ensuring that the designer enters essential information about the new part. This new part is then automatically created within the document management system.

3.10 Enhanced Design Process Support for the ETO Document Lifecycle

Cyco AutoManager Meridian and Cyco AutoManager TeamWork for SolidWorks track each document, maintaining full lifecycle information and management. Documents in the design phase can be modified according to a specific pre-configured workflow process.

3.11 Facilitated Design Audits for Improved Design and Troubleshooting

With Cyco AutoManager Meridian and Cyco AutoManager TeamWork for SolidWorks, designers can see the hierarchy of derived components (intelligent copies), enabling easy design processes audits. Designers can check the impact of future changes and track possible impacts, including errors in previously-manufactured machines. Designers also have the option to graphically track references, parts and derived documents.

4 Concluding Thoughts

Cyco Software solutions enable fast, simple and secure document management that adapts to work the way your teams and your company want to work. File modifications automatically ripple through the system, updating just the right linked files, but preserving previous versions for reference. Design and manufacturing team members have ready access to the latest revisions. References, approvals and job progress can be easily tracked, even on lengthy, multi-level projects. Solid modeling technology offers endless versatility that reduces time-consuming remodeling. Integrating smoothly with Window, CAD and Office software, Cyco AutoManager Meridian and Cyco AutoManager TeamWork support hundreds of file formats and handle 2D and 3D docs simultaneously for unprecedented document management control, efficiency and enterprise-wide communication.

5 More information

For more information on this subject, contact Cyco Software at 1-800-323-2926 ext 110 (Americas), +31 70 413 37 00 (EMEA/APAC) or by email to info@cyco.com.

6 Cyco Software

Cyco Software is the worldwide leader and pioneer in departmental and divisional EDM. We have two decades of industry experience, with over 275,000 users in more than 50 countries worldwide. We have offices in the USA, UK, Germany, and the Netherlands, together with an extensive global network of established partners. This ensures a high level of service and support on a truly worldwide scale.

Our flagship product, Cyco AutoManager® Meridian, provides powerful, highly scalable data management solutions to corporate divisions and engineering departments, while Cyco AutoManager® TeamWork delivers quick, affordable, and complete data management for engineering workgroups. Cyco Software products are fully compatible, offering flexible configuration and growth options in single or multiple locations.

Visit Cyco Software's website at www.cyco.com.