

ENGINEERING & PRODUCT DESIGN

Next-Generation Standards Management with Engineering Workbench

The addition of standards management capabilities in Engineering Workbench provides Standards Expert users with a powerful new platform for easily finding and managing the standards, codes and specifications they need to complete their projects on a daily basis.

This briefing paper will introduce you to these exciting new capabilities and the value that managing standards in Engineering Workbench delivers to your organization.

IHS Markit is pleased to introduce you to the next generation of our solution for standards management, Engineering Workbench, delivering greater capabilities and enhanced value for our user community that depends on Standards Expert for access to standards, codes and other critical technical documents.

Standards users will soon find the same features that they have come to rely on in Standards Expert, along with robust new capabilities that make it easier for them to discover, use, and manage standards in the course of their everyday workflows. Engineering Workbench will help standards users be more effective and efficient, and help engineers make better decisions faster.

Why Is IHS Markit Transitioning to Engineering Workbench for Standards Management?

As technologies continue to evolve at a rapid pace, and as the volume and diversity of engineering knowledge expand exponentially, today's engineers need a single, unified technical knowledge platform they can rely on for access to the essential documentation required to complete their projects on time and on budget.

At the same time, engineers today must often collaborate on projects and share knowledge across geographically dispersed, cross-disciplinary teams. Having a single platform that can be deployed across an enterprise and used to disseminate and manage documentation across far-flung project groups ensures all team members are using a "single source of the truth," reducing the risk of confusion and mistakes, rework and extended project cycles.

Engineering Workbench meets and exceeds the requirements for a unified knowledge platform that can be deployed across the technical enterprise Featuring a modern, simplified user interface, next-generation search technology, and research and project management tools tailored to the needs of the technical professional, Engineering Workbench meets and exceeds the requirements for a unified knowledge platform that can be deployed across the technical enterprise. Engineering Workbench is supplanting the venerable Standards Expert with an up-to-date technology platform that incorporates the latest cloud-based capabilities, allowing IHS Markit to deliver features in direct response to requests from users in the IHS Markit Customers First Survey, in ongoing interactions with IHS Markit Customer Care, and through other feedback channels.

How Will Engineering Workbench Make Working with Standards Better?

Firstly, Standards Expert users and administrators will be reassured to know that Engineering Workbench will deliver all the value and capabilities currently enjoyed and much more:

- **Assured compliance**, with a single, trusted source for 24/7 access to standards, codes and specifications, at the desktop or in the field.
- **Rapid ramp-up**, with one uniform, intuitive interface for users to be trained on.
- Enhanced teamwork and reduced risk, with easy-to-use tools for sharing and collaborating around industry standards and best practices.

From the user perspective, the functionality that has made Standards Expert an indispensable tool for engineers – such as quick and flexible filtering, My Subscription, Watch Lists, Alerts, and Favorites – will carry over to the new platform, ensuring a seamless transition and no disruption to ongoing projects.

But the leading-edge technology at the heart of Engineering Workbench also allows for key productivity enhancements focused around how engineers work with standards. Users will find that, taken together, these new capabilities make standards easier to discover, use, and manage.

Easier to Discover

Users of Standards Expert are familiar with the solution's two search boxes: one for entering a document number (for example, "ISO 9001") and another for entering keyword search terms ("quality management system requirements").

Engineering Workbench simplifies and accelerates the discovery process with a single "Intelligent Search Box" that automatically distinguishes between a document number and keywords. When a user enters "ISO 9001," the type-ahead search feature recognizes the document number and automatically suggests the ISO 9001 standard. This allows the user to click through to the document directly without having to execute the search.

Simplified Search

- Single search field for all searches
- Type ahead search suggestions
- Popular document suggestions
- Search facets
- Advanced Search Tools
- Query Builder
- Include or exclude search criteria

Research Assistant

• Discover knowledge through textual OR graphical exploration

Search Personalization

- Set your unique preferences
- Save Recent Searches—one-click to reexecute

On the other hand, if the user doesn't know the exact document number and enters keyword search terms instead, such as "quality management system requirements," the type-ahead feature will intelligently suggest standards that match the terms, again allowing single-click access to the required document.

For more complex keyword queries, search results are ranked in order of relevance. Convenient search facets allow the user to refine the search by publishing organization, publication year, and so on, so the user can quickly and flexibly drill down to the needed standard when the exact document number is unknown.

"Power users" are able to take advantage of Advanced Search capabilities to refine their searches using a combination of up to a dozen different fields, for example, "ISO" in the

The "Intelligent Search Box" makes it easy to find standards using either a document number or keywords. publishing organization field, and "quality management requirements" in the title field. A query builder tool allows the use of Boolean operators, grouping of terms, and order operations logic to build complex queries, as well as the ability to include or exclude search criteria.

The **Research Assistant** tool in Engineering Workbench allows users to quickly navigate to the standards they need to address a particular technical challenge when they don't know what documents are applicable. Research Assistant creates information workflows that guide you – much like a subject matter expert – through large bodies of information to the most relevant search results.

The Engineering Workbench platform also offers ample opportunities for personalization that can save time and help users become more productive. For example, users can save complex search queries to their home screen area in Engineering Workbench and then re-execute the searches again directly from the home screen with a single click. Alerts can also be set for search queries: for example, a user who wants to track new standards around nanotechnology could set an alert and be notified as new documents related to this field are published.

Therefore, Engineering Workbench provides standards users with powerful new ways to discover and access required documents quickly and efficiently, along with the ability to do complex research to discover the standards you need to address complex technical challenges.

Easier to Use

The productivity enhancements for standards users continue in Engineering Workbench with the new Document Viewer. The viewer allows a user to open up a document directly within Engineering Workbench without having to download the PDF or launch a browser plug-in to view the PDF. The viewer "streams" documents page by page, rather than opening the entire document all at once. This means that a user can get into the document almost instantly without having to wait for the whole file to load – a particularly noticeable improvement when viewing lengthy documents.

In addition, with the Document Viewer, users won't need a security plug-in to view secure documents – these standards can be viewed

Faster Document Viewing

- Opens online quickly -1 page at a time
- No waiting for download
- View secure documents plug-in
- Retrieve full PDF to print or save

Easier Navigation of Documents

- Navigate using Table of Contents
- Jump to a specific page
- Easily search within the document
- Review summary & revision history
- Link to reference or equivalent docs

Personalize your Documents

- Create Annotations on or within
- Bookmark documents, pages, passages
 for quick access
- Add to Projects

immediately online. Of course, Engineering Workbench continues to support PDF download for those users who want to use a standard document offline.

Engineering Workbench improves navigation within standards, too. The new Table of Contents feature allows users to browse through a large document and jump directly to a specific section of the document. Engineering Workbench also makes it easy to search for a specific phrase within a document.

Reduce search time and cut down on "clicks" by saving frequently used search queries to your home screen for quick access

The Document Viewer "streams" documents directly within Engineering Workbench, so you can start reading even very long documents almost instantly

Use a standard's Table of Contents to jump to a specific section, or perform a word search within the document to jump to a keyword As in Standards Expert, a user working in Engineering Workbench can quickly review the revision history of a standard, view or click through to other standards referenced within a document, and even view other standards that reference the document being reviewed. However, Engineering Workbench adds a dynamically generated document summary describing the standard's contents. The summary can be translated automatically into several major languages, or exported for use in other applications.

As noted above, Engineering Workbench offers ample personalization capabilities, which extend to the way that users can interact with documents inside the solution. For example, users now are able to bookmark a document – or specific sections in a document – for later reference, and even "pin" a bookmark to their home screen or save it to a "Project" folder. This allows engineers to be very precise about how they access the content they use on a continuous basis.

Similarly, users can add Annotations to an entire document or to specific sections within the documents. These Annotations also can be pinned to the home screen, saved as part of a Project or shared with others on a team.

Together, Bookmarks and Annotations help ensure that both individual and "tribal" (or team) knowledge is preserved within an organization. These, along with the other enhancements described above, allow engineers to access needed information more quickly and organize their documentation in a way that makes sense to them and best supports their daily workflows.

Easier to Manage

Engineering Workbench provides tools for users to manage standards and related documentation, including the new Projects capability, which allows engineers to save and share related documents, Bookmarks, Annotations, and other information in a unique project folder for later reference.

For example, standards can be saved alongside references from eBooks or journal articles that describe how to implement the standards'

Tools to map documents to Workflow

 Create Projects as a central repository for information (documents, bookmarks) to share with project teams and individuals.

Personalize your Experience

- Pin Projects and Bookmarks to your personal home screen
- Manage your full portfolio through My Workspaces

requirements. Members of a project team working on a particular subassembly can share a project folder so they have a common knowledge base for the life of the project. Or an engineer can use a project folder to share materials related to a particular problem with colleague to seek their advice on how to solve the challenge.

As described above, the ability to "pin" bookmarks, projects, saved searches and other information to the user's home screen makes it easy to access documents quickly and easily. Engineering Workbench also provides the **My Workspaces** tool for managing a user's portfolio of saved content, so engineers are always in control of their personal information space within the platform.

Next-Generation Standards Management

Featuring vetted content from top publishers, Engineering Workbench facilitates the discovery, use, and management of standards. Combining content, search, analytics,

Bookmarks, Annotations and Projects make it easy to organize your work and preserve knowledge

Standards can be saved in project folders alongside eBooks or articles that describe best practices for implementing the standards' requirements and an array of tools tailored to the needs of the technical professional, this new platform allows users to access a plethora of resources via a single interface and signon.

This allows knowledge workers to quickly locate information within a single context, save that information, refine their searches, and create a personalized workspace they can return to time and time again. Using specialized workflow and problem-solving tools, Engineering Workbench specifically addresses the needs of the technical enterprise and allows engineers to analyze the content and draw intelligence from it.

Over the next several months, IHS Markit will be rolling out additional standardsmanagement functionality in Engineering Workbench, culminating in the planned Q2 2017 release of Engineering Workbench 2.0. The 2.0 release will include the full capabilities of Standards Expert, along with many powerful new capabilities for discovering, using and managing standards along with related technical content.

Before the 2.0 release, users at current Engineering Workbench customers will have "early visibility" to the standards-related capabilities in successive 1.x releases, starting with 1.2 releasing in September. This will allow them to already begin using Engineering Workbench as their standards management platform, while taking advantage of the ability to use standards alongside the eBooks, journals, or other content that they already access via Engineering Workbench.

By bringing together content, tools, and analytics in an entirely new way, Engineering Workbench has become the best-in-class standards platform available in the industry today. In an ever-changing world of standards, Engineering Workbench is a step forward for companies that want to drive competitive advantage from their ability to work smarter, be more productive, and intuitively manage technical knowledge.

Monday 12:00am (UTC) to Saturday 12:00am (UTC) (Sunday 8:00 PM ET)PhoneEmail / ChatAmericas: Toll Free: +1 800 447 2273 Outside US/Canada: +1 303 858 6187Global Email: CustomerCare@ihsmarkit.com Chat: www.ihs.com/CustomerCareEurope, Middle East, Africa: +44 1344 328 300Africa: (Sunday 100 - 1	IHS Markit Customer Care		
Americas: Toll Free: +1 800 447 2273 Outside US/Canada: +1 303 858 6187Global Email: CustomerCare@ihsmarkit.com Chat: www.ihs.com/CustomerCareEurope, Middle East, Africa: +44 1344 328 300Asia Pacific:	, , ,		
Toll Free: +1 800 447 2273 Chat: www.ihs.com/CustomerCare Outside US/Canada: +1 303 858 6187 Chat: www.ihs.com/CustomerCare Europe, Middle East, Africa: +44 1344 328 300 Asia Pacific: Chat: www.ihs.com/CustomerCare	Phone	Email / Chat	
+604 291 3600	Toll Free: +1 800 447 2273 Outside US/Canada: +1 303 858 6187 Europe, Middle East, Africa: +44 1344 328 300 Asia Pacific:		

Engineering Workbench is now your best-in-class standards management platform