

Knovel quickly delivers trusted, accessible and relevant engineering answers and insights for Industry & Academia - building foundational engineering knowledge and solving problems with high business impact.

Getting Started With Knovel - Registration

Visit app.knovel.com and click Create Account to register with Knovel.

Benefits of registering:



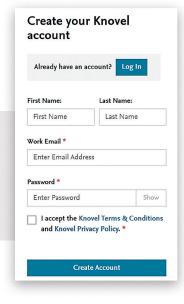
Print & download content for offline use



Save, organize & share content with colleagues



Create notes & highlights on content

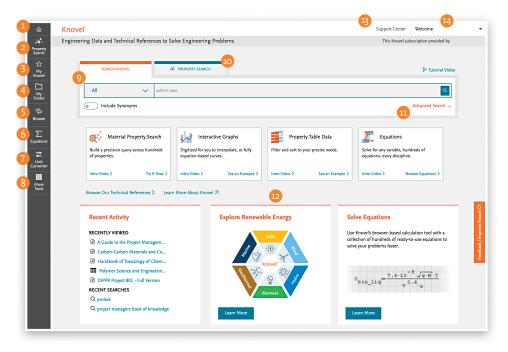




For more information about knovel, visit: www.elsevier.com/knovel

Knovel Homepage

The Knovel homepage is your starting point to discovering Knovel's technical reference content, data and interactive tools to solve data-driven problems and gain foundational knowledge.



- Home: Returns you to this page.
- Property search: Find material and property data from interactive graphs and tables.
- My Knovel: Save, organize, and share your favorite content, queries and data.
- My Folder: When on a page where there's content or a search that can be saved, you can add the item or search term by clicking 'Add this Resource' and quickly organize your saves into different folders from the My Folder panel.
- **5 Browse:** Browse all Knovel content by subject areas.
- **6 Equations:** Find and use engineering equations and worked examples.
- **17 Unit converter:** Covert units of measure.
- 8 More tools: Integration and other tools, including the Knovel Steam Calculators, Periodic Table, instructions for downloading the Knovel ToGo mobile app and more.

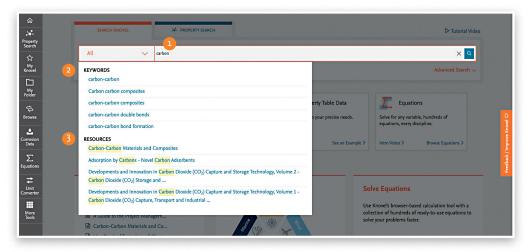
- Search: Search using keywords, title or author. A drop-down is available to support pre-filtering of your searches.
 - Search Pre-Filter Filter your search results by selecting a title, table, graph...
 - Include Synonyms toggle below search input on left.
 - Include Synonyms Toggle this on to include synonyms, when available, along with the term(s) you entered.
- **Property search:** Use Knovel's query builder to find materials or substances and their properties.
- Advanced search: Use advanced search to search for specific titles, authors, publishers, and other information.
- Information panels: Displays your recent search activity, newly added content and other featured announcements from Knovel.
- Support center: Visit Knovel's Support
 Center to find answers to your questions on using Knovel.
- Welcome: Update profile details, change your password, access mobile authentication / license and log out.





Searching in Knovel

Use the search bar to begin your journey into Knovel. Search examples are listed below.



- **Search:** Enter your search query using keywords, phrases or syntax like Boolean operators, "title:" or "author".
- 2 **Keyword Suggestions:** Select from auto-suggest terms based on engineering concepts.
- **Resources:** Suggested resources that may match your search query.

Search examples

- To search for a phrase or exact match, use quotation marks (e.g. "tool steels").
- Knovel supports the Boolean operators "AND", 'OR' and 'NOT". When using multiple Boolean operators, they are processed left to right. To change the order in which terms are processed, enclose the term(s) in parentheses. Operations in parentheses are evaluated first.
- To search by author or title, use 'author: xxxx' or 'title: xxxx' (e.g. 'title: mining')
 You may also use the "Advanced Search" feature to build complex search queries.
- Search by CAS Registry No. (71-43-2), Molecular Formulas (c6h6) or UNS numbers (R56400).

What might you find with a Knovel search?

Handbooks

Databases

Manuals

Conference Proceedings

Interactive Equation Worksheets

Textbooks

Interactive Graphs

Databooks

Interactive Tables

Primers

Excel Worksheets

Encyclopedias

Mathcad Worksheets

Dictionaries

Definitions

Regulatory Information

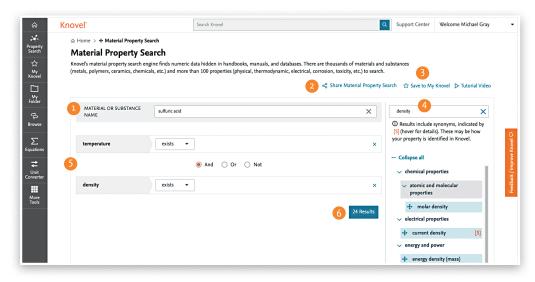
For detailed tutorials on how to use interactive content, visit: service.elsevier.com/app/answers/detail/a_id/13522/supporthub/knovel/p/10938





Property Search in Knovel

Instantly find specific materials properties data from a database of more than 100 properties for hundreds-of-thousands of materials and chemicals.



1 Material or Substance Name: Enter a specific material or substance name or select from auto-suggest terms.

Results include Synonyms [S], these may be how your property is identified in Knovel.

- 2 Share URL: Share this search query via an email or short URL.
- 3 Save to My Knovel: Save this search query to My Knovel.
- Filter by Property Name: Start typing a property name e.g. density; or browse the property tree and select a property by dragging and dropping onto the query builder or double-clicking it.
- 5 Drag & Drop desired property onto the query builder.
- **Results:** As you build your query, the number of results is dynamically updated. Click to view results.

Material or Substance

Name can be:

- Name: titanium, carbon, sulfuric acid, etc
- CAS Registry No: 71-43-2, 7440-38-3
- Molecular Formula: c6h6, h2so4, etc
- UNS number: R56400, H40270
- ASTM Spec.: SA-182, SA-387, etc

Properties:

- You can combine up to three properties in the query builder and 'AND', 'OR' and 'NOT' operators.
- Knovel supports the following numeric operators: exists, =, <=, >= and is between, enabling you to enter numerical values or numeric ranges.
- For relevant properties, you can select units of measurement using the drop down menu; e.g., temperature units (C, F, R, K, etc.)

How is Knovel Used?

An engineer used Knovel to compare properties of stainless steel alloys to increase the life span of a heavy milling machine.

An engineer used Knovel's graph digitizer to understand the severity of corrosion of steel with respect to pH and water flow velocity in piping.

A research team at an academic institution used Knovel to discover background information on wearable technology & fabrics, plus find reliable data on the density of various polymers supporting four research papers.

Results

18% cost reduction and 15% life span Increase.

Reduced EHS risk and provided cost savings on the project.

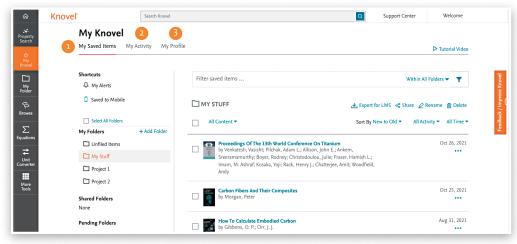
Provided an increase in research funding.



For more information about knovel, visit:

My Knovel

Register with Knovel to gain access to special capabilities, such as saving, organizing, note-taking, sharing, printing and downloading.



- 1 My Saved Items: Manage your saved interactive tables, search queries, titles, annotated section, etc.
- 2 My Activity: Access your recent searches, viewed content and other activities arranged in chronological order.
- My Profile: Change your personal details and password, as well as retrieve a mobile authentication code for the Knovel ToGo app and license codes for Knovel plug-ins.



For registered users download the app Knovel ToGo https://app.knovel.com/web/marketing/mobile-app.v

Knovel is an engineering decision-support solution enabling engineers to solve problems faster. With powerful search and interactive analytical tools, engineers can confidently find answers to technical questions through best practice insights, validated equations and materials and substances data from more than 160 providers. For more than 20 years, Knovel has helped thousands of engineers and researchers from leading companies and institutions around the world enhance research and productivity, achieve operational excellence, reduce costs and time to market, and build expertise.

To learn more about how to use Knovel, visit app.knovel.com and click **Support Center** in the top right corner.

