



UNIVERSIDAD
RICARDO PALMA

Introducing Knovel



Knovel Training Deck

We're here to help you make the most of your access to Knovel.



1. Create a user account



2. Search



3. Key Features








4. Find Help and Support

Knovel

Knovel quickly delivers trusted, accessible and relevant **Engineering Answers & Insights** for Industry & Academia—building foundational engineering knowledge and solving problems with high business impact.



Knovel




<p>What Knovel gives you >>></p>	<p>ESSENTIAL ANSWERS </p>	<p>ACCELERATED DISCOVERY </p>	<p>CONTINUOUS ACCESS </p>	
<p>How Knovel delivers >>></p>	<ul style="list-style-type: none"> • Access Reference titles, Interactive Equations, Graphs & Tables, & More with content from over 150 international content providers • Easily Manipulate & Use Data – within Knovel • Personalize your Knovel experience – Save your Notes, Searches, Titles, Data, Alerts – and Share with your colleagues 	<ul style="list-style-type: none"> • Smart Search capabilities that understand the engineering language • Search results filtering based on Engineering concepts to find what you need – Fast! • Choose the Type of Search you need – Material Property Search, Advanced Search, or KDA 	<ul style="list-style-type: none"> • Mobile App (IOS & Android): Uninterrupted access on-site, off-hours • Seamless use with Excel add-in & Software plug-ins (Inventor, Revit) • Enhanced Discoverability through EBSCO, SUMMON, & PRIMO 	
<p>What you can do with Knovel >>></p>	<p> Learn: Find engineering best-practices and foundational knowledge to come up to speed on a topic</p>		<p> Solve: Find data-rich answers and insights essential to solve engineering problems with high business impact</p>	
<p>How Knovel adds Value >>></p>	<p>LEARNING / KNOWLEDGE MANAGEMENT </p>	<p>PRODUCT DEVELOPMENT & ENHANCEMENT </p>	<p>EHSQ RISK MANAGEMENT </p>	<p>OPERATIONAL EXCELLENCE </p>

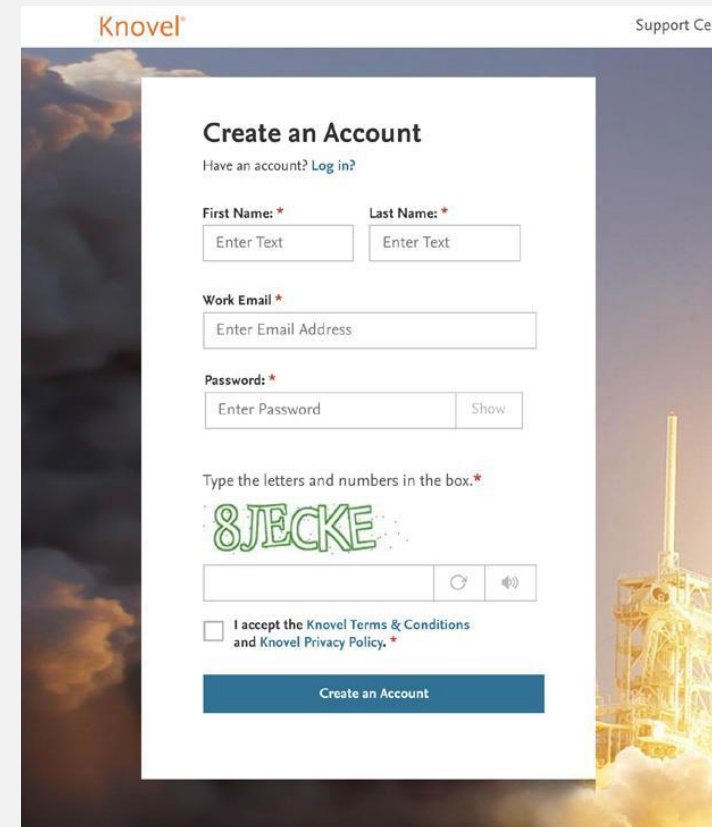
1. Create a user account

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
-  Share content with colleagues
-  Create notes & highlights on content



The screenshot shows the Knovel registration page. At the top left is the Knovel logo, and at the top right is a 'Support Center' link. The main heading is 'Create an Account'. Below it, there is a link for users who already have an account: 'Have an account? Log in?'. The form contains several fields: 'First Name' and 'Last Name' (both with 'Enter Text' placeholder), 'Work Email' (with 'Enter Email Address' placeholder), and 'Password' (with 'Enter Password' placeholder and a 'Show' button). Below the password field is a CAPTCHA challenge: 'Type the letters and numbers in the box.' with the image '8JECKE' and a refresh button. At the bottom, there is a checkbox for 'I accept the Knovel Terms & Conditions and Knovel Privacy Policy.' and a blue 'Create an Account' button.

1. Create a user account: Now, also on your Mobile device!

1. Download the *MyKnovelToGo* app on your iOS or Android device

2. Select "Register Instantly"

3. Enter Registration information

4. If Knovel recognizes email domain or user's IP, then address registration will be successful

mobile.registration+8533@knovel.net
Password

Sign In

Forgot your password?

or

If you access Knovel by first signing in to your organization's Intranet

Get an Authentication Code ?

or

Register Instantly 2

with the email address you use at your organization

Instant Registration

Email
Password
Repeat Password 3
First Name
Last Name

At least 8 characters, 1 uppercase letter, and 1 digit

I have read and agree to the [Terms and Conditions](#)

Create Account
Cancel

Instant Registration

mobile.registration+8563@knovel.n
abcAbc12 4
Password
Repeat Password
First Name
Last Name

At least 8 characters, 1 uppercase letter, and 1 digit

Registration Success

You are almost done...
Please check your email to activate your account.

NOTE: Automatically-generated emails can sometimes be routed to Bulk email folders. Please check this folder if you do not receive your activation email and add Knovel to your "safe senders" list

OK

2. Search

Search Knovel with precision and ease

Knovel offers engineers 2 different search techniques:

1

Search broadly and then filter

OR

2

Advanced Search to find using
Keyword, Book Title, or Author

OR

3

Use Material Property Search to locate information
that may be hidden in large complex tables

Use our Search bar to find what you need

Knovel®

[Support Center](#)

Welcome Sreenath Juttu

1

SEARCH KNOVEL

 PROPERTY SEARCH

3

[▶ Video](#)

acrylic polymer*



[Advanced Search](#) ▾

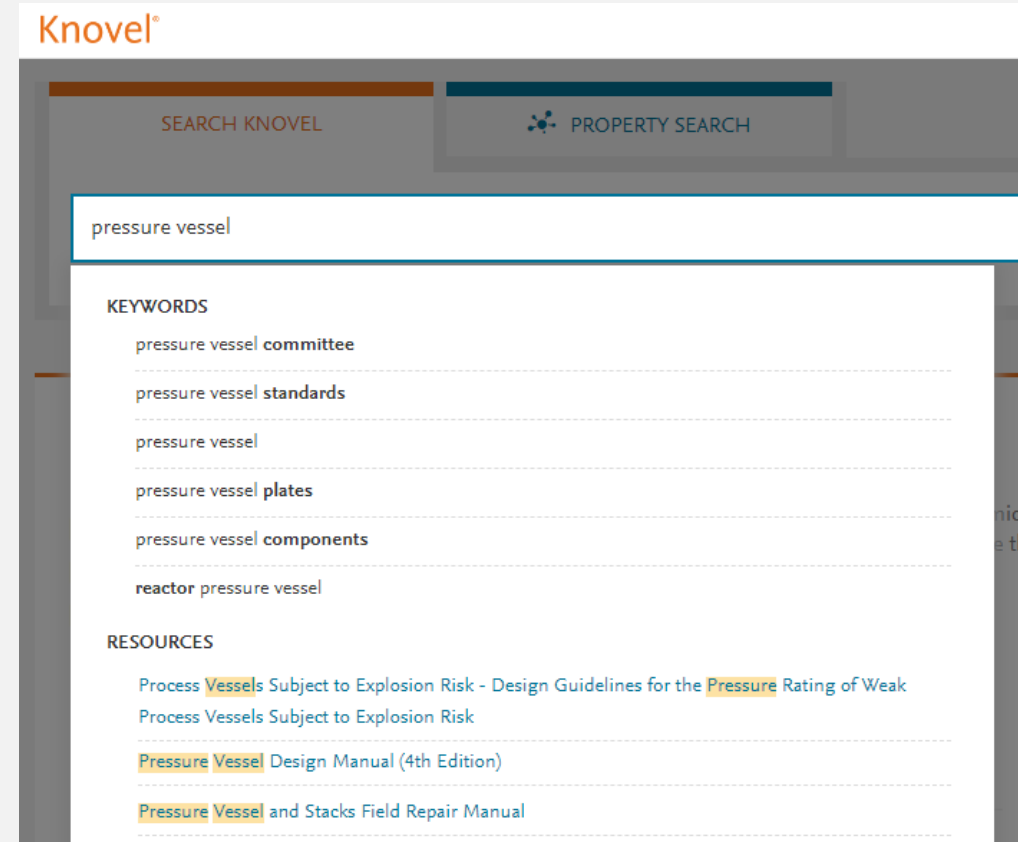
2

2.1 Search

Just type into the search bar

Knovel

Auto Suggest:
As you type your query,
Knovel automatically
suggests relevant search
terms



The screenshot displays the Knovel search interface. At the top, there are two search options: "SEARCH KNOVEL" and "PROPERTY SEARCH". The search bar contains the text "pressure vessel". Below the search bar, the results are categorized into "KEYWORDS" and "RESOURCES".

KEYWORDS

- pressure vessel **committee**
- pressure vessel **standards**
- pressure vessel
- pressure vessel **plates**
- pressure vessel **components**
- reactor** pressure vessel

RESOURCES

- Process **Vessels** Subject to Explosion Risk - Design Guidelines for the **Pressure** Rating of Weak Process Vessels Subject to Explosion Risk
- Pressure Vessel** Design Manual (4th Edition)
- Pressure Vessel** and Stacks Field Repair Manual

2.1 Search

Use filters to narrow down the results

1

Content Type Filters:
Looking for data in a table? Or need to work in an equation?
Just click on the type you need.

2

Engineering Concept Filter:
What context do you need the information in?
With a single click, refine your search results using engineering concepts generated by Knovel

The screenshot shows the Knovel search interface. At the top right, there are links for 'Support Center' and 'Welcome Sreenath'. The search bar contains 'pressure vessel' and has a search icon. Below the search bar, there are options to 'Share Search Results', 'Save Search Query', and 'Video'. A dropdown menu for 'Advanced Search' is visible. On the left, there is a 'Refine By Related Concept' section with a list of filters: 'mechanical engineers', 'low-alloy', 'brittle fracture', 'relief valves', 'ferritic', 'carbon steels', 'astm standards', and 'low-alloy steels'. Each filter has a progress bar. A blue circle with the number '2' is next to 'relief valves'. Below this list is a '[+] More' link. There is also an 'External Links' section with a link to 'Compendex from Engineering Village'. On the right, there is a 'Sort by Relevancy' dropdown and a pagination bar showing '1 2 3 ... 426'. A blue circle with the number '1' is next to the 'Book' filter in the pagination bar. Below the pagination bar, there are two search results. The first result is '[BOOK] 2017 ASME Boiler and Pressure Vessel Code, Section II - Materials' by ASME Boiler and Pressure Vessel Committee on Materials... (2017). It has a 'Save Result' button. The second result is '[BOOK] Irradiation Embrittlement of Reactor Pressure Vessels (RPVs) in Nuclear Power Plants' by Soneda, Naoki (2015). It also has a 'Save Result' button. Both results have a 'See Inside' link.

2.2 Advanced Search

Find book titles with precise search parameters

Knovel

1.
Click on the **Advanced Search** link.

2.
Enter your **search** term(s) in the appropriate field(s) provided:

3.
Optional: Select '**More**' to display additional **search** fields.
Note: One of these two additional fields may be included in an **advanced search** query.

4.
Select '**Search**'.

Knovel® Support Center Welcome Sreenath Juttu

SEARCH KNOVEL PROPERTY SEARCH Video

acrylic polymer* 1 Advanced Search

Knovel® Support Center Welcome Sreenath Juttu

SEARCH KNOVEL PROPERTY SEARCH Video

Advanced Search

Search All 2

Book Title 2

Author 2

More 3

4 Search Clear All

- Put exact phrases in quotes: "metal corrosion".
- Type OR between any of the optional words you are interested in; otherwise, every word in each box must be present.
- Type NOT before words you don't want.
- Use * for any letters, or ? for any single letter.
- Entries in multiple fields are combined with an AND.

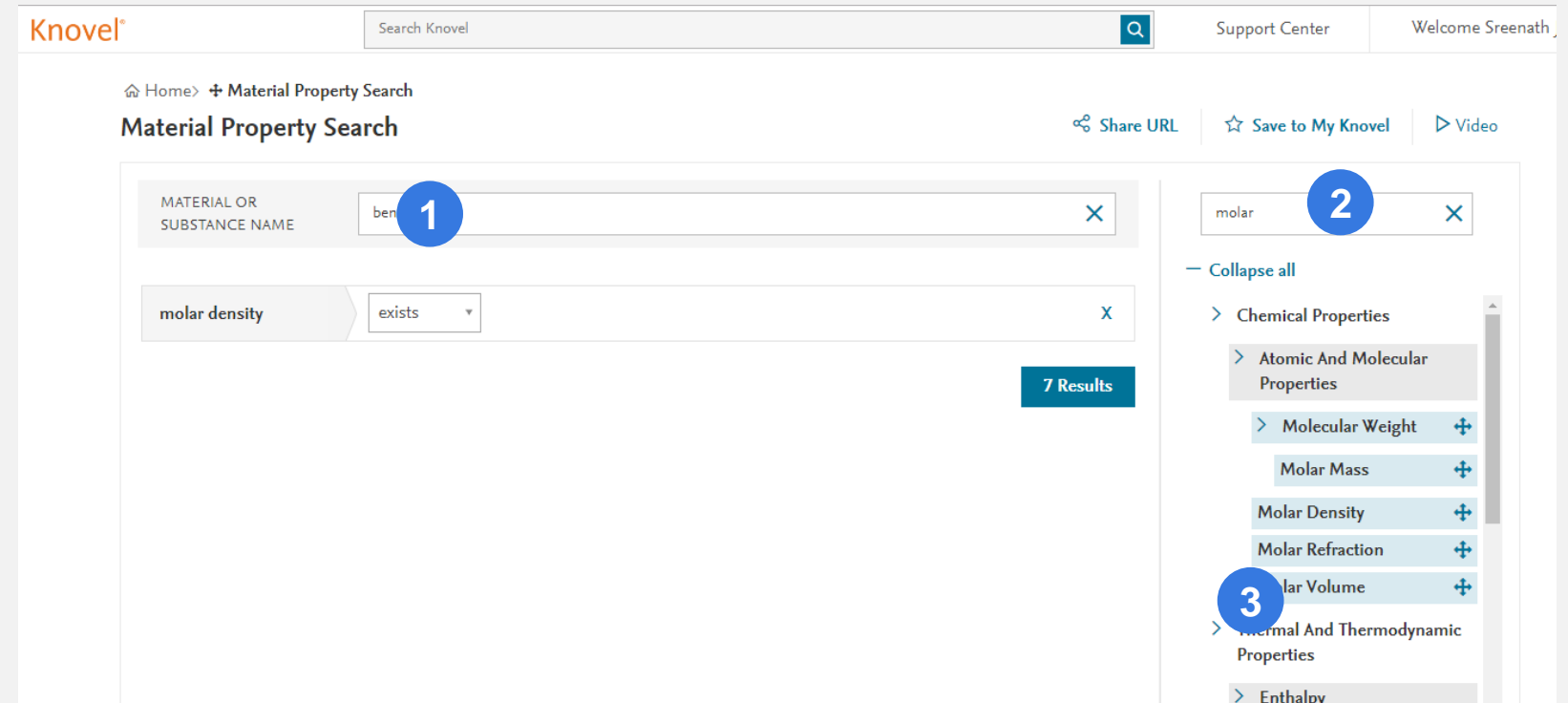
2.3 Material Property Search

Finding materials with the required properties is easy – Just Drag & Drop!

1.
Dedicated, intelligent search “wizard” guides you through searching for materials or substances AND their properties

2.
Select a Material, and Knovel’s Properties taxonomy lets you pick from relevant properties to complete your data query.

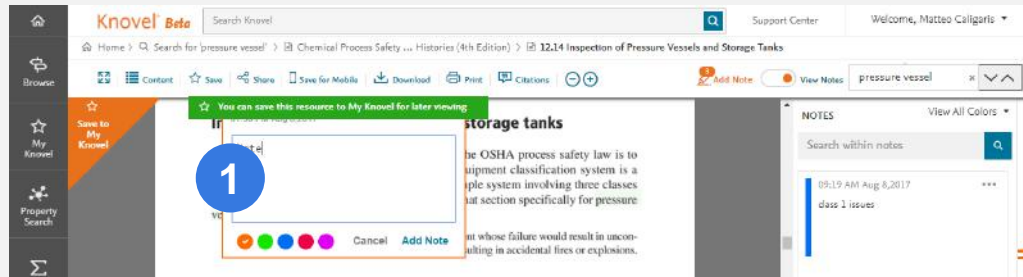
3.
Easy, drag-and-drop functionality, to quickly find the data you need



The screenshot shows the Knovel Material Property Search interface. At the top, there is a search bar with the text "Search Knovel" and a magnifying glass icon. To the right of the search bar are links for "Support Center" and "Welcome Sreenath". Below the search bar, the page title is "Material Property Search" with a breadcrumb "Home > Material Property Search". There are three utility links: "Share URL", "Save to My Knovel", and "Video". The main search area has a text input field labeled "MATERIAL OR SUBSTANCE NAME" containing the text "ben" (1). Below this is a property selection area with a dropdown menu showing "molar density" and a value of "exists" (2). A "7 Results" button is visible. On the right side, there is a sidebar with a "Collapse all" button and a list of property categories: "Chemical Properties", "Atomic And Molecular Properties", "Molecular Weight", "Molar Mass", "Molar Density", "Molar Refraction", "Molar Volume", "Thermal And Thermodynamic Properties", and "Enthalpy". The "Molar Density" category is highlighted with a blue circle (3).

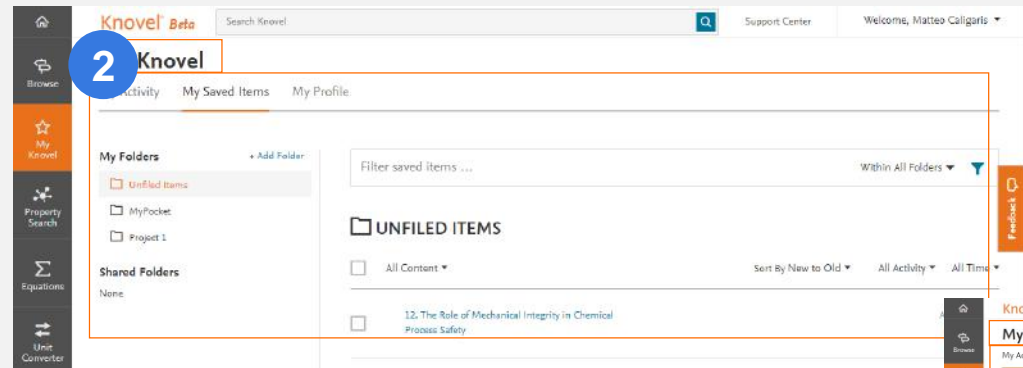
3.1 Key Features: My Knovel

Knovel

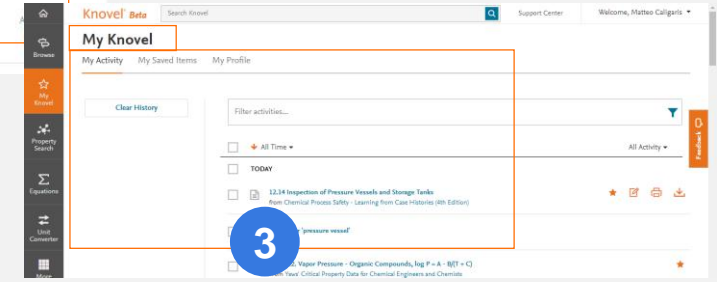


1. Annotate, save and share content

2. Save the content, notes and data you need most often – to 'My Knovel'



3. Pick up where you left off



3.1 Key Features: My Knovel

Knovel

Knovel® Support Center Welcome Sreenath Juttu

Home > Search for: haber process

haber process

Share Search Results Save Search Query Video

Advanced Search

Refine By Related Concept

- ammonia synthesis
- nitrogenase
- chemical reaction ...
- nitrogen cycle

All (260+) Books / Text (240+) Definitions (17)

Sort by Relevancy

Include out of subscription results

[BOOK] Predictive Control in Process Engineering - From the Basics to the Applications

2. Save time and effort - save search queries to 'My Knovel'

1. Save a search result, e.g. a title, to your 'My Knovel' for easy access later

Knovel® Search Knovel Support Center Welcome Sreenath Juttu

Home > Search for: haber process > Hydrogen Generation, Storage, and Utilization > 10.3.1 Ammonia Production: The Haber Process

Hydrogen Utilization in Chemical Industry 181

Flow chart illustrating the main components in a typical Haber process:

- Nitrogen (From air)
- Hydrogen (From air)
- Compressor
- Reactor (15-25 Mpa, 300-500°C, Catalyst)
- Cooling Chamber
- Liquid ammonia as product
- Unreacted gas (N₂ and H₂)

FIGURE 10.6 A flow chart illustration of the main components in a typical Haber process [11].

3. Share a search with your colleagues

SHARE THIS SEARCH

https://app.knovel.com/web/search.v?qs=haber%20process&search_type=tech-reference&ro

Enter the email addresses of people you'd like to share this Search:

Separate multiple addresses with commas

Enter a message you'd like to appear with your item (optional):

Cancel Share via Email

3.2 Key Features: The 'MyKnovelToGo' Mobile App

Knovel

1. In the Table of Contents, save a book title to Mobile
2. Download the book on your MyKnovelToGo app
3. Access the title –Online or Offline!

Knovel® Search Knovel Support Center Welcome Sreenath Juttu

Home > Search for: haber process > Predictive Control in Process Engineering - From the Basics to the Applications

Predictive Control in Process Engineering - From the Basics to the Applications
Haber, Robert; Bars, Ruth; Schmitz, Ulrich

Describing the principles and applications of single input, single output and multivariable predictive control in a simple and lively manner, this practical book discusses topics such as the handling of on-off control, nonlinearities and numerical problems. It gives guidelines and methods for reducing the computational demand for real-time applications.

View More

Save to My Knovel Citation Mobile Share

Search Within

1 NEW! Make your own Notes in this book!

Try Our Mobile ...
Download our mobile app to search and read engineering technical references anywhere, even when you're offline.

MyKnovelToGo

My Resources

Predictive Control in Process Engineering - From the Basics to the Applications
Haber, Robert; Bars, Ruth; Schmitz, Ulrich

Civil Avionics Systems (2nd Edition)
Moir, Ian; Seabridge, Allan; Jukes, Malcolm

Tools for Making Acute Risk Decisions with Chemical Process Safety Applications
Center for Chemical Process Safety

2017 ASHRAE® Handbook - Fundamentals (I-P Edition)
American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

MyKnovelToGo

Predictive Control in Process Engineering - From the Basics to the Applications
HABER, ROBERT; BARS, RUTH; SCHMITZ, ULRICH

Describing the principles and applications of single input, single output and multivariable predictive control in a simple and lively manner, this practical book discusses topics such as the handling of on-off control, nonlinearities and numerical problems. It gives guidelines and methods for reducing the computational demand for real-time applications. With its many examples and several case studies (incl. injection molding machine and waste water treatment) and industrial applications (stripping column, distillation column, furnace) this is invaluable reading for students and engineers who would wish to understand and apply predictive control in a wide variety of process engineering application areas.

Front Matter

3 Citation and Abbreviations

3.3 Key Features: Interactivity

Interactive Equations

1. Filter the search results for interactive equations

2. Click the required equation

3. Click 'Open Worksheet'

4. Use the solver to compute exact values

Knovel Search for: distributed load

1. Filter by 'Equations' (1494)

2. Click on the equation: [EQUATION] Maximum Deflection in a Cantilever Beam with a Uniformly Distributed Load

External Links: Compendex from Engineering Village

Knovel Interactive Equations

Maximum Deflection in a Cantilever Beam with a Uniformly Distributed Load

Equation:
$$v_L = \frac{w L^4}{8 E I}$$

3. Click 'Open Worksheet'

Diagram showing a cantilever beam of length L fixed at C and free at D, with a uniformly distributed load w acting downwards. The deflection curve is shown at the bottom.

Knovel Equation Solver

Worksheet Edit Calculate Insert Units

Maximum Deflectio...

Legend with variables and units

Maximum deflection at the free end.	v_L	in
uniformly distributed load	w	$\frac{lbf}{in}$
Young's modulus	E	psi
Second moment of area	I	in^4
Length of the beam	L	in

Calculation

w := 100 $\frac{lbf}{in}$

E := 200000 psi

I := 10000 in^4

L := 100 in

4. Result: $v_L = 0.625 in$

3.3 Key Features: Interactivity

Interactive Tables & Graphs

1. Filter the search results for interactive Tables

2. Click the required equation

3. Manipulate the table - move or remove Columns & Rows – all within Knovel

4. Save / Export data

The screenshot shows the Knovel search interface for the query 'distributed load'. A search bar at the top contains the query. Below it, a 'Refine By Related Concept' sidebar lists various engineering terms with progress bars. The main results area shows a filter for 'Graphs / Tables (7)' selected. A table of results is displayed, with the first row highlighted. A blue circle with the number '1' points to the search bar, '2' points to the 'Graphs / Tables' filter, and '3' points to the table header.

category of loaded area	uniformly distributed load, q_k	concentrated load, Q_k
Category C - C13, Classrooms	3.0	3.0
Category B - B1, General use other than in B2	2.5	2.7
Category C - C22, Places of worship	3.0	2.7

The screenshot shows a detailed view of a search result for 'Table NA.3 of EN 1991-1-1. Imposed Loads on Floors, Balconies and Stairs in Buildings'. The table has columns for 'Category of loaded area', 'Concentrated load, Q_k (kN)', and 'Uniformly distributed load, q_k (kN/m²)'. A blue circle with the number '3' points to the table header, and a blue circle with the number '4' points to the 'Concentrated load, Q_k (kN)' column. The table content includes various categories of loaded areas with their respective load values.

Category of loaded area	Concentrated load, Q_k (kN)	Uniformly distributed load, q_k (kN/m ²)
Category A - A1, All usages within self-contained dwelling units. Communal areas (including kitchens) in blocks of flats with limited use (see Note - 1). For communal areas in other blocks of flats.	2.0	1.5
Category A - A2, Bedrooms and dormitories except those in self-contained single family dwelling units and in hotels and motels.	2.0	1.5
Category A - A3, Bedrooms in hotels and motels; hospital wards; toilet areas	2.0	2.0
Category A - A4, Billiard/snooker rooms	2.7	2.0
Category A - A5, Balconies in single family dwelling units and communal areas in blocks of flats with limited use (see Note 1)	2.0	2.5
Category A - A6, Balconies in		

3.3 Key Features: Interactivity

Interactive Tables & Graphs

1. Filter the search results for interactive Graphs

2. Click the required Graph

3. Click on graph directly to plot the X & Y coordinates

4. Save / Export data

Knovel Search for: distributed load

1

2

Refine By Related Concept

- bending moment dia...
- maximum shear
- influence lines
- imposed loads
- bearing strength
- strength design
- point load
- arches

Sort by Relevance

Graphs / Tables (7)

graph digitizer	x-axis	y-axis	graph title	text
	Tapered beam size, r	Deflection, (Δ_{gb}) $(h_2-h_1)^3 E/NWL^3...$	Figure 8-1. Graph for determining tapered beam size based on deflection under uniformly...	view text

3

4

Knovel Search for: distributed load

Home > Wood Engineering Handbook (2nd Edition) > Figure 8-1. Graph for determining tapered beam size based on GRAPH DIGITIZER

4

How to Use

X Axis: Tapered beam size, r

Y Axis: Deflection (Δ_{gb}) $(h_2-h_1)^3 E/NWL^3$

X Significant Digits: 4

Y Significant Digits: 4

X	Y
1.480	0.1141
1.891	0.1902
2.378	0.2770
2.974	0.3631
3.185	0.4353
3.657	0.5281

3

LEGEND:

- W = TOTAL LOAD ON BEAM (UNIFORMLY DISTRIBUTED)
- Δ_b = MAXIMUM BENDING DEFLECTION
- E = ELASTIC MODULUS OF BEAM
- b = BEAM WIDTH
- h_1 = $\frac{h_2-h_1}{2}$
- h_2 = $\frac{h_2-h_1}{2}$

1

2

5

4. Find help and support

Support

1.
For Video Tutorials, FAQs and more, access the “Support Center”

2. Contact Us
While we strive to make Knovel easy and intuitive to use, sometimes help is required. Our customer support team is here to help and you can contact us in various ways.

The screenshot shows the Knovel website interface. At the top left is the Knovel logo. To its right is a navigation bar with a 'Support Center' link, which is highlighted with a blue circle containing the number '1'. Further right is a user greeting 'Welcome Sreenath Juttu' with a dropdown arrow. Below the navigation bar is a search area with two tabs: 'SEARCH KNOVEL' (highlighted with an orange bar) and 'PROPERTY SEARCH' (highlighted with a teal bar). A search input field contains the text 'author: yaws' and has a magnifying glass icon on the right. Below the search field is an 'Advanced Search' link with a dropdown arrow. To the right of the search field is a 'Video' icon. At the bottom of the page is the Elsevier logo and footer text: 'Knovel subscription is supported by Knovel. Contact your Knovel administrator for additions/suggestions' (with a blue circle containing the number '2' next to 'suggestions'), 'Copyright © 2018 Knovel Corporation. All rights reserved.', 'Terms and conditions', 'Privacy Policy', 'Contact Us', and 'Sitemap'. A cookie notice states: 'Cookies are used by this site. To decline or learn more, visit our Cookies page.'



ELSEVIER

Thank you

