Ⓔⓘ Engineering Village 2

Thesaurus

The thesauri are guides to the controlled vocabulary used in indexing articles for Compendex and INSPEC. Indexers choose terms from the controlled vocabulary to describe the article they are indexing. The controlled vocabulary is used to standardize the way the articles are indexed.

The thesauri are hierarchical in nature. Terms are organized by broader, narrower or related concepts. Articles are indexed using the most specific controlled vocabulary terms available. For example, an article about metal testing in general will be indexed in Compendex under "Metal testing" not "Materials testing." Articles specifically about steel testing will be indexed under "Steel testing" not "Metal testing."

Select database
The thesauri can be reached by clicking on the Thesaurus tab at the top of any Engineering Village 2 page. If you have access to both Compendex and INSPEC, you will need to choose the thesaurus you wish to search by clicking on the radio button beneath Select Database. If you do not have access to INSPEC, only Compendex will appear.

Terms selected from the Compendex thesaurus will be searched in the Compendex database, terms selected from the INSPEC thesaurus will be searched in the INSPEC database.

If you switch from one thesaurus to another, the selections in the Search Box will be deleted. Some terms are common to both databases, but many controlled terms are unique to Compendex or INSPEC. Because of this, each thesaurus must be searched separately.

Locating terms
There are several ways to identify controlled vocabulary terms. Enter a term into the search box and click either "Search" "Exact Term" or "Browse." Then click on Submit.

Search
The search function looks for the term you have entered anywhere in a controlled vocabulary term as well as for broader, narrower and related controlled vocabulary terms. The terms will be listed in alphabetical order. For example, searching for "anchor" in Compendex will retrieve:

If you enter a term that is not in the controlled vocabulary list, the system will suggest alternate spellings. For example:

If any of the suggestions match what you are looking for, check the radio button at that suggestion and click on the "Search again" button. The system will then search the thesaurus for that term. You can also click on the hyperlinked term and you will be brought to the thesaurus record for that term.

Exact Term
If you know the exact controlled vocabulary term you are looking for, but want to see broader, narrower or related terms directly, you can use the "Exact Term" function. This search will take you directly to the main record for the term. It should be noted that some Narrower Terms and Related Terms will also have narrower terms. If you wish to do a comprehensive search on a subject, it may be beneficial to explore all likely paths. In the example below, a comprehensive search for "diodes" should include all of the Narrower Terms and each of the Narrower Terms should be explored. "Semiconductor diodes" has the following narrower terms: avalanche diodes, gunn diodes, light emitting diodes, photodiodes, tunnel diodes, varactors and zener diodes. These terms cannot be selected from the "Diodes" record. To find and select these Narrower Terms you need to click on the hyperlink for "Semiconductor diodes."

If you click on the hyperlink for "Semiconductor diodes," you will see the following record:

The narrower terms should also be selected for a comprehensive search.

If you try to do an Exact Term search for a term that is not a controlled vocabulary term, the system will suggest alternate spellings. You may click on any of the hyperlinked suggestions to go to the thesaurus record.

Browse
The Browse command is like using the printed Thesaurus. Selecting browse takes you to the place in the Thesaurus where the term would appear alphabetically. In the example below, browsing for "ships" in the Compendex thesaurus retrieves the following terms. Use Previous Page or Next Page to scroll through the entire thesaurus.

Browse: ships

Terms	Select
Shipbuilding materials–Steel*	☐
Shipbuilding–Drafting*	☐
Shipping	
Ships	☐
Ships–Auxiliary machinery*	☐
Ships–Ballast tanks*	☐
Ships–Bow thrusters*	☐
Ships–Cable laying application*	☐
Ships–Constructing and outfitting*	☐
Ships–Conversion*	☐

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Lead-in and Prior terms

In all of these results sets, terms are hyperlinked. Clicking on a hyperlinked term will bring you to its thesaurus record. Terms that appear in italics are lead-in terms. Lead-in terms can be either synonyms that are not part of the controlled vocabulary or prior terms that are still in the database but that have been replaced by other controlled terms. Any database search that would include the entire range of years should include current and prior controlled vocabulary. Prior terms are indicated by an asterisk. In the example below, Bridge floors and Bridges (electric measurement) are a lead-in terms and all of the other terms except "Bridges" and "Bridge Piers" are prior terms. Lead-in terms that are not prior terms do not have a Select option.

Browse: bridges

Terms	Select
Bridge floors	
Bridge piers	☐
Bridge piers–Scour*	☐
Bridges	☐
Bridges (electric measurement)	
Bridges, Aluminum*	☐
Bridges, Arch*	☐
Bridges, Bascule*	☐
Bridges, Box girder*	☐
Bridges, Cable stayed*	☐

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Top Terms

INSPEC thesaurus entries include a top term. Top terms are the highest or most general terms in the hierarchy.

Scope notes

Scope notes are available in the thesaurus record for most controlled terms. The scope notes may include the dates that the term was in use (or introduced) and related Classification Codes. Scope notes may also include usage notes.

The scope notes can be found by clicking on the "i" symbol from the thesaurus record.

Selecting terms

All controlled terms present in the database have a Select box. Lead-in terms that have never been used as controlled vocabulary terms cannot be selected. Marking the Select box places the term in the Search Box.

You may remove terms from the Search Box by un-clicking the Select box in the results set, highlighting the term in the Search Box and

clicking on Remove or by resetting the Search Box.

Executing the search
Once terms have been selected and placed into the Search Box, a search can be run against the database. The terms can be combined with OR (any term may be present) or AND (all terms must be present). OR is the default.

Search limits
Using the limits (document type, treatment type, discipline, language or date) is a useful way to construct searches more precisely.

Document types
Document types describe the type of source publications from which indexed papers are taken.

The document type field was added to Compendex in 1985. **Please note that limiting a search to a particular document type will exclude items added prior to 1985.**

The document types used in Compendex are:
All document types (default)
Journal article
Conference article
Conference proceeding
Monograph chapter
Monograph review
Report chapter
Report review
Dissertation
Unpublished paper

The document types used in INSPEC are:
All document types (default)
Journal article
Conference article
Conference proceedings
Monograph chapter
Monograph review
Report chapter
Report review
Dissertation
Patent (1969-1976)

Disciplines (INSPEC only)
You can limit your search to one of five main subject areas covered by INSPEC. Disciplines are:
Physics
Electrical/electronic engineering
Computers/control engineering
Information technology
Manufacturing and production engineering

Treatment Type
The treatment type is used to specify the slant or approach taken in the document.

Document treatments were added to Compendex records in 1985. **Therefore, a search with a treatment limit is restricted to post-1985 records only.**

The following treatments are used in Compendex:
All treatment types
Applications
Biographical
Economic
Experimental
General Review
Historical
Literature Review
Management Aspects
Numerical

Theoretical

The treatment types available for INSPEC are:
All treatment types
Applications
Bibliography
Economic
Experimental
General review
New developments
Practical
Product review
Theoretical

A record may have one or more Treatment Types. However, not all records have been assigned Treatment Types.

Language
In the thesaurus, you can limit your search to any language listed in the drop-down menu: All languages, English, Chinese, French, German, Italian, Japanese, Russian or Spanish.

To search for more than one language, or to search for a language not listed in the thesaurus pull-down menu, use Expert Search. Complete lists of available languages within the Compendex and INSPEC databases are in the language look-up indexes in Expert Search.

Limit by date

Last four updates
Selecting this option allows you to limit your search to the four most recent weekly database updates.

If you do not find what you need, broaden your search by selecting the date range limit and expanding the range of your search to the last year, the last 2 years, etc.

2003 TO 2003
2002 TO 2003
2001 TO 2003

Alternately, to focus your results to a single year, select the same year in both date range drop-down boxes.

2001 TO 2001

Sorting
Search results can be sorted by either relevance or publication year. The default is relevance.

- **Relevance:** The relevance sort is based on an algorithm. Controlled vocabulary used as a Main Heading is ranked higher than terms not used as Main Headings.
- **Publication Year:** Records are sorted by year. Most recent years are displayed first. 2003, 2002, 2001, 2000, 1999 etc.

Refine search
If you have run a search of selected thesaurus terms and wish to add or delete terms from the search you can refine your search by selecting the Refine Search option. As an example, a search was done in the Compendex thesaurus for "Light rail transit" or "Monorails."

Clicking on the Refine Search button will return you to the thesaurus search screen with the selected search terms still in the Search Box. From this screen, you can search for and select new terms, remove previously selected terms or change the limits of the search.

New Search
In the example below, if you choose New Search instead of Refine Search, you will be returned to the main thesaurus page and the terms you had selected will be deleted. You will be able to recall the completed search by using the Search History function.

Search History

Once a search has been executed in a database, the records can be viewed as citations, abstracts or detailed format the same as search results in Quick Search or Expert Search. The search will appear in the Search History and can be saved or set up as an e-mail alert. The search can be combined with other searches run on the same database.