

Engineering Trade Literature: Access Now and in the Future

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Abstract

Trade literature, including trade journals, magazines, catalogs, cards, manuals, brochures and more, provides avenues for professionals in an array of industries to share knowledge, news, regulations, trends, data, new products, and other information key to keeping up to date in their particular industry. This content is important for engineering scholars and practitioners alike, enabling them to do everything from price specific materials, learn about new devices, understand industry trends, read about new regulations and more.

Access to trade literature has changed in recent years. Publishers may have ceased print runs entirely, they may make electronic access impossible for libraries with no institutional access options, or they may make electronic access too expensive for library subscriptions. Trade literature is precarious broadly, as publishers also may not have archival back-ups for electronic-only content. At the same time, given the expense and local space constraints, libraries may have stopped subscribing to print content and even removed print back issues from their holdings. This leaves libraries in a difficult situation: a landscape where they cannot provide access to a growing number of these trade literature titles.

In this paper, we define trade literature, share a brief history of trade literature, and discuss its importance to engineering research and scholarship. We examine several trade publication titles to determine library access to print and electronic content of these titles to make a case that the content is at risk of being inaccessible via libraries in the future. We hope to develop the librarian community's understanding of trade literature content and access and inspire conversations between librarians and publishers to protect library access to this content now and in the future.

Introduction

Trade literature is a broad term that encompasses a wide swath of publication types including trade journals, magazines, catalogs, cards, manuals, brochures and more. These materials have a long history of being important for engineering scholars and professionals to keep updated with respect to news, regulations, trends, data, new products, and other information; that is, content not otherwise found in academic publications. Engineering scholars and practitioners alike use trade literature to price specific materials, learn about new devices, understand industry trends, read about new regulations and more. Therefore, engineering librarians in particular should understand what is meant by "trade literature" and what kinds of materials are considered trade literature.

Literature Review

Key Definitions

Ulrich's Serials Analysis System, which provides bibliographic information on hundreds of thousands of periodicals, delineates the content type for their publications either by its source (e.g. a government publication) or by its primary audience. For example, Ulrich's applies "**trade**" as a content type "to business publications targeted to readers in the following fields of employment or commerce: industrial or manufacturing; merchandising or trade; institutional; and professional" [1]. "**Consumer**" is attached to publications that are for all audiences but "is also assigned to single interest magazines with a single editorial interest (e.g., *Golf Digest*)." Finally, "**corporate**," according to Ulrich's, is applied to "describe reports of activities and other publications of a business or non-profit corporation or a non-governmental organization."

The ALA glossary of library and information science [2] defines **trade literature** as "catalogs and other advertising or promotional material distributed by business firms, usually free of charge." More specifically, a **trade catalog** has two definitions "a catalog designed to present a line of products or various sizes and models of a product, and to supply sufficient technical information to facilitate the purchasing process" and "a catalog issued by a manufacturer, a dealer, or a group of manufacturers, describing (and sometimes illustrating) their products, and sometimes including or accompanied by a price list. Synonymous with manufacturer's catalog and trade list." The glossary specifies that **catalogs** in these two definitions are defined "in a wider sense, a list of materials prepared for a particular purpose; for example, an exhibition catalog or a sales catalog." **Trade cards**, discussed later in this paper, were stylized cards used in the 17th through 19th century and were created by individual merchants selling a variety of instruments, products, and services [3]. **Brochures**, **bulletins**, and **equipment manuals** have also been considered a type of trade literature, and in the past were content types featured regularly in announcement or advertising sections of scholarly newsletters and journals [4], [5], [6].

A **trade journal**, according to the ALA glossary of library and information science, is "a periodical devoted to the interests of a trade or industry and its allied fields. Synonymous with **trade paper**" [2]. Scopus, a broad coverage database provided by Elsevier, defines "**trade journals**" as "serial publications covering and intended to reach a specific industry, trade or type of business" [7]. More specifically, Scopus indicates that trade journals are "in a **magazine** format" and include information of interest to professionals in a field including articles, news, and advertisements, for example *Pipeline & Gas Journal*. Notably, Scopus only indexes articles and reviews from trade journals, not other content like news or advertisements. Often trade journals have no editorial board, though some of the article content in a trade journal may be peer reviewed.

These definitions can be blurry and are sometimes used interchangeably. Sometimes trade journals are referred to as **trade magazines**, for example with Scopus' description of a trade journal format. Other times, there may be a distinction between these two terms as with Dobre et al. (refer to Appendix 1 of [8] for a more detailed description and examples of each term). In Dobre et al., a trade magazine is a specific subset of the trade press that is often funded by advertisements and has more popular elements or are more geared towards facilitating the overall economy of an industry than a trade journal. Dobre et al. note further that both trade journals and trade magazines tend to be funded via advertisements and business sponsors. Publications may define themselves as well, for example *EHS Today* and *Hydrocarbon Processing* both indicate they are trade magazines.

Another term that might be encountered, sometimes considered a specific subset of the trade press, is the “**professional journal**.” Dobre et al. (Appendix 1) indicate that professional journals are publications generally provided free to members of particular scholarly societies (e.g. *Physics Today* provided by the American Institute of Physics) or for those that specifically subscribe to them [8]. Professional journals include both technical articles as well as news, new product information, policy updates, and more. Some societies send newsletters, like *ASEE First Bell* or *IEEE StandardsWire*, which can be considered in this category as well. These types of publications can be a significant driver of information sharing within a community of scholarly societies as Lundberg demonstrates with the *Journal of the American Medical Association* for the medical profession [9].

Some entities create specific definitions of **trade literature** to support their internal needs. Greene, Hookstra, and Willis write from the perspective of librarians at the company 3M and define **trade literature** “as product information from those manufacturers who provide goods and services to 3M” noting that their users, namely engineers working at 3M, need this information readily available to do their work effectively [10].

While these definitions have fuzzy boundaries (particularly with respect to terms like trade journal, trade magazine, and professional journal), trade literature is a rich source of key information to engineers working in industry, manufacturing, etc. and therefore also to any librarians embedded in engineering firms. Moreover, many academic engineers have industry partnerships or need information found in the trade literature for their research, so academic librarians will also benefit from having an understanding about what trade literature is and how to acquire and provide access to it.

Trade Literature in Engineering: Historical

While not the primary focus of this paper, we discuss some formats and content of older trade literature to demonstrate that scientists and engineers have always needed to understand and

assess the latest technology to do their work. Additionally, historical collections of trade cards, catalogs, and journals are extremely useful sources for historians of science, industry, and technology (e.g. [11]). Therefore, the use case for historic collections of trade literature is quite different from current trade literature collections.

The genre of trade literature has a long history, emerging as a way to share information about little toys and trinkets and how and where to shop for them in the 1600s in Europe, and later developing into a mechanism to sell mathematical and scientific instruments [12]. Nall and Taub's [13] excellent overview of British scientific trade literature demonstrates how these historic collections illuminate business history: particularly the connections between well-known (even celebrity) scientists and companies that made scientific instruments, and the marketing tactics of these companies selling scientific instruments. Crawforth [3] offers a detailed example of how to use the design of and content included in trade cards from the 17th through 19th centuries to trace business histories of specific purveyors of these types of instruments.

By the 1800s, items that had been marketed to interested buyers by individual shops and craftspeople as trade *cards* began to be advertised in trade *catalogs* produced by larger shops and firms [13]. This, along with the rise of exhibition culture in Europe and elsewhere at that time enabled the public and specialists access to observe and even purchase the latest technologies of the time [13], [14]. By the mid 1900s, trade catalogs, referred to by Smith (1966) as trade *brochures*, were common and were, as before, primarily used to drive company sales by informing their audiences of new products, processes, costs, and other information for potential buyers [15]. A secondary value of trade catalogs or brochures is for companies to delve into what they have written about their own products and processes to understand their history more completely, offering context for future needs, interests, and directions [15].

The *Thomas Register of American Manufacturers*, originally published in 1905, was a crucial trade catalog for an audience of American manufacturers that still exists today. In the 1900s, this source offered those in the manufacturing industry an access point to important suppliers and their wares [16]. By 1990, this “yellow pages” of manufacturing suppliers spanned 23 volumes [17]. Thomas Publishing has been quick to capitalize on technological advances, providing their Thomas Register via CD-ROM in the 1990s and had a presence on the nascent world wide web [16].

Finally, as mentioned above, professional journals are published by scholarly societies, and at some level these have fulfilled similar education and marketing functions at the heart of other trade literature. Lee [18] uses a professional journal originating in 1897 in the field of accounting, *The Accountant's Magazine*, to argue that professional journals allowed the marketing not just of products but of a community of practitioners, in this case accountants. Lee shows that this journal, which was funded primarily by the professional societies the key

audience belonged to, allowed these practitioners to share their knowledge and services with each other. There was also societal value in this publication as those involved in its creation governed the development of their professional standards of practice which legitimized and “professionalized” their field.

Historical collections of trade literature are not incredibly common amongst academic libraries, though when they exist, they provide immense historical value. Smith argued decades ago that academic libraries tend to pass over collecting current trade catalogs because of their lack of scholarly content and their focus on enabling sales [15]. She suggested, however, that academic libraries could pave the way for academic and industry researchers to learn about the work of each other if these collections were able to be prioritized. Imholtz and Massant affirmed in 1990 that these collections are indeed rare, and fragile as well, though some libraries have been able to preserve these collections on microfiche, including some substantial trade catalog collections built jointly by industry, private collectors, and libraries [19]. The Smithsonian Libraries have made a number of historical trade literature collections accessible online, but these are not comprehensive of all industries, rather they focus primarily on seeds and plant suppliers, scientific instruments, and sewing machines [20]. Smith’s point that trade literature does not fit the collecting policies of many academic libraries may be true today and may therefore add to the scarcity of current trade literature to be found in the future scholarly record.

Trade Literature in Engineering: Current

While trade cards are no longer a common format of trade literature, many other formats exist that are useful to engineers of all kinds. Dobre et al. [8] surveyed trade literature readers and conducted an extensive assessment of articles from a variety of trade publications, which skewed heavily towards the engineering discipline, to investigate the flow of information via trade publications (trade journals, trade magazines, and professional journals). They demonstrate through citation analysis that scholarly, academic research is cited in some trade literature publications, particularly in those publications from professional societies, and that authors of trade literature include both academics and industry practitioners. Moreover, they document through their survey examples of industry practitioners sharing and integrating information from trade publications into their work. Dobre et al. conclude that trade literature is a key driver of the flow of current, relevant information between industry and academia.

Trade sources also remain important for engineers needing to purchase and use materials and equipment for their work. Search engines can lead users to brochures and equipment manuals, and there are some sites that host equipment manuals as well [21]. The Thomas Register presents an interesting example to explore, given its long history as an important trade catalog. Today, the Thomas Register continues to market itself as one that “powers the growth of North American manufacturing” [22], though it has transformed into a comprehensive digital platform that

includes supplier information, brand management for suppliers advertising via Thomas, case studies, webinars, and an eBook library focused on digital marketing and making it easier for companies and customers to connect more effectively. There is a section for buyers and one for suppliers on the website, and a section for industry insights and news. The Thomas Register has gone from a vast multi-volume trade catalog to a platform that provides access to the range of trade material that can be found today. That access is free, though users of the site must register or provide their email to read the content. An academic (or any other) library is not in a position to preserve, or perhaps even to provide access to, this content, rendering both current content and the future scholarly record continually at risk.

Engineering librarians helping patrons find and access current trade literature sources can use multiple approaches. Major database platforms, including Scopus, ProQuest, EBSCO, Factiva, Nexis Uni, BrowZine, and even OverDrive and Libby, have format tags for trade literature. Note that many of these may not index every bit of content in a trade publication, instead only including the articles while leaving out the advertisements and other non-scholarly information. Libraries seeking to provide access to all content from particular trade literature titles could subscribe to content where allowable by the publisher. Often, trade literature titles are free and could simply be added to a library's catalog, but catalog records should note when those sources require user registration, which is common. Academic societies, like the American Society of Mechanical Engineers, the Association for Computing Machinery, and IEEE (the Institute of Electrical and Electronics Engineers), often publish professional journals as well that can be included in packages or as one-off titles for licensing. While some publications maintain their print runs, many smaller, private publishers have ceased producing hard copies adding to the precarity of long-term preservation of this content as well.

Methods

Rationale for our Study

The University of Michigan has a world class library collection, and we purchase or license an incredible amount of materials from an array of vendors and in all areas of engineering. Historically, we have specifically selected trade publications relevant for engineering scholars. Over the past few years, we have noticed that some of this material was becoming inaccessible to us due to cost or other access barriers. We felt this may not be a singular issue for the few journals we no longer provide access to, but instead may represent a wider trend for trade journal content. With this point in mind, our objective in this study was to investigate several trade journals and determine whether access to these journals was becoming more difficult or not. To investigate this phenomenon, we developed a list of trade literature titles specifically for which providing library access has become increasingly difficult. The analysis in this paper centers on trade *journals*, as opposed to other trade literature content, in part because these are the types of trade materials we actively attempt to select and in part because of their importance as a bridge

between engineers in academia and industry. In this paper, we assess the access landscape for each and what kinds of barriers are in place.

Selection Process for the Trade Journals

To start this study, we searched our library records for trade journals to which we have subscribed or are currently subscribing (electronic or print). Through this exploratory phase, we identified 26 titles, mainly engineering and applied engineering titles, that we think have gotten harder to access for our engineering community.

The list of trade journals is shown below:

- | | |
|---|--|
| 1. Chemical Engineering (ISSN 1945-368X, 0009-2460) | 14. Modern Machine Shop (ISSN 0026-8003) |
| 2. CIM Magazine (ISSN 1718-4177) | 15. The Motor Ship (ISSN 0027-2000) |
| 3. Cost Engineering (ISSN 0274-9696) | 16. Pipeline & Gas Journal (ISSN 0032-0188) |
| 4. Cycle World (ISSN 0011-4286) | 17. Plastics technology (ISSN 0032-1257) |
| 5. EHS Today (ISSN 1945-9599) | 18. Popular Science (ISSN 0161-7370) |
| 6. Food Engineering (ISSN 1522-2292) | 19. POWER (ISSN 0032-5929) |
| 7. Food Manufacture (ISSN 0015-6477) | 20. Professional Engineering (ISSN 0953-6639) |
| 8. Hydrocarbon Processing (ISSN 0018-8190) | 21. Prepared Food (ISSN 0747-2536) |
| 9. ICIS Chemical Business (ISSN 1937-5786) | 22. Sea Technology (ISSN 0093-3651) |
| 10. Industrial Heating (ISSN 0019-8374) | 23. The Naval Architect (ISSN 0306-0209) |
| 11. Machine Design (ISSN 0024-9114) | 24. Transportation Professional (ISSN 1478-4467) |
| 12. Materials Handling & Logistics (ISSN 2157-0302) | 25. World Oil (ISSN 0043-8790) |
| 13. Modern Casting (ISSN 0026-7562) | 26. WMO Bulletin (ISSN 0042-9767) |

These journals were also chosen based on our familiarity with certain engineering disciplines and from communications with our peers. Note that *Popular Science* is more representative of a popular, broad-audience magazine than others in our set. Because of its roots as more of a trade publication [23], we include it here.

We then collected more detailed bibliographic and publisher information for each title using Ulrich's Serials Analysis System, the trade journal's website for additional information such as the availability of an individual and/or institutional subscription, and several digital archives. We used this information to determine whether digital accessibility existed for the trade journal.

Determining the Number of Trade Journals

We searched Scopus and Ulrich's to understand the scale of how many published trade journals in engineering exist. To identify engineering trade journals indexed in Scopus we conducted the following search:

- Navigate to the upper left banner and select "Sources"
- Search by "Subject Area" and filter the subject areas to:
 - Chemical Engineering, Computer Science, Earth and Planetary Sciences, Energy, Engineering, Environmental Science, Materials Science
 - Select "apply" and Scopus will automatically run the search
- Navigate to the left side navigation and filter by "Source Type" → "Trade Publication"
- Select "apply" and run search

To identify engineering trade journals indexed in Ulrich's Serials Analysis System, we conducted the following search:

- Navigate to the "Advanced Search" option
- In the "Status" box select → "active"
 - In the "Serial Type" box select → journals AND magazine AND newsletter
- In the "Content Type" box select → "trade"
- In the "Subject Areas" box select → "Earth, Space, and Environmental Sciences" AND "Technology and Engineering"
 - See option 1 and 2 for the "Format" box selections
 - Option 1: In the "Format" box select → "print"
 - Run search
 - Option 2: In the "Format" box select → "online"
 - Run search

WorldCat is a comprehensive catalog describing library collections around the world and contains library holdings for millions of records of books, periodicals, audio and videos files, archival materials, etc. Libraries vary in the degree to which they update their holdings in WorldCat, which adds some uncertainty to this analysis. We decided on solely using Ulrich's for bibliographic data because we have found that data in WorldCat is not updated regularly.

Print, Digital, and Archival Access

We determined the start and end dates of print runs for each title by checking our institutional holdings, Ulrich's, and the publisher websites. In determining whether a title was digitized or not, we searched the journal's webpage. For archival access, we searched the digital library of HathiTrust. HathiTrust is a collaborative repository of digital content from more than 60

academic and research libraries around the world. The access coverage is not current but is limited to content published up to 1930. Additionally, if trade publications are not published in print HathiTrust will not have access to them once print has ceased. We also looked at trade journal websites to determine if a digital archive was hosted on their website and whether it was public or behind a subscription (paid or via an email registration).

Another resource is the Keepers Registry (from the ISSN International Centre), a global discovery tool to find out which digital archive a title was deposited in (for digitized serial publications). This tool covers a large range of archives, some of which rely on the concept of LOCKSS, “Lots of Copies Keep Stuff Safe,” including the CLOCKSS (“controlled” LOCKSS) Archive, Global LOCKSS Network, and Portico. CLOCKSS is a global, interdisciplinary, dark digital archive [24]. The Global LOCKSS Network (GLN) is similar to CLOCKSS, though the GLN supports local preservation at the institution scale [25]. Portico works with libraries and publishers to preserve their electronic resources [26]. Although Keepers Registry is a helpful resource, we chose not to use this resource - using only HathiTrust - because the Keepers Registry is not accurate for some titles. For example, for some titles there was no mention of HathiTrust, even though those titles could be found on HathiTrust.

Results

Number of Engineering Trade Journals

We determined that there are on the order of hundreds to thousands of trade journals in engineering disciplines out there as seen in Scopus (706 results as of January 2026) and Ulrich’s (7017 results for print and 4347 results for online as of January 2026). Many of the Scopus titles are also present in Ulrich’s result set. Notably, we found that searches in Ulrich’s often retrieved many duplicates which is why we ran two separate searches for only active print titles and only active online titles. The reason behind these duplications is that Ulrich’s often creates multiple records of the same title if a specific title is found in multiple formats (e.g. print, online, microform, and CD-ROM). In Scopus, this database only covers the titles that are indexed in it.

Content Type

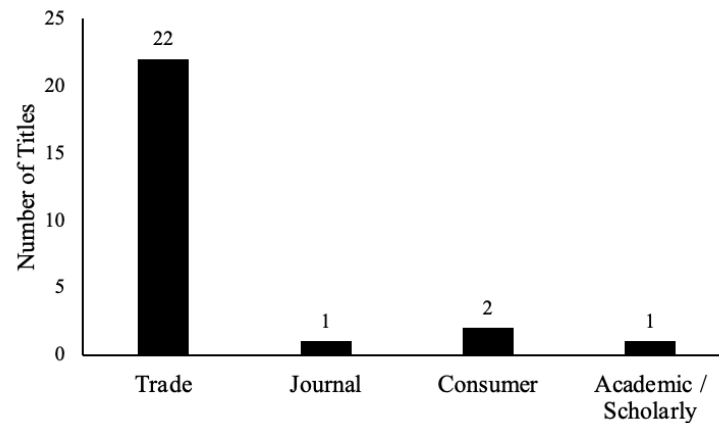


Fig. 1. Content types for the trade journals.

When we evaluated our selected 26 trade journal titles in Ulrich's [Fig. 1], we saw that 22 titles were classified as trade, one title classified as a journal (*Cost Engineering*), two titles classified as a consumer (*Cycle World* and *Popular Science*), and one title classified as an academic/scholarly (*WMO Bulletin*). In Scopus, all 26 titles were classified as trade publications.

Coverage Years for the Print Trade Journals

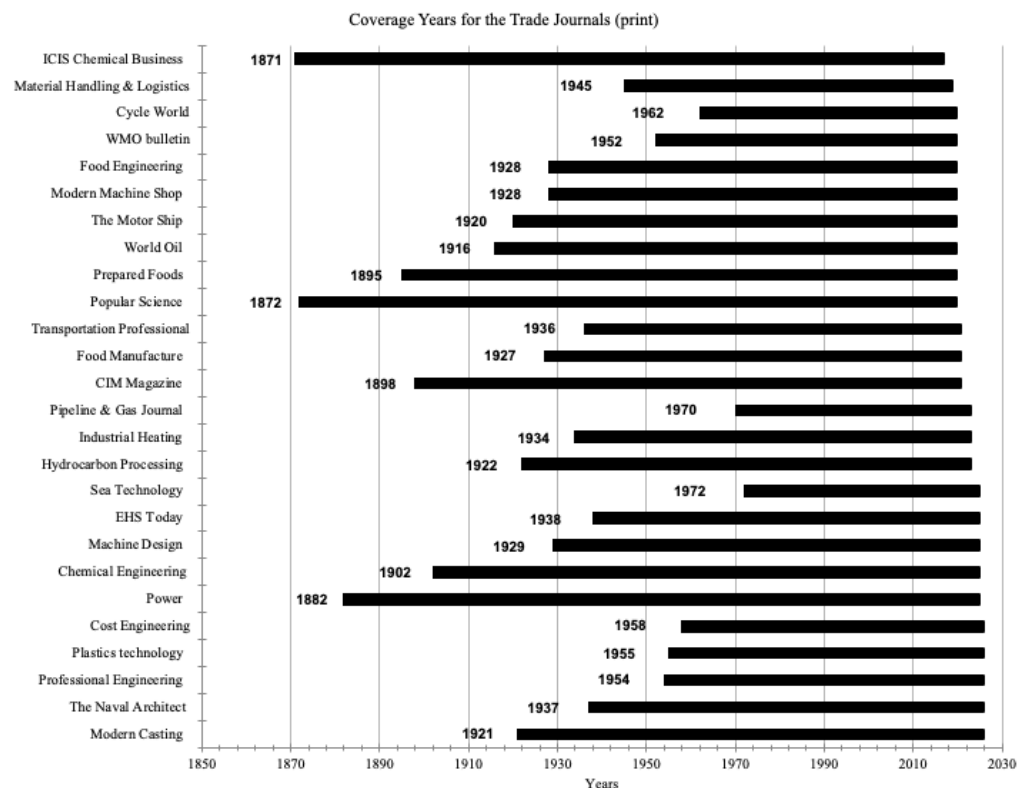


Fig. 2. Coverage years for the trade journal titles in print.

The coverage for the majority of the print titles spans from the 1870s to recent times [Fig.2]. However, 21 titles of our set of 26 have now ceased their print publications. The remaining five titles providing print availability are *Cost Engineering*, *Plastics Technology*, *Professional Engineering*, *The Naval Architect*, and *Modern Casting*.

We found that only two titles in our data have discontinued their print and electronic publications altogether, *Industrial Heating* in 2023 and *Sea Technology* in 2025.

In terms of electronic titles, 24 titles, excluding *Industrial Heating* and *Sea Technology*, have plans to continue publishing this way in the foreseeable future.

Current Access Models for Electronic Titles

When we investigated the access model for current electronic titles by looking at each trade journal's website, we found that the access models varied across the board [Tab. I, Fig. 3].

Two titles ceased publication. For titles with free access to its content, 11 titles requested that users sign up with an email address and two titles did not ask for any registration. In terms of paid subscriptions, seven titles were found to offer individual paid subscriptions and four titles were available through an individual society membership.

Institutional access was available for the seven titles that offered individual paid subscriptions; however all of these titles had barriers including high costs for each subscription and access that was not based on IP addresses. We term this type of access "High-Barrier Institutional Subscription." Three of the four titles offering access with an individual membership did not offer institutional access at all. *Cost Engineering*, a trade journal from the Association for the Advancement of Cost Engineering, has institutional memberships but access is limited to 10 users.

Although we investigated the access model for electronic titles, we were curious how many titles provided a print option for their titles. Our findings show that five titles provided this option. Of the five titles, one title (*Plastics Technology*) provided a free print option at registration and four titles (*Cost Engineering*, *Modern Casting*, *Professional Engineering*, and *The Naval Architect*) provided a print option to their individual paid subscribers.

TABLE I
Current Access Models for Electronic Titles

Ceased	Free with Email Registration	Free without any Registration	Individual and High-Barrier^d Institutional Paid Subscription	Individual Paid Subscription with Society Membership (No or High-Barrier^d Institutional Paid Subscription)	Low-Barrier Academic Subscription
Industrial Heating Sea Technology	CIM Magazine Cycle World EHS Today Food Engineering Food Manufacture Machine Design Material Handling & Logistics Modern Machine Shop Plastics Technology ^a Popular Science Prepared Foods	Modern Casting ^b WMO Bulletin	Chemical Engineering Hydrocarbon Processing ICIS Chemical Business Pipeline & Gas Journal POWER The Motor Ship ^c World Oil	Cost Engineering ^b Professional Engineering ^b The Naval Architect ^b Transportation Professional	None

^a. Free print available on registration to individuals

^b. Print available to individual subscribers

^c. Free access to 3 articles per month by signing up

^d. High barrier: high costs, requires individual log-in accounts, no IP access

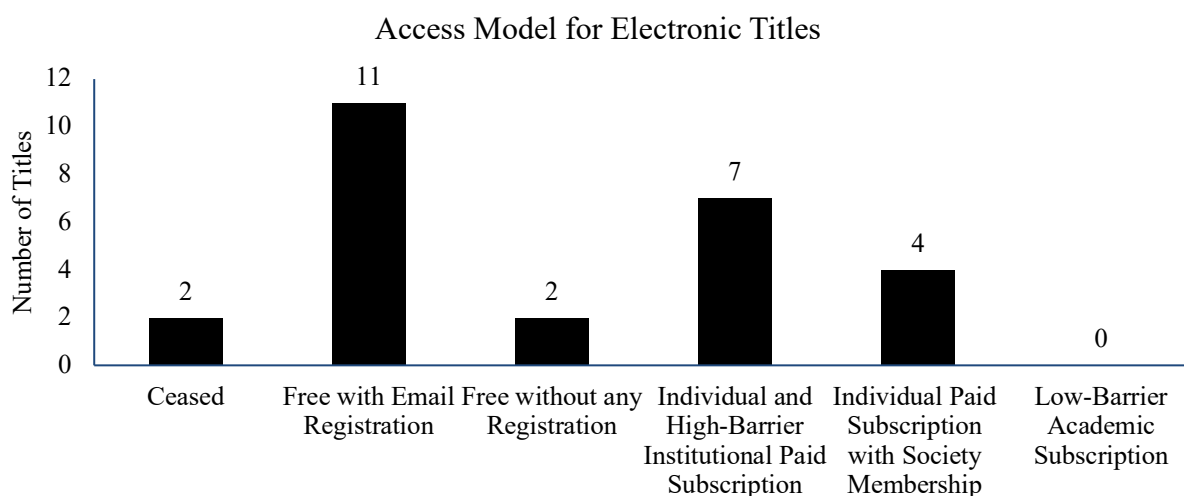


Fig. 3. Access model for the trade journals' electronic titles.

Digital Archives

We found that titles that were published in 1930 and prior were accessible in HathiTrust because they have entered the public domain in the United States. We also found that all of the titles were either deposited in HathiTrust and/or the Internet Archive, but were not found in any other archival sites (as verified via the Keepers Registry). Additionally, some trade journals' websites hosted their own archives which were often behind a subscription paywall.

We found one archive that may be removed entirely. The ceased journal *Sea Technology* made a blog post in October 2025 with a note that read "The website will remain live until October 2026. The digital archives will be available through the site during this period" [27].

Aggregator Access

In our findings we saw that most of our content was indexed in EBSCOhost, Gale, and ProQuest [Tab. II]. Although not shown, a few titles were also indexed in other aggregators such as Dow Jones Factiva (*Chemical Engineering*, *ICIS Chemical Business*, *Food Manufacture*, *Hydrocarbon Processing*, *Pipeline & Gas Journal*, and *World Oil*), Nexis Uni (*EHS Today*, *ICIS Chemical Business*, *Industrial Heating*, and *Prepared Food*), and NewsBank (*Food Manufacture* and *Popular Science*).

We also found that several titles were not found in any aggregators. These titles include *The Motor Ship*, *POWER*, *The Naval Architect*, *Transportation Professional*, and *WMO Bulletin*.

TABLE II
Aggregator Access for the Trade Journal Titles

Title	EBSCOhost	Gale	ProQuest	No aggregators
Chemical Engineering	Available from 06/01/2009 until 10/15/2011	Available from 08/01/2000	Available from 11/23/1987	x
CIM Magazine	x	x	Available from 06/01/2002 until 12/31/2005	x
Cost Engineering	Available from 07/01/1997 until 09/30/2009	x	Available from 12/01/1987 until 06/30/2009	x
Cycle World	Available from 03/01/2013 until 10/31/2020	x	Available from 01/01/1994 until 01/31/2020	x
EHS Today	Available from 11/01/2008. Most recent 3 month(s) not available.	Available from 11/01/2008 until 02/28/2013	Available from 01/01/2009 until 12/11/2019	x
Food Engineering	Available from 07/01/1999	Available from 07/01/1998	Available from 06/01/1997	x
Food Manufacture	Available from 12/01/1995 until 02/29/2020	Available from 01/01/1990 until 03/31/2000 and from 09/01/2012 until 11/30/2014	Available from 01/01/1998 until 03/31/2000	x
Hydrocarbon Processing	Available from 01/01/1995 until 06/30/2016	Available from 06/01/1989 until 08/31/2021 and from 01/01/2024	Available from 10/01/2002 until 06/30/2021	x
ICIS Chemical Business	x	x	Available from 10/08/2007 until 10/23/2020	x
Industrial Heating	Available from 07/01/1996 until 08/31/2023	Available from 02/01/2001 until 09/30/2020 and from 01/01/2022 until 08/31/2023	Available from 04/01/1998 until 08/31/2023	x
Machine Design	Available from 06/19/1997. Most recent 3 month(s) not available	Available from 01/12/1984 until 11/30/2024	Available from 04/07/1988	x
Material Handling & Logistics	Available from 09/01/2010 until 11/30/2019	Available from 09/01/2010 until 06/22/2020 and from 04/17/2024	Available from 12/01/1987 until 12/11/2019	x
Modern Casting	Available from 01/01/1997	Available from 06/01/1989	Available from 12/01/1996	x

Modern Machine Shop	Available from 08/01/1996 until 04/02/2016	Available from 01/01/1989	Available from 01/01/1997	x
The Motor Ship	x	x	x	No aggregators, but content can be found on The Motor Ship site
Pipeline & Gas Journal	Available from 07/01/1993 until 10/31/2001	Available from 02/01/1991 until 02/28/1991 and from 12/01/1993 until 12/31/2022	Available from 01/01/1997 until 12/31/2022	x
Plastics Technology	Available from 01/01/1995	Available from 04/01/1989	Available from 01/01/1997	x
Popular Science	Available from 11/01/2002 until 12/31/2020	Available from 01/01/1984 until 09/30/2020 and from 02/01/2022 until 08/31/2023	Available from 01/01/1992 until 10/31/2020	x
POWER	x	x	x	No aggregators
Professional Engineering	Available from 01/15/1997 until 12/31/2017.	Available from 01/01/2008 until 09/30/2020	Available from 04/29/1998 until 12/31/2010	x
Prepared Foods	Available from 07/01/1999	Available from 01/01/1989 until 12/31/2006 and from 01/01/2008	Available from 03/01/2001	x
Sea Technology	Available from 04/01/2003	x	Available from 10/01/1996	x
The Naval Architect	x	x	x	No aggregators
Transportation Professional	x	x	x	No aggregators
World Oil	Available from 08/01/1993 until 09/30/2022	Available from 01/01/1989 until 11/30/2006 and from 04/01/2008 until 08/31/2021	09/01/2002 until 06/30/2021	x
WMO Bulletin	x	x	x	No aggregators, but content can be found on WMO site

Discussion

The access landscape for trade journals has permanently changed with the rise of the internet. To illustrate and provide some specific examples of how access to this type of literature looks today, we assessed the availability of print and electronic options of 26 trade publications for library access. While this set of 26 were not chosen at random, with it we were able to explore the ways access has become harder to provide.

There are several thousand trade periodicals listed in the Ulrich's Serials Analysis System, though a number of these titles have ceased print production or publication entirely. Within our analysis set, 21 of the 26 titles, whether they originally started in the 1800s or as late as the 1970s, have ceased print production (Fig. 2). Given the timing of print run endings, it appears that the COVID-19 global pandemic may have impacted trade literature sources. Two stopped print publication just before 2020, eight titles ceased in 2020 and three titles ceased in 2021, all after decades of publication. Finally, eight stopped print publication within the last three years. Two ceased entirely, in 2023 and 2025 respectively (*Industrial Heating* and *Sea Technology*). With the exception of *Industrial Heating*, all titles have electronic platforms of some kind as of January 2026. It is unclear whether *Sea Technology* will provide electronic access to their content after October 2026 or where that content could be available if the publisher removes it from their website [27].

While heartening that electronic platforms exist for the titles in our analysis set, library access to these platforms have some barriers. Aggregator access to the content via some combination of ProQuest, EBSCOhost, or Gale, is fairly common, though five titles in our analysis set were not included on any of these platforms. Content on these aggregator sites do not typically include advertisements, data, some news pieces, and other elements present in these publications or on their expanded website offerings. Finally, libraries have little control over whether these vendors drop titles, and there is no guarantee that titles will remain accessible on these platforms. For example, *ICIS Chemical Business* has historically been available in major vendor aggregator platforms (e.g. EBSCO Business Source Complete and ProQuest's ABI/INFORM) [28]. EBSCO and ProQuest dropped current access to *ICIS Chemical Business* as of 2020, and Factiva dropped current access in 2022. In the fall of 2025, during the writing of this paper, no vendor provided current access. However, the authors noticed current access was turned on in NexisUni in January 2026 illustrating the fluid nature of and lack of library control for aggregator access to these types of titles. Thus, while some aggregator access is better than no access, it is not a perfect solution for libraries given these issues.

Access to the full suite of content for these trade publications directly via online websites can vary. Only two titles in our set of 26, *Modern Casting* and *WMO Bulletin*, provide free access to the electronic platforms without any registration. Almost half of the titles, 11 in total, provide free access to their electronic content after users register for an account.

Publishers, however, could transition to requiring payment for individuals or institutions at any time for part or all of their content. POWER Plant ID is a database affiliated with *POWER*. A selection of *POWER*'s online content is available to users for free with registration via www.powermag.com, though access to the POWER Plant ID database and other expanded offerings from the publisher is only available via individual subscriptions and there are no institutional subscriptions available.

Three publications, *Professional Engineering*, *The Naval Architect*, and *Transportation Professional*, even have no institutional subscription option at all. *The Naval Architect*, and *Transportation Professional* are not available on aggregator platforms rendering them completely inaccessible to library patrons. These titles are published by small societies; larger societies like IEEE, ASME, and ACM do offer low-barrier access to libraries.

Libraries have access to institutional subscriptions to seven titles in our analysis set. Trade journals that do provide institutional subscriptions, however, often come with additional barriers to access for libraries. Sometimes, access is password restricted, charged by the number of users, or dependent on registration rather than IP addresses. While these types of requirements may work for corporate entities, they are harder for libraries to work with. Cost can also be an issue for academic libraries. As an example, the subscription costs our institution was quoted for these seven titles are in the several thousands of dollars, which is likely prohibitive for this type of title in many library budgets.

Conversely, trade journals published by academic societies are much more straightforward for libraries to offer to their patrons. These entities have existing agreements with libraries, and there is often more of a commitment to preservation and archiving of content than there is with industry publishers. For example, IEEE publishes 51 trade magazines and journals currently, and the majority of these publications include peer-reviewed articles, and are indexed and archived in the same way as the scholarly IEEE journals are (J. Kelley, personal communication, December 17, 2025). IEEE also participates in Portico, a platform that offers publishers digital preservation services [26]. These IEEE trade publications are available to libraries via a subscription to individual titles or with a subscription to the IEEE Xplore platform, and this type of access is representative of other society publishers.

Finally, all trade journal content is fairly precarious. With libraries being cut out of the ecosystem, preservation is left to publishers. However, our sense from our experiences and from this study is that aside from academic societies, most publishers do not participate in CLOCKSS or Portico. HathiTrust may be archiving print runs of many trade publications, but it will not archive content once publishers cease offering print.

Conclusions

Trade literature represents a diverse array of sources useful to academic and practicing engineers. Indeed, while definitions of trade journals are fuzzy, and some entities may classify these titles in different ways, our analysis suggests that there are on the order of several thousand trade journals currently in publication. Of these sources, publishers range from scholarly and professional societies to industry groups. Many of the industry publishers in particular are creating and offering resources with industry professionals in mind, and *not* with academics who will be future industry professionals. With these publishers, there are name changes, consolidations, access model changes, and discontinuations of trade publications. Library access through institutional subscriptions are available, but with key barriers including password restrictions and high costs. Because academic libraries are losing access to this content, they are not able to archive or preserve current content. Compounding this precarity is that industry publishers are likely not participating in Portico or CLOCKSS, nor are they enabling LOCKSS for their trade journal (and other) content. If publishers cease titles as has happened for two titles in our results set, how will access be available to humanity now and in the future?

While there are no easy answers to that question, we have some suggestions for our library community moving forward. We encourage engineering librarians to become aware of the research areas of interest to their patrons, identify relevant trade literature titles, and investigate access models for those titles. We hope our community of engineering librarians will advocate for better library access to these titles when speaking with publishers or other vendors in initial, exploratory outreach and in negotiations. In these conversations, share a desire for reasonable academic access models in terms of pricing (that is, lower than a commercial institution's pricing) and availability of IP access. Finally, ask publishers to connect with digital archival platforms such as Portico or CLOCKSS, or to enable LOCKSS. If a number of potential customers reach out in this way, it may be possible to shift this landscape.

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References

- [1] "Ulrichsweb: Glossary of Terms," Ex Libris Knowledge Center. Accessed: Dec. 09, 2025. [Online]. Available: https://knowledge.exlibrisgroup.com/Ulrich's/Product_Documentation/Searching/Ulrichsweb%3A_Glossary_of_Terms

- [2] M. Levine-Clark and T. M. Carter, Eds., *ALA Glossary of Library and Information Science*, 4th ed. Chicago, IL, USA: American Library Association, 2013.
- [3] M. A. Crawforth, "Evidence from Trade Cards for the Scientific Instrument Industry.," *Ann. Sci.*, vol. 42, no. 5, pp. 453–554, Sep. 1985, doi: 10.1080/00033798500200331.
- [4] "Trade literature," *Elect. Eng.*, vol. 60, no. 4, pp. 12–14, Apr. 1941, doi: 10.1109/EE.1941.6432082.
- [5] "Trade literature," *Elect. Eng.*, vol. 78, no. 10, pp. 64A-80A, Oct. 1959, doi: 10.1109/EE.1959.6446012.
- [6] "Trade literature," *Elect. Eng.*, vol. 79, no. 1, pp. 54A-60A, Jan. 1960, doi: 10.1109/EE.1960.6433041.
- [7] "Scopus Content," Elsevier. Accessed: Dec. 22, 2025. [Online]. Available: <https://www.elsevier.com/products/scopus/content>
- [8] S. Dobre, R. Herbert, and D. Hicks, "Trade literature provides a path from research to practice," *Res. Eval.*, vol. 33, Jan. 2024, doi: 10.1093/reseval/rvae041.
- [9] G. D. Lundberg, "The Role and Function of Professional Journals in the Transfer of Information," *Int. J. Technol. Assess. Health Care*, vol. 4, no. 1, pp. 51–58, Jan. 1988, doi: 10.1017/S0266462300003251.
- [10] M. T. Greene, L. K. Hoekstra, and D. J. Willis, "Online Vector Library Index (OLVLI): A Unique System for the Management of Trade Literature at 3M," *Sci. Technol. Libr.*, vol. 10, no. 4, pp. 3–8, Aug. 1990, doi: 10.1300/J122v10n04_02.
- [11] A. D. Morrison-Low, S. J. Schechner, and P. Brenni, Eds. *How Scientific Instruments Have Changed Hands* (Scientific Instruments and Collections Series 5). Leiden and Boston: Brill, 2016. doi: 10.1163/9789004324930.
- [12] A. Baker, "Symbiosis and Style: The Production, Sale and Purchase of Instruments in the Luxury Markets of Eighteenth-century London," in *How Scientific Instruments Have Changed Hands* (Scientific Instruments and Collections Series 5), A. D. Morrison-Low, S. J. Schechner, and P. Brenni, Eds., Leiden and Boston: Brill, 2016, pp. 1–20. doi: 10.1163/9789004324930_002.
- [13] J. Nall and L. Taub, "Selling by the Book: British Scientific Trade Literature after 1800," in *How Scientific Instruments Have Changed Hands* (Scientific Instruments and Collections Series 5), A. D. Morrison-Low, S. J. Schechner, and P. Brenni, Eds., Leiden and Boston: Brill, 2016, pp. 21–42. doi: 10.1163/9789004324930.
- [14] P. A. Kidwell, "Mathematical Instruments Changing Hands at World's Fairs, 1851–1904," in *How Scientific Instruments Have Changed Hands* (Scientific Instruments and Collections Series 5), A. D. Morrison-Low, S. J. Schechner, and P. Brenni, Eds., Leiden and Boston: Brill, 2016, pp. 88–103. doi: 10.1163/9789004324930_006.
- [15] E. B. Smith, "Trade Literature: Its value, organization and exploitation," in *The Provision and Use of Library and Documentation Services*, W. L. Saunders, Ed., New York: Pergamon, 1966, pp. 29–54. doi: 10.1016/B978-0-08-011974-8.50006-7.

- [16] R. Womack, "Thomas Register," *J. Bus. Finance Libr.*, vol. 4, no. 2, pp. 69–75, Dec. 1998, doi: 10.1300/J109v04n02_06.
- [17] R. Lieberman, "What Is Thomas Register?," in *The Role of Trade Literature in Sci-Tech Libraries*, E. Mount, Ed., London: Routledge, 1990, pp. 43–44.
- [18] T. A. Lee, "The professional journal as a signal of movement to occupational ascendancy and as legitimization of a professional project: the early history of The Accountant's Magazine 1897–1951," *Account. Hist.*, vol. 11, no. 1, pp. 7–40, Feb. 2006, doi: 10.1177/1032373206060080.
- [19] A. A. Imholtz Jr. and E. J. Massant, "Library-Publisher Collaboration in the Preservation and Dissemination of Trade Catalogs," *Sci. Technol. Libr.*, vol. 10, no. 4, pp. 23–30, Aug. 1990, doi: 10.1300/J122v10n04_05.
- [20] "Trade Literature Collection," Smithsonian Libraries. Accessed: Dec. 25, 2025. [Online]. Available: <https://library.si.edu/trade-literature>
- [21] "About," ManualsLib. Accessed: Jan. 14, 2026. [Online]. Available: <https://www.manualslib.com/about.html>
- [22] "About," Thomas Net. Accessed: Dec. 23, 2025. [Online]. Available: <https://business.thomasnet.com/about>
- [23] "About Us," Popular Science. Accessed: Jan. 13, 2026. [Online]. Available: <https://www.popsoci.com/about-us/>
- [24] "About," CLOCKSS. Accessed: Jan. 16, 2026. [Online]. Available: <https://clockss.org/about/>
- [25] "Global LOCKSS Network," LOCKSS Program. Accessed: Jan. 16, 2026. [Online]. Available: <https://www.lockss.org/gln>
- [26] "Core services," Portico. Accessed: Jan. 11, 2026. [Online]. Available: <https://www.portico.org/our-work/services/>
- [27] Sea Technology staff, "Farewell from Sea Technology," Sea Technology. Accessed: Jan. 08, 2026. [Online]. Available: <https://sea-technology.com/sea-technology-ends-publication>
- [28] D. E. Hubbard, (Jun. 2018). Chemical Pricing Information for Student Design Projects and Cost Engineering: Challenges and Opportunities. Presented at ASEE Annu. Conf. Expo. [Online]. Available: <https://peer.asee.org/30189>