

Power Information Guide

Locating Power Information

The following is a list of key shelf numbers for the power subject area. If you are looking for a particular book please check the library catalogue.

Boilers	621.184	Pneumatics	621.5
Chemical process plants	660.28	Pollution/environment	614.71
Combustion	536	Power plants	621.312
Compressors	621.51	Power stations	621.312
Energy	621.4	Power transmission	629.832
Fuel cells	537.65	Pressure vessels	660.283
Fuels	662.6	Process engineering	660.281
Gas dynamics	533.2	Pumps	621.67
Geothermal power	621.46	Solar energy	621.47
Hydraulic design	627.52	Steam plant	621.193
Hydraulic power	621.26	Steam turbines	621.165
Industrial pollution	628.54	Thermodynamics	621.101
Maintenance management	658.2	Tribology	621.89
Mining	622.33	Turbomachinery	621.6
Nuclear energy	621.48	Wave energy	621.312 134
Offshore engineering	627.98	Wind energy	621.45
Pipes & piping	621.185		

Useful Books

Barber A, Pneumatic handbook	621.5 BAR
Boyle G, Renewable energy 3 rd ed	621.4 BOY
Breeze P, Power generation technologies	621.31 BRE
Chapple PJ, Principles of hydraulic system design	621.26 CHA
Chattopadhyay, A, Pressure Vessels: Design and Practice	660.283 CHA
Chuse R, Pressure vessels the ASME code simplified	660.283 CHU
Energy sourcebook 2005	621.4 (Directory)
Energy supply handbook 2006	621.312 REE
Gas turbine world 2006 handbook	621.433 (Directory)
Kirschen DS, Fundamentals of power system economics	621.31 KIR
Lillington J, The future of nuclear power	621.48084 LIL
Mackay R, The practical pumping handbook	621.64 MAC
Patel MR, Wind and solar power systems: design, analysis and operation	621.44 PAT
PB Power, Powering the nation	338.476214 PBP
Turbomachinery international handbook 2005	621.6 (Directory)
Wave energy conversion	621.312134 ENG

Ackermann T, Wind power in power systems
Woodruff E B, Steam plant operation
World Energy Outlook 2004

621.45 ACK
621.193 WOO
621.400031 (Directory)

E-books

Available via the Knovel service in the Virtual Library

2004 ASME Boiler and pressure vessel code, section II – materials
Barclay, F, Combined power and process – an energy approach (revised version), 1998
Burton T et al, Wind energy handbook, 2001
Clifford M, Engineers' guide to pressure equipment – the pocket reference, 2001
Dixon S L, Fluid mechanics and thermodynamics of turbomachinery (4th ed), 1998
Gallagher, J, Natural gas measurement handbook, 2006
Frankel M, Facility piping systems handbook (2nd ed), 2002
Hester R E & Harrison R M, Sustainability and environmental impact of renewable energy sources, 2003
Kutz M ed, Mechanical engineers' handbook (2nd ed), 1998
Larminie J & Dicks A, Fuel cell systems explained (2nd ed), 2003
Lyons W C & Plisga G J eds, Standard handbook of petroleum & natural gas engineering (2nd ed), 2005
Mays L W ed, Hydraulic design handbook, 1999
Mobley R K, Fluid power dynamics, 2000
Neale M J, Tribology handbook 2nd ed 1995
Snow D A ed, Plant engineer's reference book (2nd ed), 2002
Soares C, Process engineering equipment handbook, 2002
Speight, J, Natural gas – a basic handbook, 2007
Wenyuan, L, Risk assessment of power systems – models, methods and applications, 2005
Winkle, P, Power generation retrofitting – optimizing power plant performance, 2002
Wood, A et al, Power generation operation and control (2nd ed), 1996
Wulfinghoff D R, Energy efficiency manual, 1999

Available via the Books24x7 service in the Virtual Library

Air-cooled heat exchangers and cooling towers, PennWell Corp, 2004
Basics of boiler and HRSG design, PennWell Corp, 2002
Companion guide to the ASME Boiler and pressure vessel, ASME, 2002
Companion guide to the ASME Boiler and pressure vessel, ASME, 2002
Closed cycle gas turbines: operating experience, ASME, 2005
Embedded generation, IET, 2000
Gas turbines: a handbook of air, land and sea applications, Butterworth-Heinemann
Nuclear power, IET, 2007
Practical machinery vibration analysis and predictive maintenance, Newnes, 2004
Pressure vessel design: the direct route, Elsevier Science and Technology Books Inc, 2006
Power plant construction management, PennWell Corp, 2005

Recent IMechE power conferences and seminars

These are shelved alphabetically by year in the Conference/Seminar section of the library.

[Carbon capture: technology options and making plant carbon capture ready](#), IMechE seminar 2007
[Collaborative strategies – partnering and alliancing for success](#), IMechE seminar 2006
[Development of future UK fossil power stations](#), IMechE seminar 2006

Updated March 2009

[Handling of radioactive materials](#), IMechE seminar 2008
[Heat recovery steam generator user group](#), IMechE seminar 2007
[Nuclear lifting](#), IMechE seminar 2006
[Nuclear new build 2008](#), IMechE seminar 2008
[Nuclear ventilation : discussing the real issues](#), IMechE seminar 2008
[Supercritical coal: operating experience and technology developments](#), IMechE seminar 2007

Useful Journals

Please check the library catalogue to see if the library subscribes to your required journal. Current issues of key journals are held on the journal display rack. The back copies of these journals are stored in the basement. Please ask a member of staff if you wish to view any and they will be retrieved for you. This generally takes 10-15 minutes.

The library has an extensive collection of historical journals including *Engineer* from 1856-, *Engineering* from 1866-

ASME Journal of heat transfer	1880-	Hydraulics and pneumatics (UK)	1998-
ASME Journal of solar engineering	1880-	Hydraulics and pneumatics (USA)	1960-
ASME Journal of pressure vessel technology	1880-	IMechE Proceedings part A Journal of power and energy	1985-
ASME Journal of turbomachinery	1880-	IMechE Proceedings part I Journal of systems and control engineering	1991-
ASME Journal of engineering for gas turbines and power	1880-	Nuclear engineering international	1956-
ASME Journal of energy resources technology	1880-	Nuclear future	2005-
ASME Journal of offshore mechanics and artic engineering	1880-	Oil and gas journal	5 years
Energy world	2005-	Petroleum review	1987-
Environmental engineering	1988-	Power engineer	2006-
Gas turbine world	1996-	Process engineering	2005-
		RGN: Revue generale nucleaire	2 years

A number of journals are available electronically via EBSCOhost which is available in the IMechE Virtual Library. Click here to see a list of [titles](#) or to see [titles by subject](#).

Databases

The library subscribes to the following databases please ask a member of staff if you wish to use them.

- **IMechE Library Catalogue**

This contains details of all the books available in the library and title and abstract information for all papers and articles published in IMechE's conference, seminar, proceedings and journal publications back to 1984, and from 1847 to 1996.

- **Knovel**

This electronic books database is available in the Virtual Library pages of the IMechE website (members only). Search and download chapters of key engineering handbooks, including:

Hester R E et al, Sustainability and environmental impact of renewable energy sources 2003
Larminie J, Fuel cell systems explained 2nd ed 2003
Burton T, Wind energy handbook 2001
Peyton K B, Ondeo/Nalco fuel field manual revised ed 2002

- **EBSCO Business Source Corporate**

This business database contains full-text articles from industry, trade and academic journals and is fully searchable for Members of the IMechE through the Virtual Library. It also contains substantial UK and global industry and market reports from Datamonitor (covering industries such as Airlines and Aluminium) as well as company profiles and economic reports for over 10,000 companies.

- **ESDU**

The library holds the **ESDU (Engineering Science Data Unit) datasheets** which contain validated data and design methods, principles, worked examples, programs and related equations on over 1,200 specific aerospace, process, structural and mechanical engineering topics. The ESDU database can be viewed in the library. Datasheets are available for week loan to members and cannot be photocopied.

Useful websites

American Gas Association	www.aga.org
American Society Mechanical Engineers	www.asme.org
Association of Electricity Producers	www.aepuk.com
Association of Manufacturers of Power Generating Systems (AMPS)	www.amps.org.uk
British Standards Institution	www.bsi-global.com
British Wind Energy Association	www.bwea.com
Intute: Science, Engineering and Technology	www.intute.ac.uk/sciences
Energy Institute	www.energyinst.org.uk
Energy Networks Association	www.energynetworks.org
Industrial Maintenance and Plant Operation	www.impomag.com
Institution of Chemical Engineers	www.icheme.org
Institution of Diesel and Gas Turbine Engineers	www.idgte.org
Institution of Gas Engineers and Managers	www.igem.org.uk
Institution of Nuclear Engineers	www.inuce.org.uk
Offshore Research Focus	www.orf.co.uk
Offshore Technology	www.offshoretechnology.com
Oil & Gas Directory	www.oilandgas.co.uk
Piping Design Central	www.pipingdesign.com
Pressure equipment directive	http://ec.europa.eu/enterprise/pressure_equipment/ped/index_en.html
UK Offshore Operators Association	www.ukooa.co.uk