

# USING THE INTERNET FOR YOUR QUERIES

Many of the enquiries received by the BLF concern requests for information on chemical hazards, aspects of legislation, occupational health and hygiene, environmental issues, etc.

As many members may not be aware of the wealth of information available via the internet, this article identifies a number of useful website addresses, which can often provide the necessary information.

There are two methods for conducting a search; either one can use a search engine to conduct a search for you, or if the appropriate website address is known, it can be accessed directly.

### Search Engines

Typical search engines include Alta Vista, Euroferret, Excite, Hotbot, Inference Find, Infoseek, Internet Sleuth, Lycos, UK Academia, UK Index, Yahoo and Yahoo - UK and Ireland. Alternatively, one can use a more sophisticated search engine of search engines, such as Copernic 2000 V4.5, which is available as a free download direct from: - [www.copernic.com](http://www.copernic.com) This software actually simultaneously conducts a search of a number of the most suitable conventional search engines.

When conducting a search, it helps to have a clear understanding of what you need, i.e. think in terms of related terms (both broader and narrower), synonyms, other chemical names or appropriate legislation. Also, read the help or search tips indicated by the particular search engine. Differences in spelling (e.g. English/American) may also need to be taken into account. Many search engines also make use of Boolean operations to refine searches. These consist of the words AND, NOT or OR to express logical processes. For example, if you are searching for information on tank bunding, by entering tank AND bunding, all located records will include both these terms. Mines NOT methane will find all references to Mines but will exclude those references also including methane. The OR operator is useful when searching synonymous terms, e.g. polycyclics OR polyaromatics (strictly speaking these terms are not synonymous but are often confused in literature).

### WEBSITE ADDRESSES

Many websites will contain the required information, although one may have to search within the website to locate it. For example, one may wish to identify all HSE publications on metalworking fluids, a search of the HSE website will identify nine HSE publications on the subject, together with order references.

### USEFUL SITES

For information from UK government sites:

<http://www.hmso.gov.uk> (UK Legislation)

<http://www.hmso.gov.uk/stat.htm> (Statutory Instruments)

<http://www.ukstate.com> (The Stationery Office) This site provides a wide variety of information about UK Government publishing services, and also the text of some of their latest publications.

<http://www.context.co.uk> (UK Legislation - Information Sources)

<http://www.hse.gov.uk> (Health and Safety Executive)

<http://www.detr.gov.uk> (Department of the Environment, Transport and the Regions. Contains a large and growing amount of UK Department of Environment information, including daily press releases and air quality forecasts. Also Air Quality Archive under miscellaneous.

Links to other environmental sites).

<http://www.environment-agency.gov.uk>. (Environment Agency, UK is well structured and new information is constantly appearing. Facility for ordering free leaflets and also contains the Chemical Release Inventory.

These sites vary in terms of their degree of sophistication and the amount of information available, but they are being continually updated and improved. For information on countries other than the UK

<http://www.hspublishing.com/hsworld>

Chemical Sites include

<http://www.cia.org.uk> (Chemical Industries Association site containing information on e.g., Responsible Care)

<http://www.rsc.org> (Royal Society of Chemistry)

<http://www.chemweb.com>

In addition to the above, there are a vast number of HSE-related websites, some of which are listed below.

<http://www.behavioural-safety.com>

Behavioural Safety brings the latest news in the world of Behavioural Safety, Safety Culture and other related topics. The site gives details of books, conference papers, professional magazines, contacts, training courses, links and much more.

<http://www.coatings.org.uk>

British Coatings Federation extensive site which contains information, latest news, training, publications, industry facts, frequently asked questions and links to sites worldwide.

<http://www.bl.uk>

British Library information sources in the UK and through GABRIEL to Europe. Gateway to scientific, technical and medical information. British Library List of current journals/serials received at the UK British Library - 64,000 titles listed A-Z under title. Go into Online and then the Current Serials.

<http://www.bmj.com>

British Medical Journal - BMJ Home Page

<http://www.bohs.org>

British Occupational Hygiene Society is a multidisciplinary learned society, which has members in over 30 countries.

<http://www.bre.co.uk>

Building Research Establishment - BRE UK - useful for UK publications and links to fire and construction organisations.

<http://www.cieh.org.uk/cieh>

Chartered Institute of Environmental Health (CIEH) of the UK. Extensive information sources covering publications, events, seminars and exhibitions, training services and details on how to become an environmental health officer. List related organisations and activities.

<http://www.rsc.org/ris/chcs/chcs.htm>

Chemical Hazards Communication Society of the UK. Active group which holds meetings, shares information and produces a Newsletter.

<http://www.liv.ac.uk/Chemistry/Links/links.html>

Chemical information for chemists. Contains extensive information, MSDS, journals, and many links to other useful chemical sources of information.

<http://www.natfocus.uwic.ac.uk>

Chemical incidents hotline based at the University of Wales in Cardiff which aims to provide a 24 hour, 365 day a year service to receive notification of incidents in the UK and to provide a contact point for Government. It also aims to alert officials at the Departments of Health for England, Ireland, Scotland and Wales to public health aspects of chemical incidents and to provide information on such incidents.

<http://enviro.mond.org/current/home.html>

Chemistry and Industry Magazine linked with the Society of Chemistry and Industry

<http://www.citb.org.uk>

Construction Industry Training Board. Information on publications for vocational, craft, operative, pre-vocational, technical, supervisory and management training, and health and safety publications.

<http://www.open.gov.uk/cdsc>

Communicable Disease Surveillance Centre - UK

(Continued on Page 11)

# LUBETECH

(Continued from Page 1)

<http://www.d-net.com>

Directory Publishers Association site includes the largest list and details of published directories on the Web, could prove the starting point for elusive or unusual information.

<http://www.eevl.ac.uk>

Engineering Information from the University of Edinburgh Engineering Virtual Library

<http://www.ends.co.uk>

Environment Data Services (ENDS) very useful environment site Contains first daily news service for professionals interested in European environmental affairs, high quality and timely news of developments; Environmental Consultants Directory; more than 400 carefully selected links to environmental sites; online example of the monthly journal 'The ENDS Report'; plus Diary of Events

<http://www.genie.lut.ac.uk>

Environmental Research

<http://www.aeat.co.uk/corporate>

Environment Services- the National Environment Technology Centre (NETCEN) brings together the resources of the AEA Technology and Warren Spring Laboratory and offer a wide range of key activities in all aspects of environmental technology.

<http://www.tandf.co.uk>

Ergonomic Abstracts - Taylor and Francis UK publisher of Ergonomics Abstracts - premier ergonomics source

<http://www.hspublishing.com/hsworld/fig.html>

Fire Information Group (FIG), UK based network of fire information specialists

<http://www.ife.org.uk>

Fire information from the Institution of Fire Engineers site lists activities, publications, events and more news.

<http://www.lpc.co.uk>

Fire and loss prevention information from the Loss Prevention Council and The Fire Protection Association

<http://www.fire.org.uk>

FireNet service contains What's New, Aviation Fire Journal, Information Exchange, including Bulletin Board System, Advice and links to national and international fire service departments

<http://www.safepractice.co.uk>

Fire Information - SafePractice is an interactive learning site, include information on Fire Safety

<http://www.fss.org.uk>

Forensic Science Service in the UK offers a wealth of experience and information, including the FORS CD-ROM which is multidisciplinary and covers literature relevant to the examination of evidential materials, analytical methods and the presentation and interpretation of findings. FORS contains more than 50,000 records, which are not publicly available elsewhere in the world. FORS uses SilverPlatter software.

<http://www.foe.co.uk>

Friends of the Earth Environment extensive and useful site containing information from non-governmental sources and links to other environmental sites

<http://www.foe.co.uk/factorywatch>

Friends of the Earth comments on pollution from factories

<http://www.open.gov.uk>

Government Information from UK Departments, Agencies and Local Authorities

<http://www.open.gov.uk/doh/dhhome.htm>

UK Department of Health - information resources

<http://www.earl.org.uk/ask/index.html>

'Ask a Librarian' brings the resources of the UK public libraries to your

desktop. You can email a factual question and you should get an answer within two working days, if not before!

<http://www.bioh.org>

The British Institute of Occupational Hygienists. Activities, goals and Code of Ethics.

<http://www.bl.uk/services/stb>

British Library Environmental Information Service

<http://www.bma.org.uk>

British Medical Association details of news, publications and access to databases including MEDLINE

<http://www.bsi.org.uk/bsi>

British Standards Institution site containing information on standards, product certification and testing.

<http://www.cieh.org.uk/cieh>

Chartered Institute of Environmental Health (CIEH) of the UK. Extensive information sources covering publications, events, seminars and exhibitions, training services and details on how to become an environmental health officer. List related organisations and activities.

<http://www.ciria.org.uk>

CIRIA which aims to share knowledge and best practice in building. List research, publications, events, news releases and related sites.

<http://www.commonwealthtuc.org>

Commonwealth Trade Union Congress links trade union national centres, representing over 30 million trade union members, throughout the Commonwealth. Gives news, contacts and links.

<http://www.open.gov.uk/hse/hsehome.htm>

Health and Safety Executive Information Service. Revamped and improved pages have details of contact points, legislation, publications, press releases of the UK Government Agency - Health and Safety Executive

<http://dspace.dial.pipex.com/hhsc>

Health and Safety information pages of H. and H. Hughes Scientific Information UK.

<http://www.iem.org.uk>

Institute of Environmental Management -Access to publications, information on courses and a discussion forum

<http://www.bham.ac.uk/ioh>

Institute of Occupational Health, Birmingham, UK. Gives details of the courses, seminars, training, research and publications

<http://www.petroleum.co.uk>

Institute of Petroleum UK - forthcoming events, information services, new publications and details of membership, periodicals list and also list of titles of test methods and links to other pages in the petroleum industry

<http://www.ife.org.uk>

Institution of Fire Engineers site lists activities, publications, events and more.

<http://www.iosh.co.uk>

Institution of Occupational Safety and Health - UK.

Lists various IOSH goals, activities, events and publications, including the Journal of the Institution with abstracts and archive file.

<http://www.bohs.org/ioha>

International Occupational Hygiene Association conducts a wide range of activities to promote and develop occupational hygiene worldwide. From its creation in 1987 the IOHA has grown to more than twenty member organisations, representing over 20,000 occupational hygienists worldwide. Promotes the exchange of information.

(Continued on Page 15)

All machine shop operators recognise the important role of water soluble metal working fluids in their production processes. These being to provide lubricity, to cool, to prevent surface corrosion and to remove metal fines (swarf) from the cutting process. The fluids also serve to prolong the life of the machine cutting tool. Many users are not getting the best out of their metalworking fluids and could reduce their operating costs significantly by implementing and improving fluid management and control practices. It is estimated that 16% of manufacturing costs are attributed to fluid purchase, management and disposal. For companies with poor fluid management procedures, savings of 40 – 60% may be possible by implementing proven waste minimisation techniques. Even good companies with good fluid management procedures still have the potential to achieve worthwhile cost savings.

The economic and environmental benefits of correct fluid use has been recognised by the Environmental Technology Best Practice Programme (ETBPP)<sup>1</sup>. With assistance from Pera, the ETBPP have published an Environmental Performance Guide and a Good Practice Guide to help users improve their practices.

**The Environmental Performance Guide – Benchmarking the Consumption of Metal Cutting Fluids (EG179)**

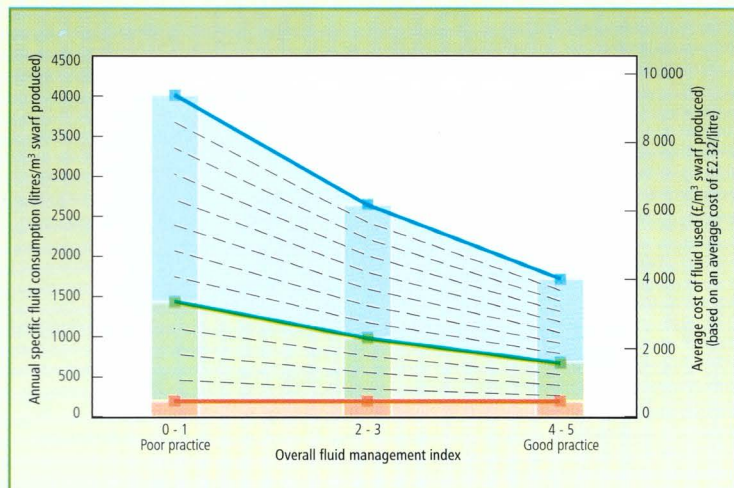
describes how you can benchmark the consumption of your metalworking fluids and assess this against the performance of companies employing ‘good practices’.

The Guide was compiled after thorough research across a wide section of engineering companies throughout the UK, to determine industry profiles and statistical information on the management and use of metalworking fluids. Whilst the UK engineering industry is diverse resulting in a wide variation in the data collected, useful comparisons and conclusions can be drawn from the information.

It highlighted a broad range of companies using metalworking fluids in their machining operations and identified a considerable variation in fluid consumption and management

## Improve your environmental performance by cutting coolant costs

Tony Lesowiec of Pera reports on a new initiative for metalworking fluid users to improve their performances



procedures, suggesting that many operators could improve their performance and reduce their use of metalworking fluids.

The Environmental Performance Guide:

- ▲ Summarises the survey findings, allowing you to compare your current fluid use with that of your competitor.
- ▲ Provides a Fluid Management Index that helps demonstrate the connection between production levels, fluid use, costs, and degree of fluid management.
- ▲ Will help you estimate the cost savings achievable through improved fluid management.
- ▲ Presents an Action Plan and suggestions for reviewing and reducing your current level of fluid use, thereby reducing your costs.

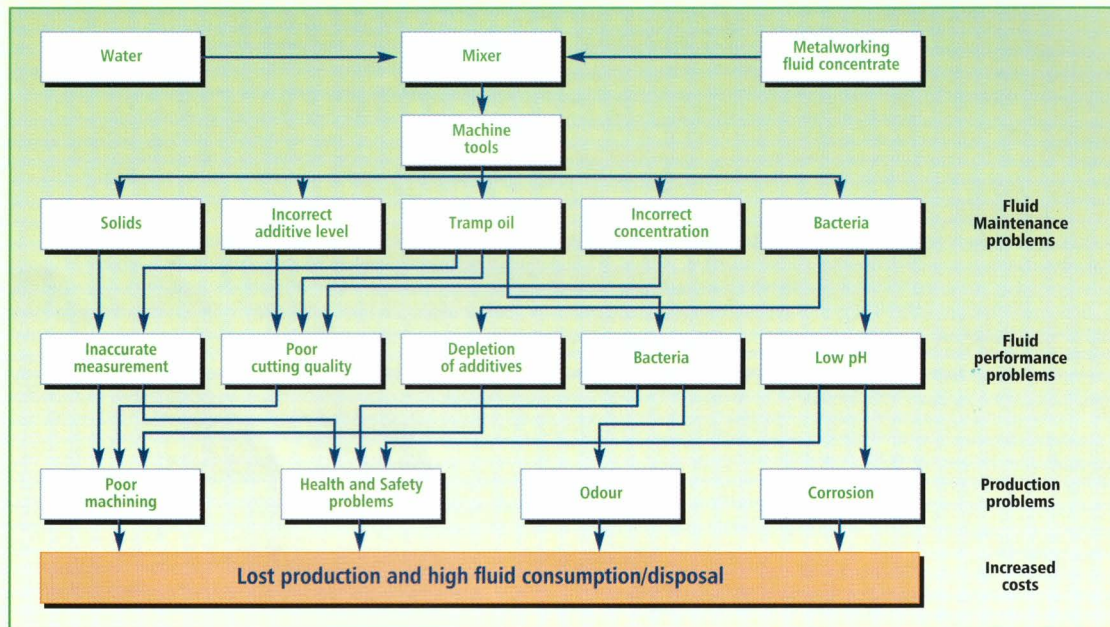
*Specific fluid consumption in relation to fluid management*

**The Good Practice Guide – Optimising the use Metalworking Fluids (GG199)**

describes practical measures to help companies prolong the life of their fluids and reduce their operating costs. The Guide provides workshop managers with simple practical advice to help save money and improve their environmental performance through improved management of their metalworking fluids. Advice is given on:

- ▲ Factors affecting fluid choice
- ▲ Housekeeping
- ▲ Fluid management
- ▲ Determining when a fluid is ready for disposal
- ▲ Disposal options
- ▲ Health and safety issues

# LUBETECH



The consequences of poor fluid management

There are a number of factors affecting fluid selection, however the critical ones are the machining operation and type of metal being machined. Other factors include water hardness, machining parameters ( e.g. spindle speed and feed rates ), type of coolant system, component quality and tolerance requirements. The Guide stresses the importance of using quality metalworking fluid products from reputable suppliers, as using cheaper lower specification fluids can lead false economy. There are many metalworking fluid products on the market formulated for both general and specific machining applications. End users are advised to consult their suppliers for advice on fluid selection.

The Guide also provides advice on the importance of Good Housekeeping. A good standard of housekeeping enhances fluid condition, performance and life. It also contributes to pleasant and safe working conditions for employees. Information is given on operators' hygiene, how to keep the fluid clean, mixing of new fluids, topping up machines, cleaning out machines and storage of fluids.

The key to increasing fluid life time and improving performance is fluid management. It is estimated that over 90% of fluid-related complaints to suppliers are actually due to poor management. There are many potential

sources of fluid contamination, the most common being tramp oil, metal fines from the cutting process and airborne particles.

The mechanism and consequences of poor management can be summarised by the schematic above.

The most important parameters to check are appearance, concentration, pH, microbial activity and tramp oil contamination. These can be measured by simple techniques in the workshop by line managers and operators. Other important parameters include corrosion characteristics, water hardness, temperature and biocide level. Advice on the methodology of the tests can be obtained from the Guide and fluid supplier.

Case studies have quantified the benefits of fluid management. These can be summarised as:

- ▲ **cost savings on fluid purchase**
- ▲ **reduced disposal costs**
- ▲ **extended fluid life**
- ▲ **improved environmental performance**
- ▲ **improved health and safety conditions in the workshop**
- ▲ **minimise problems associated with product quality**
- ▲ **performing better than your competitor**

## FURTHER INFORMATION

The Environment Technology Best Practice Programme (ETBPP) offers free advice and information to U.K. businesses to promote environmental performances. Copies of the following Guides can from the ETBPP Environment and Energy Helpline – telephone no. 0800 585794:

- ▲ **Benchmarking the Consumption of Metal Cutting Fluids (EG179)**
- ▲ **Optimising the Use of Metalworking Fluids (GG199)**
- ▲ **Improved Management of Metalworking Fluids Increases Profits (GS199)**

Pera can also be contacted for independent advice (telephone 01664-501501 or e-mail [tony.lesowiec@pera.com](mailto:tony.lesowiec@pera.com))

<sup>1</sup> The ETBPP is a joint Department of Trade and Industry and Department of the Environment, Transport and Regions Programme. It is managed by AEA Technology plc through ETSU and the National Environmental Technology Centre.