

The Relevance of ISO 14001 to Contract Heat Treaters

CHTA Chairman **David Wilkins** considers the impact of the global standard on environmental management systems.

At a time when market conditions are difficult for all contract heat treatment companies, it may seem inappropriate to some that the subject of environmental governance should be on the agenda for the Association.

In reality, this subject is not the sideline issue that some companies appear to make it.

The true potential impact of failure to comply with current legislation, as well as the potential for market development of our industry which a proactive strategy on the issue will provide, must be appreciated.

It should be the aim of every member of the CHTA to ensure that their company, if not already registered to ISO 14001, takes immediate steps to establish a programme of implementation of the procedures and controls.

There really is no economic or other

argument which can be advanced to justify neglecting this issue.

By way of encouragement, a brief review of the annual reports of the leading OEM's in our markets will demonstrate the priority they give to the subject of ISO 14001 compliance.

In fact, in many cases, leading companies go to the extent of producing a separate annual report covering environmental and associated issues.

The importance of this information to all stakeholders in these companies (shareholders, employees, their surrounding communities, as well as regulatory bodies) has led to the establishment of international awards for best performance in environmental matters.

We recognise that the very future of our industry, and of small and large member companies alike, depends upon the trend to outsourcing continuing, especially by the major manufacturers.

It follows that any company that is serious about offering a viable and credible alternative to in-house heat treatment must be able to demonstrate professional standards in environmental management, as much as in mainstream heat treatment expertise.

It is planned to include a review article, drawing upon the experience of a member who successfully operates an ISO 14001-approved environmental control system, in the next issue of *Hotline*.

Hopefully this will bring members up to date with current practice and provide advice on how to approach implementing the standard.

Meantime, for the basic information, see BSI's website at www.bsi-global.com.

DON'T GO AWAY EMPTY-HANDED!

CHTA members will have received an invitation to attend SEA's *Surface Engineering Awards 2002* Presentation Ceremony and Gala Dinner at Birmingham's International Convention Centre on 11th October. The event will be compered by Jim Bowen, erstwhile host of TV's *Bullseye*.

It offers an opportunity to recognise and celebrate excellence in all branches of surface engineering, including relevant heat treatment processing. The seven categories include: business achievement; environmental; marketing; quality; training; process innovation.

The closing date for entries, on the official entry form also previously circulated, is 1st July.

It's time a CHTA member company won one of these prestigious awards!

CHTA datasheets on your own website?

It has been suggested that CHTA members might like to have the facility to feature CHTA's *Datasheets for Non-heat-treaters* on their own websites, as downloadable PDF files. Currently they appear on CHTA's website in this format by clicking "Specifying Heat Treatment".

Your Management Committee also wonders if members might be prepared to include a link to CHTA's website on their own site to help "further the cause".

Member opinion on these two matters is sought in a brief questionnaire that accompanies this issue of *Hotline*.

Find CHTA datasheets and much more at . . .

www.chta.co.uk

Inside . . .

	Page
● CCL dual-use exemption	2
● CHTA Benchmarking Club	2
● Report examines future for automotive sector and its suppliers	3
● Useful links on CHTA website	4
● Member news	4
● Other news	5
● Market Movements	6



Guido Plicht
Senior Research Engineer

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CCL dual-use exemption

Wallwork's **Richard Burslem** comments on the recent EU decision approving the UK CCL dual-use concession.

We have been paying Climate Change Levy now for over 12 months, and there seems little chance of the rebate scheme being extended to heat treaters. Whilst other industries have been allowed to negotiate a reduction of their tax burden, in exchange for agreed energy savings, we have not.

Those fortunate enough to have applied for the dual-use exemption in April 2001, and secured at least some relief from the tax, were shocked to see, as reported in *Hotline 86*, that the scheme had not been approved by the European Union. Further applications to join the scheme were halted and it was suggested that relief already claimed might even be clawed back!

As reported on CHTA's website Bulletin Board on April 4th, thankfully the scheme has now been passed, those in the scheme continue to get relief, and new applications are again being processed.

Details of the dual-use exemption scheme were published in *Hotline 83*. At the time, the scheme was new and those applying for exemption had no experience of how it would work. After 12 months in existence, it is time to look at the scheme again and evaluate it.

The scheme is relatively easy to join and needs little administration. It applies to any 'fuel' supplied that is not used as fuel; for instance, methane used in preparing a furnace atmosphere. It is a self-certification scheme whereby the consumer calculates the proportion of gas not used as fuel.

CHTA Secretariat

Items for inclusion in *Hotline* and enquiries about CHTA activities should be addressed to:

Contract Heat Treatment Association

c/o WHTC, Aston University,
Aston Triangle, Birmingham B4 7ET.

Tel: 0121 359 3611, ext.5212

Fax: 0121 359 8910.

E-mail: mail@chta.co.uk

Website: www.chta.co.uk

CHTA Secretary: Alan J. Hick

The Contract Heat Treatment Association is not responsible for the statements made or opinions expressed by contributors to *Hotline*.

A supplier certificate (form PP11) and supporting analysis (form PP10) must be completed and sent off to both the gas supplier and Customs & Excise. The gas supplier will then only gather tax on the proportion used as fuel and not on the proportion used as feedstock.

HMCE may carry out audits to ensure the correct entitlement is claimed by the user and allowed by the supplier. With this in mind, it is important to select a calculation method that is not only verifiable but can also be followed by a non-technical body such as HMCE. Because the measurement of industrial gas usage was never designed with the CCL in mind, HMCE will accept approximations in the calculations.

An example calculation could look like this:
 $A = \text{Total annual gas usage (actual figure from gas bills);}$

$B = CH_4 \text{ converted to 'endo' (average hourly gas flow } \times \text{ hours usage per year);}$

$C = CH_4 \text{ used as carburising additions (all furnace additions recorded over a representative week } \times \text{ number of weeks run in the year);}$

$\text{Relief claimed} = (B+C) / A \times 100 \%$.

**"Is it worth it?
I would say yes."**

**"Our saving in CCL is
£4,300 annually."**

If you joined the scheme in April 2001, it is now time to review your usage of exempt gas and revise, if necessary, the percentage of exemption claimed. As a guideline, HMCE has advised that only significant differences need to be notified and their definition of 'significant' is where 'the relief would be revised by at least 20 percentage points'.

Is it worth it? I would say yes. Both our gas supplier and the CCL team at HMCE were most helpful, although the most accurate information was available off the HMCE web site. For this company to produce the necessary information took half a day of senior management time and one day of junior time. The calculations need to be repeated annually but there has been no work in between. Our saving in CCL is £4,300 annually.

All the information you need, including application forms, can be obtained from the HMCE website www.hmce.gov.uk in the notices section, notice CCL1, a general guide to climate change levy.

CHTA Consumable Cost Survey

We regret to record that response to the latest of the hitherto well-supported and much-valued CHTA consumable cost surveys was poor. Only four members returned the questionnaires circulated with the previous *Hotline*.

Because these respondents (A-D) don't necessarily employ a significant proportion of the consumables listed, publication of the normal full comparative summary is inappropriate. Nonetheless, they all consume energy and the limited following table might be of interest:

Company	Consumable			
	Electricity		Natural gas	
	Total annual consumption, kWh	Unit cost, p/kWh	Total annual consumption, kWh	Unit cost, p/kWh
A	1.94M	3.54	4,70M	1.14
B	10.75M	3.9	124M	0.87
C	0.96M	4.22	3.71M	1.22
D	0.50M	4.99	0.88M	0.70

2001 unit costs based on dividing the total annual energy cost, including standing charges etc., by total annual consumption.

Let's hope another survey encourages better participation; fingers out, financial folk! . . .

CHTA's Benchmarking Club

Hotline 86 outlined the purpose and scope of the proposed CHTA Benchmarking Club, in which members share performance data anonymously. The response to the follow-up questionnaire, to assess interest, was encouraging and the exercise is now being launched, with a six-monthly frequency.

With this *Hotline*, members will find a form listing the questions that most respondents indicated they would be prepared to answer. Please complete with your current data, return to CHTA's Secretariat and note that:

- completed responses will be collated by the Secretariat only and reported without identification of responding companies;
- the anonymous results will only be reported, by letter, to participating members.

Please find time to take part and make this new initiative a success. As ever, you have your Secretariat's total assurance that your information will be treated in the strictest confidence.

Report examines future for UK automotive sector and its suppliers

Contract heat treaters who serve UK automotive companies and their suppliers might gain some reassurance from the upbeat tone of a recent report on the prospects for that industrial sector.

In his foreword to the Executive Summary of the report of the DTI's *Automotive Innovation and Growth Team (AIGT)*, Chairman Sir Ian Gibson observes:

"Since the AIGT began its work in April 2001, the pressures on the sector have become ever more intense. Some commentators have gone as far as to suggest that the UK is no longer a viable base for volume manufacturing. Predictions of the imminent demise of the UK automotive sector are nothing new but we cannot afford to be complacent, and it is clear that action is needed to ensure that the industry continues to be competitive.

Identifying what is required to meet the challenges facing us is at the heart of the work that the AIGT has been undertaking over the past year. I would stress, however, that our overall conclusion is rather different to that of the pessimists: we believe that the industry can have a long-term future in the UK, provided that industry and Government work together to address the agenda laid out in our reports."

CHTA's DTI contact Brian Greenwood notes: "You may have also seen recent press reports about the DTI support for an automotive academy that directly stems from the AIGT report; commentary so far suggests that component suppliers may derive real benefits."

Amongst other things, the AIGT Report summary provides a brief overview of the automotive industry worldwide and key facts about the UK automotive sector, some of which will be of interest to CHTA members:

THE AUTOMOTIVE SECTOR IN THE UK - KEY FACTS

- There is only one UK-owned volume car manufacturer, MG Rover, and as a result there are occasional suggestions that the automotive sector has ceased to matter. This overlooks the fact that the UK provides a manufacturing base for 7 of the world's leading volume vehicle manufacturers, 9 commercial vehicle production facilities, 17 of the world's top tier-one suppliers, and around 20 of the world's leading independent automotive design engineering firms. We are host to more global volume car manufacturers than any other country in Europe.

- Turnover of the UK automotive sector as a whole is £45 billion, contributing approximately 1.5% of GDP and employing some 715,000 people – both directly in vehicle manufacturing and in the supply and distribution chain. About half of

added value comes from manufacturing and assembly, which represents about 15% of total UK manufacturing value added.

- Exports totalled nearly £20bn in 2000, greater than in any other manufacturing sector. 65% of UK automotive output is exported; conversely, 74% of UK car registrations are imports. This is a highly (and increasingly) globalised industry, with complex supply chains, which reach across countries and even continents.

- Despite more than doubling output in the last 25 years, the UK tends to lag behind the major car-producing countries in terms of productivity. However, we do boast the two most productive car plants in Europe (Nissan in Sunderland and Toyota in Derbyshire), plus Leyland (the most productive truck plant).

- Rates of return on capital of the UK vehicle and component industry are currently very low, with many large companies making losses reflecting a wider problem in Europe and worldwide.

"... our overall conclusion is rather different to that of the pessimists ..."

- The UK sector's particular strengths include design engineering, especially advanced technology in motorsport. We are home to the most successful global motorsport cluster, which commands 80% of the world market. Constructors including McLaren, Williams, Benetton, Stewart, BAR, Jordan, Lola, Prodrive and Reynard and engine designers and manufacturers such as Cosworth, Ilmore and Hart are all based in the UK, meeting the requirements of teams in Formula 1, CART, Formula 3000, the World Rally Championship, GT and Touring Cars.

- The UK is also increasingly becoming a centre for engine production (with recent decisions by Ford, BMW and Toyota to invest in significant engine production facilities here), and in "premium" cars (from the new Mini, through Jaguar and Range Rover and super-luxury cars such as Bentley and Aston-Martin).

- Investment by global Tier-1 companies such as TRW, Johnson Controls, Lear Corporation, Magneti Marelli, Denso, Visteon, Delphi and Thyssen has had a similar positive effect on the quality of the UK supplier base. An estimated 7,000 automotive component companies operate in the UK, 90% of which are SMEs. Turnover in the UK components sector in 1999 was about £12bn.

- Linked to this strong manufacturing base, there is growing global demand for the design engineering skills of UK-based

companies such as Ricardo, Prodrive, TWR Engineering, Cosworth Technology, Lotus Engineering Millbrook, MIRA, Hawtal Whiting and MZX International. British designers are to be found in almost any automotive styling studio in the world.

- Inward investment in UK manufacturing continues; notable recent examples include the decisions by Nissan, Honda and Toyota to increase their investments, plus increased investment by Ford in both Jaguar (Halewood and Coventry) and Land Rover, while GM have invested £130m to produce the next X83 van at IBC Luton. However, concerns about the unfavourable £/Euro exchange rate are already causing many vehicle manufacturers to source an increasingly large proportion of their components from elsewhere in Europe and may threaten the prospects of future investment. Recently, some commentators have also expressed concern that the position of the UK as a base for volume manufacturing may be under threat.

- The UK retail sector is characterised by a high number of traditional franchised dealership groups and a few newer independent internet and import businesses. The EU's review of Block Exemption due to expire in September 2002, the UK Competition Commission's review of new car pricing, the emergence of new channels to market such as the internet and the changing ownership of retail operations mark this a period of uncertainty for the sector.

- Road transport contributes to emissions of the greenhouse gases associated with climate change and emissions of local air pollutants, which can damage health and the environment. Emissions from transport have fallen by around 50% since 1990, despite the growth in traffic, and are expected to fall by another 25% over the next five years as a result of the spread of new technology driven by more stringent European emissions standards. There are however increasing concerns about the health effects of smaller particles, which are also emitted by petrol engines. Vehicles are becoming more fuel-efficient – by 2008 the average new car sold in Europe should be 25% more fuel-efficient than the average in 1995. Growing congestion, however, is costing the UK economy billions every year.

FURTHER INFORMATION

The Executive Summary of the AIGT Report, and its four other parts, can be obtained in either hard copy or electronically from DTI's Lisa Stevenson (e-mail: Lisa.Stevenson@dti.gsi.gov.uk; tel: 020 7215 1169). They should also be available on the DTI website at www.dti.gov.uk (now directly accessible via the new "Links" page on CHTA's website).

Useful Links on CHTA's Website

A new "Links" page has been launched on CHTA's website this month. Accessible from the home page, it lists over 30 useful contact organisations in related fields whose websites can be entered by clicking on the appropriate name:

- Aluminium Federation (ALFED)
- British Cold Forming Group (BCFG)
- British Gear Association (BGA)
- British Stainless Steel Association (BSSA)
- British Standards Institution (BSI)
- British Turned Parts Manufacturers Association (BTMA)
- Cast Metals Federation (CMF)
- Confederation of British Metalforming (CBM)
- Copper Development Association (CDA)
- Department of Trade & Industry (DTI)
- European Powder Metallurgy Association (EMPA)
- Fastener Engineering & Research Association (FERA)
- Galvanisers Association (GA)
- Gauge and Toolmakers Association (GTMA)
- Health & Safety Executive (HSE)
- Institute of Cast Metal Engineers (ICME)
- Institute of Materials (IoM)
- Institute of Metal Finishing (IMF)
- Machine Tools Technologies Association (MTTA)
- Metal Finishing Association (MFA)
- Motor Industry Research Association (MIRA)
- NASURF
- National Association of Steel Stockholders (NASS)
- National Centre of Tribology (NCT)
- National Corrosion Service (NCS)
- Surface Engineering Association (SEA)
- Thermal Spraying & Surface Engineering Association (TSSEA)
- TWI (The Welding Institute)
- UK Spring Manufacturer's Association (UKSMA)
- UK Steel Association
- Wolfson Heat Treatment Centre

A growing number of these organisations are reciprocating by kindly featuring a link to CHTA from their websites. Suggestions for additional helpful sites on the links page to CHTA's Secretariat please. Meantime, explore the new page at:

www.chta.co.uk



The first of the continuous austempering lines being installed at HHT's Darlaston site.



HAMMOND/HOMER MERGER

Following the recent merger of West Midlands CHTA members Hammond Heat Treatment of Darlaston and Homer of Redditch, the combined operations are being consolidated at the Darlaston site.

Trading as Hammond Heat Treatment, the larger organisation, with projected sales in excess of £6million, offers a wider range of heat treatment processes for its customers. These include HHT's modern mesh-belt hardening and tempering technology and Homer's continuous austempering facilities, as well as sealed-quench, nitrocarburising and induction hardening treatments.

With a capacity of 1500tonne/year, the four austempering furnaces from Redditch are currently being installed in an area not previously used on the Darlaston site, and will still leave space for further developments. This new venture will offer both old and new customers austempering as a further process to complement the more traditional treatments.

Of the merger, HHT MD John Houseman says: "This combination will broaden the customer base, enabling us to offer extended processes now and well into the future". With regard to the latest development, he notes: "Some of our present customers may have an austempering requirement and can now take advantage of a one-stop-shop approach".

DELPHI SIGNS AGREEMENT WITH BODYCOTE

Delphi Corp. has signed a long-term agreement with Bodycote Heat Treatments Ltd. to establish a Bodycote Service Centre providing heat treatment and coatings services at the Delphi Diesel Systems plant in Gillingham (UK).

Current heat treatment personnel will be transferred to Bodycote, which will make a substantial investment to provide

facilities for all current requirements and the foundation for ongoing development. The Centre will be equipped with computerised process controls, environmentally-friendly cleaning and environmental-protection systems.

The two companies have been working successfully together for several years, developing and implementing new heat treatment and metallurgical coatings processes for Delphi's high-precision diesel fuel injection systems. "This agreement provides us with local access to specialist expertise and new investment that will help us continue to improve the quality and innovation that we offer our customers," comments Doug Ewing, Plant Manager of Delphi Diesel Systems.

As part of the agreement, Bodycote will move the existing processes to a new dedicated Service Centre, within a secure area at the Gillingham site. This will free-up manufacturing space for Delphi, allowing further work-flow improvements. The new Service Centre will provide vacuum and sealed-quench heat treatment, gas nitriding, thermal deburring, metallurgical coatings and associated treatments.

Utilisation of the facility will be increased by making the services available to third parties, extending Bodycote's UK network to serve the South East of England and the Home Counties.

"We will be working closely with Delphi to ensure we continue to meet the high standards they set for quality and delivery," said Michael Hallas, Managing Director of Bodycote Heat Treatments Ltd. "The expertise of the people transferring to us is a critical part of this and we greatly value their contribution. This is the ninth major outsource agreement signed by Bodycote in the last fifteen months and is an indication of our success in developing innovative new business models to support our customers."

Delphi Corporation is one of the world's largest technology companies. The Gillingham plant, part of Delphi Diesel Systems, manufactures components for diesel injection systems, including Delphi's advanced second-generation common-rail system, which is supplied to Ford, Renault, Hyundai and PSA Peugeot Citroen for their highly-regarded diesel passenger cars.

Bodycote Heat Treatments Ltd. is a subsidiary of Bodycote International plc, the world's largest supplier of metallurgical services. With 245 plants in 21 countries, Bodycote provides global access to a wide range of metallurgical solutions, including heat treatment, metal joining, metallurgical coatings, materials testing and the densification and manufacture of components by powder metallurgy and hot isostatic pressing.

WALLWORK-TECVAC ON SHOW AT FARNBOROUGH 2002

Ultra-hard coatings for titanium, nickel super alloys and stainless steels will be shown by Wallwork-Tecvac at Farnborough 2002 (22-28 July). These coatings, applied to mission-critical primary engine and control system components, offer extended service life, additional lubricity and resistance to erosion in arduous conditions for both civil and military aircraft.

Wallwork-Tecvac, working together with Tier-1 aerospace suppliers, have developed a new series of titanium nitride and chromium nitride coatings that are applied to titanium, nickel super alloys and stainless steels to give enhanced resistance to erosion and reduce wear and galling problems.

The Wallwork-Tecvac coatings on show at Farnborough are approved by Tier-1 aerospace component suppliers. They are applied by a PVD process under vacuum using electron-beam evaporation technology, which meets the most stringent civil and military specifications for operations in desert regions and other tough operating conditions.

Applications include turbine compressor blades, control actuators and hydraulics components, main engine bearings, fuel-delivery systems and other mission-critical units. In these applications, typical service lives have been increased by factors of between 50 and 200%.

Wallwork-Tecvac coatings are also used extensively by aerospace component makers to extend cutting-tool life, allow dry machining, and enhance cutting speed when forming steels, high-performance aluminium alloys, nickel super alloys and titanium alloys.

WELL DONE NEVILLE!



Midland Heat Treatments' MD Alistair Cowie (left) makes a presentation to Neville Thomas to mark his 40 years of service with the company, which now specialises in induction hardening. Neville retires in September with CHTA's best wishes.

ANOTHER PLASMA NITRIDER FOR TTI'S TECHNOLOGY CENTRE

A second large Eltroplus plasma nitriding furnace has been installed at TTI Group's Process Technology Centre in Birmingham. Building modifications have been completed and have involved major changes to both Unit 3 and the recently-acquired Unit 4 at Bickford Road.

The furnace will become part of a heat treatment cell dedicated to the plasma processing of parts for BMW. This whole production facility will have the capacity to treat 500,000 engine shafts per annum. Plasma nitriding was selected for this part, as it is a proven low-distortion process capable of enhancing wear and corrosion resistance.

The new and existing furnaces are fully-computerised hot-wall types with pulse power supplies. They have external dimensions of 1.7m in diameter and 2.25m in height, with a load rating of 5000kg.

Capable of processing 1200 parts per load, the furnace nitrates the shafts selectively then oxidises the resultant nitrated surfaces. Extensive development work with the customer and end-user has refined the surface engineering process to enhance the performance of these safety-critical components.

To date, the production has been focused on both the Process Technology Centre and TTI - Nitriding Services in Telford, where the bulk of the prototype and initial development work was undertaken. The parts are used in the new range of VVT engines produced by BMW. These include 1.8L and 2.0L engines as well as the new larger V8 engines used in the new 7 Series BMW.

Contact Keith Laing for further information on 0121 327 2020 or email keithlaing@ttigroup.co.uk

FURNACES CONFERENCE + EXHIBITION

Supported by Wolfson Heat Treatment Centre, the second international conference and exhibition, *Advances in Furnace Technology*, organised by the British Industrial Furnace Constructors Association, takes place on 24 October this year at the National Motorcycle Museum near the NEC in Birmingham. Further information from David Corns, BIFCA Secretary, 6th Floor, The McLaren Building, 35 Dale End, Birmingham B4 7LN (tel: 0121 200 2100; fax: 0121 200 1306; e-mail: enquiry@bifca.org.uk; website: www.bifca.org.uk).

FURNACES EXHIBITION + CONFERENCE

Furnaces 2003, the premier UK exhibition for heat treatment technology, will take place on 4-5 March next year at the Stoneleigh Park Convention Centre near Coventry.

This is the 16th event in the series and it remains an established and successful show for the European furnaces industry. As on previous occasions, it will be held alongside a Wolfson Heat Treatment Centre conference, *Advances in Heat Treatment Processing* (March 5th), for which a call for papers has been issued. Once again, *Furnaces 2003* will provide an invaluable forum for the latest in process heating technology for the metals and materials industry.

Furnaces 2003 is organised by dmg business media in conjunction with *Metallurgia* magazine. For exhibitor information, contact Furnaces Marketing Department, Queensway House, 2 Queensway, Redhill, Surrey RH1 1QS, UK (tel: 01737 786611; fax: 01737 855469; e-mail: furnaces@uk.dmgworldmedia.com). Visitors can request tickets by e-mailing tickets@uk.dmgworldmedia.com.

HEF ACQUIRES DURFERRIT

The French HEF (Hydromechanique et Frottement) Group's recent acquisition of Durferrit GmbH now places the company as a world leader in supplying processes, materials and technical advice in the fields of heat treatment, thermochemical surface treatments and heat transfer.

As a result of the acquisition, the UK distributorship of Durferrit products has been transferred from Houghton plc to the HEF UK subsidiary, Techniques Surfaces UK Ltd. in Birmingham, with effect from April 1st this year.

Confirming that both Brian Beckett and Alan McLauchlan had joined the new Durferrit UK team from Houghton, General Manager Mark Florance said: "We look forward to maintaining the high standards

of service and quality that all Durferrit customers have come to expect".

The new contact details are: Durferrit UK, 20 Wood Lane, Erdington, Birmingham B24 9QL (tel: 0121 382 6839; fax: 0121 382 3524; e-mail: enquiries@durferrit.co.uk). The Regional Managers can also be contacted on mobile telephone numbers: 07710 880323 (Brian Beckett); 07710 880322 (Alan McLauchlan).

UNDERSTANDING HEAT TREATMENT

Wolfson's *Understanding Heat Treatment* course next takes place on October 15-17 at Aston University's Business School in Birmingham. For full details and registration forms, contact the Course Administrator, Wolfson Heat Treatment Centre, Aston University, Aston Triangle, Birmingham B4 7ET (tel: 0121 359 3611, ext.5212; fax: 0121 359 8910; e-mail: WHTC@aston.ac.uk).

SOLVENT USE FOR VAPOUR DEGREASING

Envirowise have released a Benchmarking Guide (BG334) entitled *Reducing Solvent Use for Vapour Degreasing in the Metal Finishing Industry*.

The survey shows that use of solvent for vapour degreasing has reduced by 35% in the last five years. Many of the companies surveyed had implemented simple measures to reduce their consumption. New legislation, such as the reclassification of trichloroethylene and the Solvent Emissions Directive, specifies stricter emission limits for solvents and companies need to review their arrangements. This leaflet provides some ideas on reducing solvent consumption and costs. For a copy, contact Dr. Jude Murphy, Metal Finishing and Surface Engineering, Envirowise (tel: 0800 585794; e-mail: jude.murphy@envirowise.gov.uk).

"THE HEAT TREATMENT REPORT"

Over 50% of CHTA members appear in the list of 110 heat treaters, industry suppliers and others said to be covered in the May

Advertising in *Hotline* – a bargain!

Readers are reminded that advertising in *Hotline* is open to both CHTA members and suppliers to the trade. A quarter-page ad, for example, is a bargain at a cost of only £100. For booking space or further details, contact CHTA's Secretariat.

Market Movements

ANALYSIS OF QUESTIONNAIRE REPLIES RELATING TO 36 CHTA MEMBER SITES

"THIS QUARTER" =

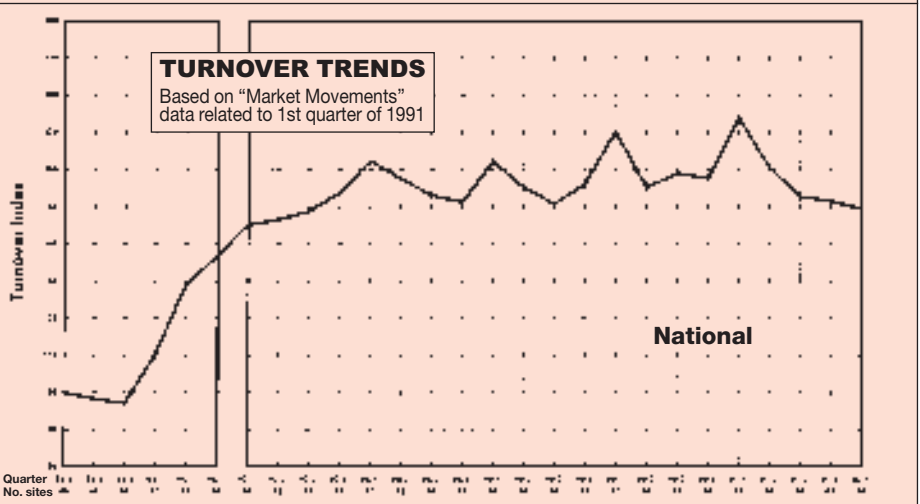
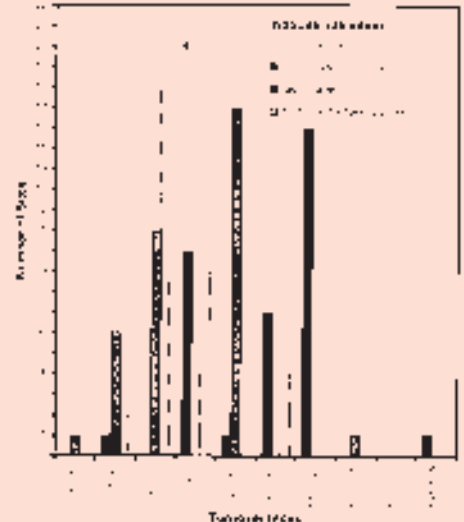
**1 JANUARY –
31 MARCH
2002**

= **TURNOVER INDEX 100**

National

OVERALL ANALYSIS
(36 SITES)

	Mean index
This quarter last year	111.3
Last quarter	101.5
Predicted next quarter	101.9



2002 edition of *The Heat Treatment Report*, an analysis of the last four years of company accounts in standardised format "for comparison on a like-for-like basis". For details, contact Merlin Scott Associates Ltd., Dunselma Castle, Strone, Dunoon, Argyll, PA23 8RU (tel: 01369 840643; fax: 01369 840363; e-mail: info@merlinscottassociates.co.uk; web: www.merlinscottassociates.co.uk).

HARDNESS MEASUREMENT CENTRE



A new centre of excellence for hardness measurement at the National Physical Laboratory (NPL) provides a calibration service and a source of advice and consultancy for industry whilst re-establishing the UK's influence in the development of international hardness standards. For details, contact NPL, Queens Road, Teddington, Middlesex TW11 0LW (tel: 020 8977 3222; fax: 020 8943 6458; website: www.npl.co.uk).

MTI

FIRST-QUARTER MTI BILLINGS DOWN

Based on returns from "participating members", the Metal Treating Institute reports that sales for North American heat treaters in the first quarter of this year declined by 8.4%, compared with the same period last year.

For the first three months of 2002, sales for the industry totalled \$220million; 2001's figure was \$240million. March billings for the industry reached \$75.9million, a drop of 9.6% from March 2001's sales of \$83.9million.