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CHTA Secretariat

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Alan J. Hick B.Sc., C. Eng., FIMMM

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



CHTA is affiliated to the Surface Engineering Association

OUTSOURCING

Outsourcing heat treatment is a no-brainer

...says **Debbie Mellor**, Managing Director of CHTA member **Keighley Laboratories Ltd.**, administration and call-handling. Now there is a move toward knowledge process outsourcing (KPO), which represents a **Cuts processing costs** – it's a matter of economies of scale. We heat treat components for hundreds of customers and are

The case for outsourcing in today's economy



Bodycote's John Jervis looks again at a frequent Hotline theme.*

The change from captive heat treatment to an outsourced option is not one entered into lightly by our industry partners; it is a 'once-in-a-generation' decision.

Over a number of years, within *Hotline*, there have been many fine and detailed articles on the subject where we have highlighted all the benefits of

**John Jervis is Bodycote's UK Heat Treatment Sales Manager - Aerospace, Defence & Energy. He is also a member of CHTA's Publicity Subcommittee.*

outsourcing. With UK manufacturing sectors showing the growth levels as reported, I thought the timing now appropriate to revisit this topic.

There have been many examples of major businesses in key manufacturing markets, such as aerospace, automotive and power generation, including primes and 1st-tier suppliers, which have made the decision in favour of outsourcing in order to focus their efforts, skills and funds on their core business activities.

In recent years, and certainly since 2008, experience suggests that decisions to move from captive to outsourced have been taken under significant cost pressures from the recession and/or declining market sectors. Whilst this has resulted in

Continued on page 3...



Guido Plicht
Industry Manager,
Metals Processing

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The case for outsourcing in today's economy

Continued from page 1...

significant additional business to the incumbent process supplier, in many cases it has been short lived as it was a precursor to further business decline or the business itself relocating to lower-cost economies.

The decisions taken were purely economic, rather than the rounded decision-making process expected and required by a business when comparing the service levels, investment, quality, approval requirements, future proofing, flexibility, etc.

New opportunities

With the UK economy now back in growth in many markets, there are both new opportunities and risks associated with the outsourcing versus 'in-house' processing decision. Do manufacturing businesses invest to increase capacity and replace outdated equipment, do they outsource totally, or do they place their additional requirements through subcontracted services?

Existing large users of subcontract processing may now consider that their process spend potentially justifies an in-house investment, based on their outlook for growth and because it provides them with more control by doing the work in-house.

In such cases, subcontract providers can benefit from the following approach:

Reinforce continued and improving service levels (key performance indicators) for the work undertaken, ensuring colleagues are totally customer focused in all activities. Increase the frequency and quality of day-to-day account management and communication activities to personnel at all touch points in the customer/prospect journey.

Identify the decision-makers within potential customers' businesses and educate them on the benefits of outsourcing so that the real costs, which in many cases may be set within their company overheads, can be understood. Often, the costs of in-house heat treatment are misunderstood; for example:

- **Energy and carbon footprint:** The real cost of processing is energy - we know it, it's our business – and we know what

percentage of our costs energy represents! Energy is the biggest individual cost of heat treatment so the carbon footprint can be reduced through outsourcing and further with the use of the most efficient furnaces being utilised effectively.

- **Capital expenditure:** The full costs of capital purchase need to be understood, together with the hidden associated costs of installation, upgrades and enhancements.
- **Quality:** Do they understand the real costs of achieving and maintaining all the appropriate approvals? Nadcap, AS9100, TS16949, CQI-9 etc.
- **People:** The costs of finding, securing and retaining technical and quality personnel cannot be underestimated. Within the industry, we know how difficult it can be to attract and retain qualified, trained and experienced people.
- **Efficiencies:** The benefits of our economies of scale of 24/7 processing, compared with in-house, need to be reiterated; the cost of underutilised equipment can be an extremely expensive luxury.
- **Flexibility and agility:** In-house operations are unlikely to be able match our range of processes and equipment sizes or be able to meet reduced or increased economic batch quantities and respond to changes to new products, materials and specifications.
- **Value focus:** Have they considered the value of their workspace if focused on their core activities for adding value?
- **Industry knowledge:** Access to knowledge, experience, new processes and technologies.
- **Risk mitigation:** The benefits of risk sharing and mitigation by entering into the appropriate agreements.

All the above points have been discussed before in detail within our *Hotline*. The growth potential in our economy now presents the opportunity for all CHTA members to succeed, to invest and fully utilise equipment for the growing customer base. Now is the time to make the case for the validity of outsourcing, prior to the next 'once-in-a-generation' decisions being made.

Coming soon...

14-16 October 2014
UNDERSTANDING HEAT TREATMENT



Readers are reminded that Wolfson Heat Treatment Centre's course is being repeated again this year at SEA's Federation House headquarters in Birmingham.

The aim of *Understanding Heat Treatment* is to convey a general appreciation of the metallurgical/technological background to industrial heat treatment processing. It examines the various processes, how they are carried out and controlled, what they seek to achieve in structures and properties, and the problems that can be encountered. With the emphasis on steel heat treatment, talks are presented, in the main, by speakers from industry. The following topics will be covered:

- basic metallurgical theory of heat treatment;
- quenching principles and practice;
- surface hardening theory and practice;
- furnace types, materials and heating methods;
- temperature measurement and control;
- salt-bath heat treatment;
- controlled-atmosphere heat treatment;
- vacuum heat treatment;
- fluidised-bed heat treatment;
- quality control/assurance in heat treatment;
- computer software to assist the heat treater.

For full registration details, contact Derek Close, Wolfson Heat Treatment Centre, Federation House, 10 Vyse Street, Birmingham B18 6LT (tel: 0121 237 1122; fax: 0121 237 1124; www.sea.org.uk/whct; e-mail: derek.close@sea.org.uk).

LOOKING FOR SPECIFIC HEAT TREATMENT CAPACITY?

Where a job is proving difficult to source, the "Ask the Members" page on CHTA's website allows the visitor to ask all CHTA members if they have appropriate capacity. Once submitted, such an enquiry is e-forwarded to members instantly; any able to help reply directly.

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R&D tax credits scheme

Tax relief can be attainable on the costs of routine heat treatment process development / proving trials. Dominic Bartholdi of Leyton UK explains...*

Research and development (R&D) tax credits, designed to stimulate innovation, growth and more efficient ways for British companies to operate, is one of the most complex pieces of legislation on the UK statute books. For over a decade, the scheme has been the key incentive for attracting foreign direct investment to the UK as well as encouraging domestic R&D activity. From a tax perspective, the R&D tax credits help stimulate the economy, through a scheme that can offer businesses significant reductions on their tax bills.

Small and medium enterprises (SMEs) can deduct up to 225% of their eligible R&D expenditure from their taxable profits. SMEs in a loss-making position can claim up to 33% of their eligible expenditure as a payable tax credit, from HM Revenue and Customs (HMRC). Potentially, this can deliver a significant cash source.

Large companies can either deduct up to 130% of their eligible R&D expenditure from

*Assisting companies with their R&D claims, Dominic Bartholdi is a Commercial Partner at Leyton UK (www.leyton.com/uk/). Contact him on 020 3384 0832.

their taxable profits or claim a tax credit of up to 10% of their eligible R&D expenditure. Regardless of the size of the company, it can potentially make an R&D tax relief claim on expenditure in the previous two accounting periods.

“...not just for companies with R&D departments and researchers in white coats.”

The government R&D tax credits scheme is not just for companies with R&D departments and researchers in white coats. Indeed, you may be surprised to discover that any company that spends money trying to improve a product or service through a technological advance, using qualified staff and appropriate project controls, and where there is doubt about the project success, is likely to be eligible. Therefore, failure on a particular project is a solid identifier for R&D.

The key to a successful claim is that companies need to demonstrate that they have carried out projects in the qualifying period that seek to achieve an advancement in a field of science or technology. The relevant

R&D project need not be ground-breaking or warrant a Nobel Prize.

Rather, it should represent a non-trivial challenge that cannot be readily resolved by a competent professional within the relevant field.

Such an initiative may translate into situations where companies add new functions or features to an existing flagship product. These functions or features may enhance consumer experience, improve an existing operational process to achieve significant cost savings or duplicate the effect of an existing service in a substantially-improved way through the deployment of technology.

It is reasonable to accept that not every accountant or professional financial adviser will be familiar with all the ins and outs of the scheme. Some may be experts in R&D tax, some may know a little while others may have only heard of it. There may even be a few that have never heard of it at all.

While significant changes have been made to enhance the scheme since its inception, it still remains a highly complex process, resulting in many companies not claiming to their full potential. The process requires clear and precise identification and documentation of R&D projects and expenditure, specialist knowledge of eligibility rules and an in-depth understanding of the legislation and HMRC guidelines. Therefore, outsourcing this mission to a R&D tax credit specialist – such as Leyton – is essential in optimising your claim.

R&D tax relief for CHTA member



*Managing Director
Simon Day*
recounts how ADI
Treatments has used
the services of R&D
tax specialist Leyton to
identify and claim a
substantial corporation
tax rebate.*

CHTA Member ADI Treatments, the West Bromwich-based specialist in batch austempering processes, seeks growth by way of substitution of existing materials and traditional processes.

Like many businesses, we did not realise that large elements of background work developing new customers could qualify for R&D tax relief. We just naturally did what we needed to do in order to grow and didn't think of this activity in terms of R&D.

However, following a chance meeting with a UK-based customer at a show in Germany (of all places), the conversation

touched on their successful R&D corporation tax rebate and suggested ADI explore this avenue, as it could prove fruitful.

The usual time constraints and, at first glance, daunting complexity of the government's R&D tax scheme, meant that it was unlikely ADI would be able to prepare a claim with the in-house resources at its disposal. The option was to involve one of the specialists in this field, whose fees can be up to 25% of any successful claim.

Following exploratory meetings, it was decided to appoint Leyton to manage the R&D tax claim process. Leyton's graduate engineers showed a quick grasp of the technical aspects of the business, which gave ADI the confidence to engage in the process.

“...a corporation tax rebate of around £70,000.”

Leyton follow an established four-step procedure in order to develop and support the claim:

1. Technical analysis - through a series of interviews they help determine the activities qualifying for R&D tax relief.
2. Financial analysis - records are interrogated to identify the expenditure incurred on the qualifying activities, both in-house and external.
3. Documentation - a comprehensive report is produced giving a narrative along with supporting documents in order to secure the claim.
4. Support - provide full assistance, free of charge, in defending the claim in the event of an HMRC compliance audit.

The whole process initially took around three weeks to develop to the point of making the claim. Subsequent claims can be produced a little quicker once the business's *modus operandi* is established and understood.

It's worth noting that up to three previous tax years can be claimed retrospectively and not just the last financial year!

ADI, with the help of Leyton, were able to identify total qualifying expenditure (including the R&D uplift of 125%) of approximately £300,000, which translated into a corporation tax rebate of around £70,000. This is obviously very helpful and easily justifies the time investment of senior staff.

*Simon Day is a member of CHTA's Management Committee.

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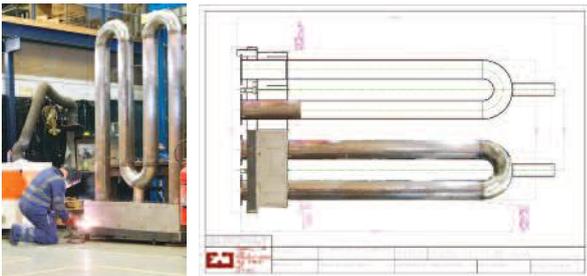
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Hotline welcomes advertising (other than recruitment) from CHTA members and suppliers to the trade.

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Series advertisers also feature on the new Suppliers page of CHTA's website at no extra charge.

Booking deadline for December's *Hotline* 138: November 12th
For further details, contact *Hotline* Editor Alan J. Hick
Tel: 0121 329 2970; e-mail: mail@chta.co.uk

Member news

WALLWORK REBRAND CAMBRIDGE COATINGS DIVISION

Thermal processing and specialist coatings company Wallwork chose Farnborough Airshow to announce the new identity for their Tecvac division. Rebranded as Wallwork Cambridge, the company will continue to be a centre of excellence for research, development and application of advanced coatings for aerospace, motorsport, medical devices and other demanding industries.

Sales and marketing director Simeon Collins explained: "We acquired Tecvac 18 years ago to give the group capability in this growing field. Relocating to new purpose-built premises the following year, we began a programme to create a skilled team of scientists and engineers working with the most advanced surface coating technology. The rebranding recognises that the company is a core part of the Wallwork Group, serving aerospace and other technologically-pioneering industries."

In addition to the application of specialist coatings to improve the hardness, lubricity and other critical properties of metal components, Wallwork Cambridge also builds the PVD machines used in this process. These bespoke machines are chosen around the world by university material science departments, metallurgical laboratories and manufacturers for their advanced research and development programmes.

Machine building will continue at Cambridge. Recognising the value of the Tecvac brand to this important customer base, the PVD machines will continue to bear the Tecvac name.

A recent addition to facilities at Cambridge



Wallwork Cambridge also builds PVD machines, which will still carry the Tecvac brand name.

has been the creation of a specialised manufacturing unit for brazed components. This has a complete capability, from development work and batch production to large-scale volume production.

In addition to offering their own unique coating services, Wallwork Cambridge is the official UK partner of the German coating specialist CemeCon. As such they are the only accredited supplier in the UK for their patented processes.

Other news

GLOBAL HEAT TREATMENT NETWORK

A number of the largest commercial heat treaters in the world were present at the Global Heat Treatment Network's first annual *Heat Treatment Forum* staged in April in Wroclaw, Poland. More than 200 registered participants attended the lectures and technical sessions and there were over 30 exhibitors.

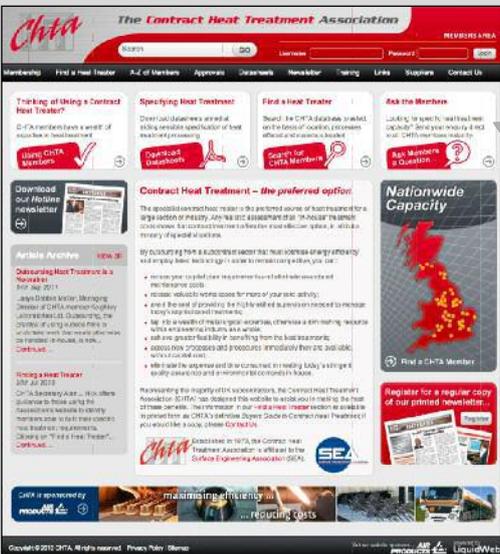
The relatively-new Global Heat Treatment Network, encompassing worldwide "hands-on" heat treatment professionals, offers support in a variety of areas including the organisation of heat treatment conferences and exhibitions. Currently, the following

events are planned:

- *European Nitriding Summit* (www.nitriding-summit.com), 8-9th October, 2014.
- *European Vacuum Carburising Summit* (www.vacuum-carburizing-summit.com), 4-5th December, 2014.
- *European Brazing Summit* 21st April, 2015.
- *2nd European Heat Treatment Forum and Expo* (www.heat-treatment-forum.pl/homepage/), 22nd-23rd April, 2015.
- *European Heat Treatment Controls and Simulation Forum*.
- *European Induction Meeting*.
- *European Aerospace Heat Treatment Summit* (October 2015).
- *European Heat Treatment Maintenance Summit* (December 2015).
- *Asian Nitriding Summit* (India, Autumn 2015).
- *Asian Vacuum Carburising Summit* (India, Autumn 2015).
- *American Summits* (Mexico, in late 2015/2016).

The first edition of each European summit or meeting will take place in Poland, as a Central European location and heart of new market developments, and ultimately move to the other countries of Central Europe (including Germany) to become a biennial European event and alternate between Europe, Asia and North America.

The Global Heat Treatment Network sees its fledgling website (<http://global-heat-treatment-network.com/en/>) as becoming the worldwide exchange and communication platform for the global heat treatment community; for equipment manufacturers, component suppliers, commercial heat treat shops, service, repair and maintenance enterprises, spare-part suppliers, consulting companies and all their clients.



Looking for specific subcontract heat treatment capacity? ...

Ask the Members

Looking for specific heat treatment capacity? Send your enquiry direct to all CHTA members instantly

Ask Members a Question...




... post your enquiry on "Ask the Members" at www.chta.co.uk

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Selecting a heat treater

Identification of those UK subcontractors able to meet specific heat treatment requirements is made easy by the website operated by the Contract Heat Treatment Association (CHTA).

Clicking on "Find a Heat Treater" at www.chta.co.uk takes the visitor to a



constantly-updated searchable database that enables easy identification from over sixty CHTA members providing various subcontract heat treatment services nationwide. Selection, based on processes offered, materials treated and location, results in a list of names of appropriate companies; clicking on a name yields full details of the company, with direct access to its own website. Enquiries can be submitted to one or more of the chosen companies with a single click.

Processes
The "Find a Heat Treater" database covers over forty heat treatment and ancillary processes from which the visitor can select. Where appropriate, the search can be refined in order to specify the preferred processing medium in which a heat treatment is conducted.

Approvals
All companies featured in the database are members of the CHTA and, as such,

are pledged to maintain the highest standards of quality and service. ISO 9001 is currently the universally accepted quality accreditation, but many members hold additional quality approvals from major organisations, which are especially relevant in particular market sectors.

National and international accreditations/certifications held by CHTA members (such as ISO 9001, ISO 14001, AS 9100, CQI-9, ISO/TS 16949 and Nadcap) are listed on the "Approvals" page of the website.

Ask all the members instantly
Where a job is proving difficult to source (say, because of size or other special requirements), the "Ask the Members" page on CHTA's website allows the visitor to ask all CHTA members if they can offer appropriate specific capacity. Once submitted, such an enquiry is e-forwarded to members instantly; any able to help reply directly.

Specifying Heat Treatment
Clicking on "Specifying Heat Treatment" or "Datasheets" at www.chta.co.uk

accesses CHTA's series of "Datasheets for Non-heat-treaters", guides aimed at aiding sensible specification of subcontract heat treatment processing and avoidance of common problems. Couched in layman's terms, they answer the questions: What are the treatments? What are the benefits? What materials can be treated? What are the limitations? What problems could arise? How do I specify? Where do I go? In response to the last question, the datasheets recommend advantage be taken of the expertise of the CHTA member companies listed at www.chta.co.uk.

Hotline
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Spreading the word

With the aim of publicising the services offered by members more widely, the articles seen here, extolling the virtues of using CHTA's website, have recently been published in:

- the April edition of *Process Engineering Control and Maintenance* (<http://issuu.com/mhmediaglobal/docs/pecm314>);
- the June issue of *Industrial Process News* (www.industrialprocessnews.co.uk/issues/628.pdf).

Promoting Hotline

In turn, CHTA members can aid the cause by:

- Nominating additional recipients of *Hotline*. In light of this issue's lead article, contacts at companies operating in-house heat treatment are particularly relevant. Suggestions to mail@chta.co.uk please.



Prospective readers can also register for a regular copy on our website at www.chta.co.uk.

Readers are reminded that *Hotline* back issues can be downloaded from the website by clicking on "Newsletter".

- Encouraging suppliers to advertise in *Hotline* and participate on our website "Suppliers" page (no extra charge for series advertisers).



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National Heat Treatment Centre Ltd

CHTA's newest member introduces itself...

The National Heat Treatment Centre (NHTC) began life in University College Dublin in 1993 as a funded research centre led by David Collins, a lecturer in Metallurgy in the Mechanical Engineering Department. To help finance the research operation, it offered contract heat treating services and metallurgical analysis to the engineering industry, predominantly the emerging tool-making sector.

In 2003, David Collins took early retirement due to illness and, as the contract heat treatment part of the operation was growing, UCD decided to "spin out" the complete Centre.

In 2004, NHTC Ltd, now a fully commercial entity with no research funding or subsidies, moved to the Sandyford Industrial Estate in Dublin. As the business continued to grow, under the guidance of General Manager John Fitzgerald, a move to larger premises was needed. In 2007, work commenced on a 10000ft² purpose-built factory on a green field site in Naas, Co. Kildare. The move to the



new site, located just off the M7 motorway connecting Dublin to Limerick and Cork, was fully completed in 2011.

The operation at the new factory allowed NHTC to increase the range of services offered to its customers. Currently the company offers a comprehensive array of heat treatments including vacuum hardening and annealing, oil hardening, polymer quenching, nitriding, nitrocarburising, carburising, carbonitriding, nitro-blackening and stress relieving. These processes are carried out with the latest controllers and data-recording equipment regulating each of the furnaces.

Following most of our customers' requirements for "traceability", we have implemented a comprehensive computer-based batch-recording system as part of our quality management system (QMS). This system allows us to link continuously recorded on-line process data with furnace batches, job numbers and operators.

NHTC's QMS is certified to ISO 9001: 2008. We are also rigorously audited by some of the major international companies in the oil and gas, pharmaceutical, medical-device and automotive industries, to whom we are an approved heat treatment supplier.

The NHTC also offers metallurgical services which include hardness/micro-hardness/tensile testing, metallography, chemical analysis and failure analysis.

NHTC works closely with its customers, from the design stage, to develop the correct steel grade and/or process to produce the optimum results for a given application. The Centre is customer-focused and offers fast turnaround combined with a quality of service meeting the customer's exacting requirements.

The NHTC (www.nhtc.ie) is proud to be the first Irish company to be admitted into the CHTA.

ADVERTISER PROFILE

Fabwell Ltd

Hotline's new regular advertiser is profiled by Owner Director Jim Smith.

Fabwell Ltd was incorporated in December 2003 with, at that time, the sole aim of purchasing the business of Fabwell Engineering Ltd.

Following a successful takeover that completed in February 2004, it was decided that, for continuity, we would operate from the existing premises in Lye, West Midlands, employing the three remaining skilled fabricators and a driver.

It was our stated ambition to compete on level terms with the best that our industry had to offer, serving our customers with: proven quality, service, engineering excellence and responsiveness to customer need; unrivalled health/safety and quality management; experienced qualified employees, operating from state-of-the-art manufacturing facilities, delivering quality products on time at a competitive price.

Brave dreams and braver ambitions! Just a little on from our tenth anniversary, we can now claim to have built the dream and delivered on our ambitions as specialists in heat- and corrosion-resistant alloy fabrications, furnace spares, repairs and modifications.

In June this year, we moved into a modern factory totalling 15000ft², with 12000ft² of manufacturing space. We now employ over

twenty skilled coded welder/fabricators plus professionally-qualified metallurgical and mechanical engineers, CAD design engineers, CSWIP and Gas Safe engineers. Our employees have an average age of 42 years, young enough to have modern qualifications but old enough to be experienced.

We are qualified to ISO 9001:2008. We also hold CHAS accreditation and are registered as Gas Safe; we believe we are the only organisation in our market sector to hold these accreditations.

Our new manufacturing facility in Halesowen has been totally refurbished to include a new overhead travelling 5-tonne crane, servicing all parts of the manufacturing workshop, with new discreet LEV and weld sets to all welding

bays. Latest-technology extraction gives 10.5 air changes per hour.

Unrivalled health and safety management is achieved by strict compliance to legislative requirements and needs driven by customer and Fabwell requirements. Compliance is managed by a formal audited system, developed and implemented by our full-time professionally-qualified health and safety manager.

Finally we thank our customers who supported us at our recent open day; we really appreciated your coming. If anyone missed this opportunity but would like to visit, please contact us (www.fabwell.co.uk); we would be honoured to give you the guided tour.

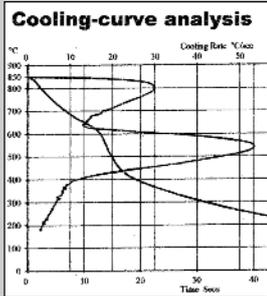


Fabwell staff pictured at the company's July 16th Open Day: Sophie Robins, Accounts Assistant; Phil Holt, Foreman; Dean Geary, Sales Director; Joe Fellows, CAD Engineer; Paul Dickens, Managing Director; Jim Smith, Owner/Financial Director; Doug Smith, Director.

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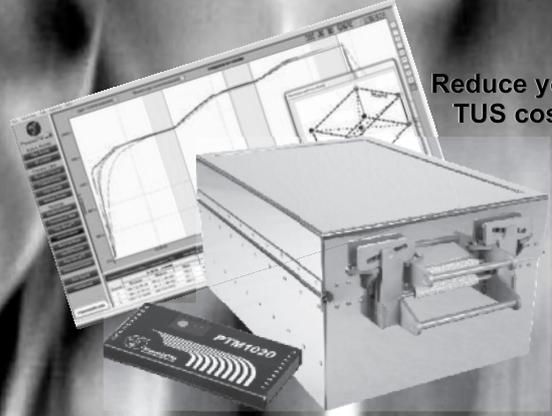
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Diary

September 23-25 2014
17TH SEMINAR "NEW TRENDS IN HEAT TREATMENT", Zielona Gora, Poland
www.secowarwick.com/en/news-events-and-information/seminar/

September 30 2014
BIFCA course: INTRODUCTION TO INDUCTION HARDENING
 West Bromwich, England www.bifca.org.uk

October 6-8 2014
SEMINAR "NEW TRENDS IN HEAT TREATMENT"
 Lyon, France
www.secowarwick.com/en/news-events-and-information/seminar-france/

October 8-9 2014
EUROPEAN NITRIDING SUMMIT 2014
 Wroclaw, Poland
 Conference organised by the new Global Heat Treatment Network: www.nitriding-summit.com

October 11-13 2014
2ND INTERNATIONAL CONFERENCE ON ENERGY AND THE FUTURE OF HEAT TREATMENT AND SURFACE ENGINEERING, Beijing, China
<http://2ndefhtse.csp.escience.cn/dct/page/1>

October 14 2014
BIFCA course: FURNACE & BURNER CONTROLS
 West Bromwich, England www.bifca.org.uk

October 14-16 2014
UNDERSTANDING HEAT TREATMENT
 Birmingham, England [See page 3](#)

October 14-16 2014
11TH CHINA INTERNATIONAL HEAT TREATMENT EXPO
 Shanghai, China www.cihtexpo.com/en/index.asp

October 17 2014
SEA AWARDS, London, England
www.sea.org.uk/awards-2014/surface-engineering-awards-2014.htm

October 22-24 2014
70TH HÄRTEREIKONGRESS, Cologne, Germany
 New venue for the heat treatment congress/exhibition, with simultaneous German/English translation:
www.hk-awt.de

October 23 2014
CHTA PUBLICITY SUBCOMMITTEE*
 Birmingham, England

October 27-28 2014
NADCAP AUDIT PREPARATION – HEAT TREATING
 Birmingham, England
www.equalearn.com/learncenter.asp?id=17849

October 29-30 2014
INTRODUCTION TO PYROMETRY
 Birmingham, England
www.equalearn.com/learncenter.asp?id=178409

November 6 2014
CHTA MANAGEMENT COMMITTEE*
 Birmingham, England

November 18-19 2014
BIFCA course: INDUSTRIAL FURNACE TECHNOLOGY
 West Bromwich, England www.bifca.org.uk

November 25-27 2014
25TH NATIONAL CONFERENCE ON HEAT TREATMENT, Jihlava, Czech Republic
www.asociacetz.cz/conference-en.html

December 1-2 2014
INTRODUCTION TO PYROMETRY
 Birmingham, England
www.equalearn.com/learncenter.asp?id=178409

December 4-5 2014
EUROPEAN VACUUM CARBURISING SUMMIT 2014
 Wroclaw, Poland
 Conference organised by the new Global Heat Treatment Network: www.vacuum-carburizing-summit.com/homepage/

**Members wishing issues to be raised at CHTA meetings should notify CHTA's Secretary, well beforehand, at mail@chta.co.uk*

Market Movements

ANALYSIS OF QUESTIONNAIRE REPLIES RELATING TO 29 CHTA MEMBER SITES

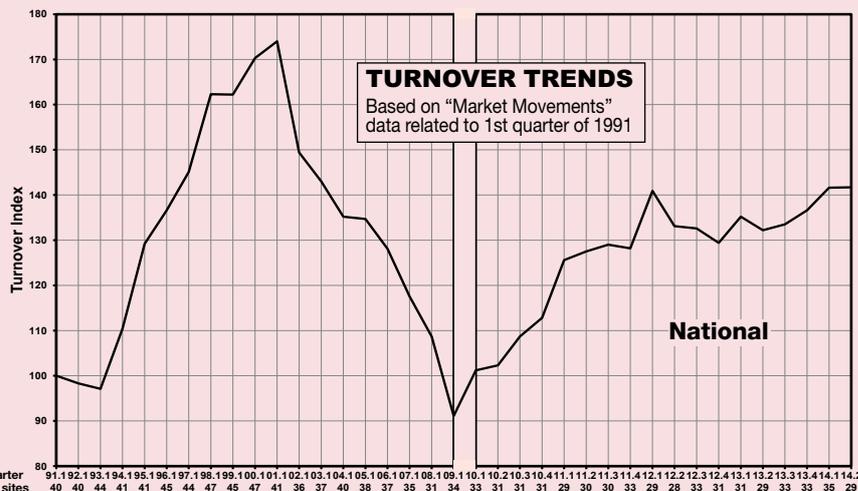
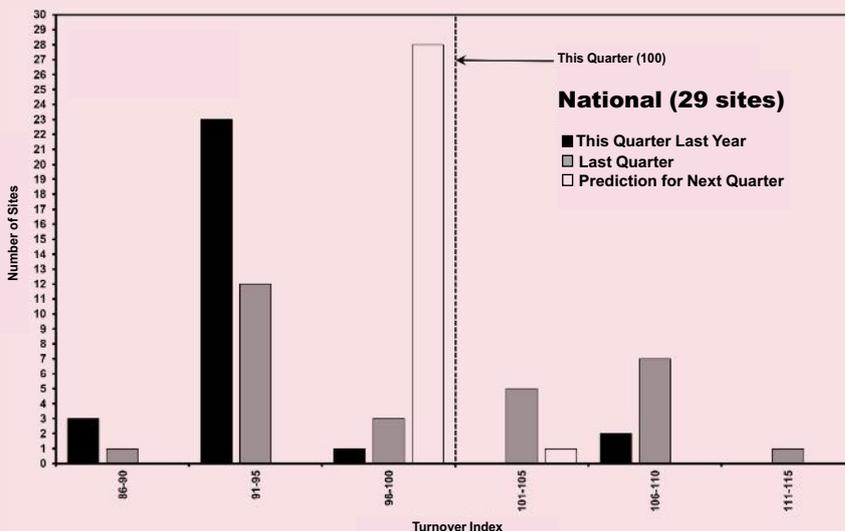
"THIS QUARTER" =

1 APRIL – 30 JUNE 2014

= TURNOVER INDEX 100

OVERALL ANALYSIS (29 SITES)

	Mean index
This quarter last year	93.8
Last quarter	99.9
Predicted next quarter	98.4



STATESIDE STATS

NORTH AMERICAN HALF-YEAR SALES UP 2.9%

CHTA counterparts participating in the Metal Treating Institute's Monthly Sales Statistics Program reported year-to-date heat-treating sales, up to and including June 2014, of \$459.7million, an increase of 2.9% from the \$446.7million recorded for the January-June period of 2013. June billings amounted to \$78.8million, up by 8.5% compared with June 2013's \$72.6million.

The latest returns indicate July sales of \$78.1million, an increase of 9.2% from July last year when billings amounted to \$71.5million.

NICKEL PRICE (US\$/lb)



Please send comment and news items for December's Hotline 138 to: mail@chta.co.uk
 Deadline: November 19th