



SURFACEMATTERS

YOUR INFORMATION SOURCE FOR THE SURFACE ENGINEERING INDUSTRY

SPRING 2022



CHEMUK 2022 EXPO

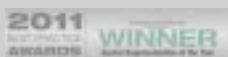
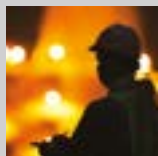
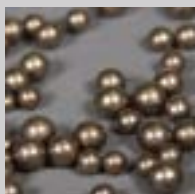
INNOVATIONS IN
SURFACE ENGINEERING
TO ACHIEVE NET ZERO
BY 2050

NICKEL SUSPENSION
UPDATE

SPONSORED BY



SAFECHM
be responsible



This publication has been printed on paper sourced from sustainable forests.

The details contained within this newsletter were accurate at time of going to press. The Surface Engineering Association cannot be held responsible for any errors or omissions.

CONTENTS

- 03. CHAIRMAN'S COLUMN
- 04. ADVANCED ENGINEERING 2022
- 06. CHEMUK 2022 RETURNS IN MAY
- 09. SAFECHEM - THE RIGHT CLEANING MEDIUM?
- 10. EUROPEAN REGULATION INNOVATION FORUM
- 11. INNOVATIONS IN SURFACE ENGINEERING TO ACHIEVE NET ZERO BY 2050
- 12. NICKEL SUSPENSION UPDATE
- 15. HSE SAFETY NOTICE ISSUED
- 16. PERSONAL PROTECTION EQUIPMENT AT WORK REGULATIONS
- 19. CITATION - MANAGING SHORT-TERM SICKNESS ABSENCE
- 20. TWELFTH INTERNATIONAL CONFERENCE ON FUNDAMENTALS AND INDUSTRIAL APPLICATIONS OF HIPIMS 2022
- 22. CRONER - EMPLOYMENT LAW CHANGES IN APRIL 2022
- 24. NEW MEMBER - IHOLLAND
- 25. NEW MEMBER - LAKE ENGINEERING SOLUTIONS
- 26. ADVERTISE WITH THE SEA

You will now find the Business Trends / Pricewatch survey results and the British Standards updates in the Members' area of the SEA website:

www.sea.org.uk



CHAIRMAN'S COLUMN

As the UK heads out of the pandemic, the bright shoots of recovery are being dulled a little by the awful situation in Ukraine, along with the human and political cost there is also the impact on our sector from the accelerated rise in metal and energy costs which have been brought on by this situation. We, like many, hope that this situation is resolved as quickly as possible and without further loss of life.

The SEA has been working during the winter to get the REACh Chrome Re-authorisation groups ready for a challenging year, alongside this our BSTSA team joining the Surface World exhibition, and our training committee is working on some new videos for new starters in Surface Engineering.

At a Government level our CEO, David Elliot, is working to help get energy costs down, and if you want to know how you can help, please contact the office.

Finally, some good news. SEA membership is on the increase, with our broadening remit regarding REACh there are more surface engineers joining our community to take advantage of member support and benefits.

I hope by my next 'Chairmans Letter' that the Ukraine situation is resolved, and we are able to start planning for more face to face functions, but in the meantime the SEA is here to support you.

Rob Sawyer

SEA Chairman



ADVANCED ENGINEERING 2022



Following on from the success of the Advanced Engineering 2021 show, we have booked the SEA pavilion for 2022.

Advanced Engineering 2022 will take place on Wednesday 2nd and Thursday 3rd November, at NEC, Birmingham.

The SEA pavilion will be located at Stand L120 in the advanced metals engineering section, between aero and automotive.

We have agreed to subsidise some of the cost, and as a result we are offering members pods at a cost of £1500 excl Vat, with corner pods priced at £2000 excl Vat.

All companies within the pavilion will receive the GOPLUS package worth £1,250 at no extra cost (access to full marketing campaign and onsite lead capturing devices), which includes:

- Increase your press and community visibility
 - Post jobs
 - Get a list of visitors who asked for your literature*
 - Capture visitor contact details onsite
 - Get real-time alerts when your visitors arrive
 - Participate in the "Ask the Expert" online forum
 - Display your company logo onsite
- Get access to My Easyfairs
 - Display your company profile online
 - Display your products/services online
 - Distribute digitally your literature at the event*
 - Invite your customers and prospects
 - Get contacted by visitors
 - Display your logo online on the exhibitor list
 - Highlight a product online
 - Get visibility in Easyfairs emails



*Visitors can collect information by simply touching the reader(s) placed on your stand with their smart badge. They will receive all the company and product information that you uploaded to My Easyfairs via email at the end of the day.

Take a look at our video testimonials from exhibitor's within in the pavilion at Advanced Engineering 2021 here
<https://www.sea.org.uk/blog/advanced-engineering-2021-2/>.

Contact us on 0121 237 1123 or at info@sea.org.uk for more information, to book or join membership. You can view our latest subscription rates and membership information at <https://www.sea.org.uk/membership-join-the-sea/>



CHEMUK 2022 EXPO

RETURNS THIS MAY

VISITOR REGISTRATION IS NOW OPEN

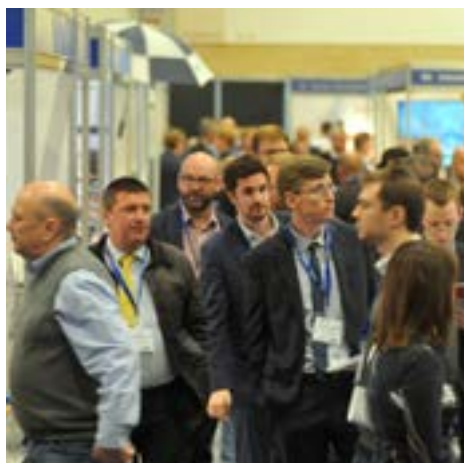
The CHEMUK 2022 EXPO returns on the 11th & 12th May 2022 at the NEC in Birmingham. The event, now established as the UK's only major expo for the UK chemical industries, will showcase 350+ specialist exhibitors and 150+ expert speakers across two co-locating shows; 'The Chemical, Process & Plant Engineering Show', and 'The Chemical Industries Supply Chain Show'.

The Chemical, Process & Plant Engineering Show will feature specialist exhibitors and speakers showcasing and discussing latest innovation covering process, plant & flow technologies; control valves & actuators; thermal technologies; digitisation & automation; chemical metering & dosing, materials handling, filtration & separation... plus lots more.

Industry partners supporting this show include BPMA - The British Pump Manufacturers Association, BVAA - The British Valve & Actuator Association, Process Intensification Network; CPI - Centre for Process Innovation, GAMBICA, NEPIC, TSA - Tank Storage Association and the UK Gasket & Sealing Association.

The Chemical Industries Supply Chain Show will present chemical industry supply chain organisations specialising in chemicals, raw materials & ingredients; logistics and transportation; HSE management & regulatory compliance; contract, toll & outsourcing; and business services.

Industry partners supporting the supply chain show include CBA - Chemical Business Association; Chemical Northwest & Chemical Industries Association; BASA - British Adhesives & Sealants Association, BCMPA - The Association for Contract Manufacturing, Packing, Fulfilment & Logistics; Composites UK; CATCH; British Surface Treatment Suppliers Association (BSTSA); SIA - Solvents Industry Association; and UKLA - United Kingdom Lubricants Association.



Show organiser, Ian Stone, comments:

"CHEMUK is deliberately set out to be a total industry meeting point, creating a fusion of cross-sector energies, inputs and connectivity, however we also recognise the contrasting needs of attending 'engineering & plant technical management' and the wider 'industry supply chain' focused attendees, on themes such as supply chain chemicals & ingredients, logistics & outsourcing, HSE, regulatory compliance, R&D management and more..."

Separating into two complimentary yet contrasting exhibition shows can only help to get attendees locked into discussions with their primary targets quicker, as well as providing an easy 'under one giant roof' experience to take in the broader trends of the sector"

New for 2022:

CHEMLAB Programme - Developing on last year's laboratory related content, CHEMUK 2022 will present the 'ChemLab Programme' showcasing specialist exhibitors providing laboratory solutions & services embracing research & development; testing & analysis; process design & optimisation; and QC/QA laboratory testing.

Sustainability Stage (sponsored by Uniper) –

Hosting panel sessions and feature presentations embracing critical themes such as chemical recycling and sustainable chemical processing, together with 'Green Chemistry' innovation and transition to bio-based products.

'CHEM 4.0' Stage (sponsored by ABB) - Reflecting the tectonic shift towards digitized operations, CHEMUK 2022 will present a

dedicated speaker programme covering Digital Adoption strategies; Process Automation & Robotics; Big Data & Process Data Management, AI & Deep Learning, IIoT/VR, Digital-driven sustainability, and lots more.

'Bio- Innovation Poster Zone' – Bringing together illuminating 'poster displays' from start-ups & research groups, from across the rapidly evolving 'biochemical/industrial biotech' landscape. Supporters of the zone include BioVale, BioRenewables Development Centre, BioYorkshire, IBiolc and the Cosmetics Cluster

Royal Society of Chemistry Member's Event –

The RSC will be heavily involved in the show once again this May. We are delighted to announce that the RSC President-Elect, Professor Gill Reid, has been confirmed to keynote on Wednesday. The RSC will also be hosting a member's drink reception on Networking Area 2 at 17:00 on 11th May.





**Visit us at stand N54 to discuss
how we can help your business.**

Who Should Attend?

Targeting chemical & process specialists and sector management teams embracing chemical synthesis, formulation / blending and manufacturing / processing segments – including:

- **Chemicals Processing groups:**
Basic petro/organic/inorganic & speciality chemicals/intermediates/agrichem etc
- **Chemicals Supplier groups:**
Basic organic / inorganic & specialist chemicals / intermediates/agrichem etc

- **Chemical R&D/Synthesis Development groups**
- **Chemical Products:**
Consumer, Industrial and Institutional
- **Chemical contract/toll synthesis or manufacture groups**
- **Supporting UK Chemical Sector Supply groups:**
Tech/Plant/Equipment/Specialist Support Services
- **Chemical User Industry Groups**



CHEMUK 2022 takes place on:

Wed 11th & Thu 12th May 2022

NEC - National Exhibition Centre,
Birmingham, B40 INT

Day 1: 9.30am – 5.00pm

Day 2: 9.30am – 4.00pm

Register for your FREE entry badge at
www.chemicalukexpo.com



HOW SHOULD YOU CHOOSE THE RIGHT CLEANING MEDIUM?

An effective metal cleaning process begins with the right choice of the cleaning medium. The question is: how do you make the right decision? In each edition of this year's Surface Matters, we'll be highlighting one key question you should ask.

KEY QUESTION NUMBER 1:

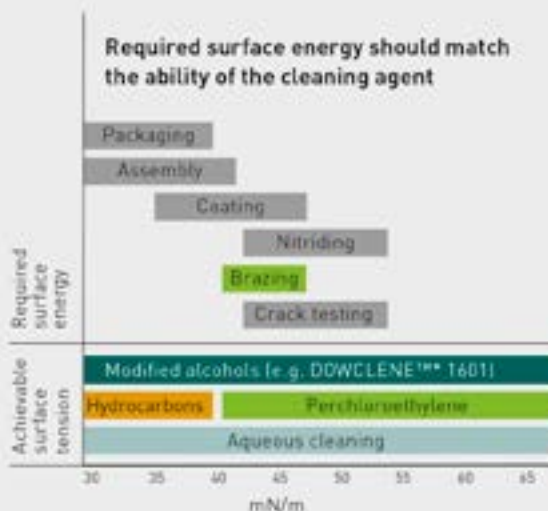
WHAT ARE YOUR CLEANING QUALITY REQUIREMENTS?

Knowing your required cleaning quality requirements is fundamental to choosing the right cleaning agent. In order to achieve optimal cleaning results, you need to consider two different kinds of soils:

1. particle contaminations, including their size, numbers and types and
2. the sort of filmy contaminations.

Aqueous cleaning agents have a density of approx. 1g/ml. Solvents, in comparison, may have a higher or lower density. "Heavier" cleaning agents are effective in removing particulates that cannot be readily dissolved. They can literally "push" or "float away" particulates and lift them off the surface.

At the same time, different industrial applications require varying degrees of surface energy of the metal surface, which is influenced by filmy contaminations. With nitriding, for example, a higher surface energy is required than with standard coating or assembling. The required surface energy should therefore match the ability of the cleaning agent. For precision cleaning where required surface energy can range anywhere from 38 mN/m to approx. 60 mN/m, both aqueous-based cleaning and solvents are capable of fulfilling the requirement.



An informed parts cleaning decision should balance the technical, economic and environmental requirements.

Download our free guide paper to find out the 10 questions you should ask to ensure parts cleaning success.

EUROPEAN REGULATION AND INNOVATION FORUM – MONOGRAPH

SCIENTIFIC EXCELLENCE IN CONSUMER SAFETY INSIGHTS FOR THE EU BETTER REGULATION AGENDA

Background

When managing consumer safety the primary aim of governments is to ensure that products are safe for their intended use. This is best achieved when regulation of consumer safety is predictable and based on the likelihood of harm. In turn, this facilitates safe use of technologies, stimulates investment in new sustainable products, limits arbitrary implementation by governments, and allows consumers to enjoy valued functional and emotional benefits. It also contributes to consumer confidence.

New initiatives proposed by the European Commission seek to restructure parts of the governance of the provision of scientific assessments for consumer safety. Possible changes include absorbing the responsibilities of existing independent scientific committees into other existing bodies and placing greater emphasis on the intrinsic properties of materials, rather than likelihood of harm, as the major regulatory philosophy for managing consumer safety. Such proposals provide an opportunity to reconsider the challenges facing the future effectiveness of the current independent scientific committees and to examine ways of building on this highly successful approach.

In the light of these issues and to contribute to the evolution of the EU's approach to ensuring consumer safety, the European Regulation and Innovation Forum (ERIF) held a major on-line workshop in November 2021 focusing on 'Scientific Excellence in Consumer Safety'.



More than 100 invited guests, including distinguished scientists, senior officials from the EU institutions and Member States, experts from academia, think tanks, and the business community joined the event and participated in the wide-ranging discussions.

This ERIF Monograph is informed by the presentations, reflections, and discussions that took place at the workshop. It also includes findings from extensive previous work on the role and governance of scientific assessments in the EU undertaken by ERIF. It is a contribution by ERIF to on-going debates about the future governance at EU-level of scientific assessments for consumer safety.

https://www.eriforum.eu/uploads/2/5/7/1/25710097/erif_monograph_-_consumer_safety_workshop_final.pdf

INNOVATIONS IN SURFACE ENGINEERING TO ACHIEVE NET ZERO BY 2050

Surface engineering and manufacturing sector leaders from Government, industry and academia within the UK will come together to address the importance and contribution of the sector in achieving net-zero by 2050.

Join us in Manchester to network with peers and contribute to discussing solutions to the most important global issue of climate change.

The conference will be held at the Henry Royce Institute in Manchester on 12th & 13th October 2022 with full details at: <https://www.iom3.org/events-awards/surface-engineering-innovations-for-net-zero.html>

The programme is split across three key topic areas:

- Material degradation and hot corrosion
- Innovation in surface technology and digitalisation in advanced manufacture
- Digitalisation in surface engineering

Who should attend?

The event welcomes everybody who is working in the sector or is interested to discover more, it would also be of specific interest to early career researchers (including Masters and PhD students) to attend.



Benefits of attending

The conference will provide an unique opportunity to listen to industry leaders, network with peers and provide a platform to consolidate the latest advances within the surface engineering discipline.

Registration fees will be announced shortly.

I.M3 Institute of Materials,
Minerals & Mining

NICKEL SUSPENSION UPDATE:

CRITERIA FOR RESUMPTION OF TRADING

AND APPLICATION OF PRICE BANDS

Summary

Notice 22/052 announced a suspension of trading in all Contracts in Nickel, which took effect at 8.15am on 8 March 2022. The Exchange has continued to monitor the evolving market situation, and has been in discussion with market participants. This Notice provides an update on these matters.

Background

The current events are unprecedented. The LME is committed to working with market participants to ensure the continued orderly functioning of the market. The LME understands market participants' desire for the market to reopen, but also notes the market's desire for caution on any reopening.

Defined Terms

Capitalised terms not otherwise defined in this Notice shall have the meaning ascribed to them in the LME Rulebook.

Market reopening

At the current time, all Clearing Members have met their margin requirements to LME Clear in full. However, the LME understands that credit conditions in the broader commodities markets have been placed under stress due to geopolitical events and rising prices.

The LME does not consider it appropriate to announce a trading resumption date for Nickel, given continued uncertainties in the broader market.

Accordingly, this Notice sets out the criteria for a re-opening, being:

- i. Operational procedures to effect a safe re-opening; and
- ii. Analysis of the possibility of netting-off long and short positions prior to re-opening.

Further details on both of these topics are provided below.

Given the need for these criteria to be met, the LME does not anticipate resuming Nickel trading earlier than 11 March 2022 (subject that the LME may implement a mechanism to net off long and short positions as discussed under the heading "Criterion (ii)" below). A date for the resumption of Nickel trading (the "Resumption Date") will be announced to the market by Notice, by no later than 2pm on the prior Business Day. The LME is mindful of the fact that 16 March 2022 is a third Wednesday date.

As set out in Notice 22/052, Nickel delivery positions will continue to roll forward at level until delivery recommences, on the first Settlement Business Day following the Resumption Date.

Criterion (i):**Operational procedures to effect a safe re-opening**

On the Resumption Date, the LME currently anticipates that it will resume Nickel trading at or around 9am London time. This is designed to ensure that maximum liquidity will be available to support the contract. A 9am opening time would be maintained until such date as the LME is confident to return the Nickel market opening time to 1am.

The LME currently anticipates that it will set a maximum limit-up and limit-down for all outright Contracts in Nickel on all Execution Venues of (indicatively, and subject to further analysis) 10% in either direction. On the Resumption Date, this will be relative to (ie 10% either side of) the Closing Prices on 7 March 2022. This would cap the maximum outright move which can occur following the resumption of trading, and allow the consequent impacts (in particular, the need for additional margin to be paid) to be managed in an orderly manner.

It is therefore possible that the market may take more than one day to reach a stable outright Nickel price, if the move required to attain such price is greater than the proposed 10% price limit.

In relation to LMEselect, the LME's current intention is to utilise price bands for order submission. The LME's price band functionality can be manually adjusted on Contract and Prompt Date levels in line with market conditions, to support orderly trading. The price band functionality enables the LME to manage volatility which may include, where appropriate, the temporary suspension of the matching of orders on LMEselect.

Trades on other Execution Venues will be prohibited, through manual controls, from being executed outside the price band.

With effect from the Resumption Date, the LME would set the price band at the commencement of trading at the defined percentage either side of the central reference price, which would be the previous published Closing Price. Thereafter, and until further notice, the LME will not re-calculate the central reference price during each Business Day that the price bands are in effect.

In the event that the price band is triggered, trading would continue but order placement of bids above the higher price band or offers below the lower price band will be rejected. In particular, carry trading will still be enabled (provided that the carries trade within their respective price limits), allowing (for example) date adjustments and tom/next rolls to be booked, even if the maximum outright price fluctuation had been reached.

The LME intends to publish a Notice setting out in further detail how the price bands would operate. The LME will also consider whether it might be appropriate to apply price bands to other metals.

Criterion (ii):**Analysis of the possibility of netting off long and short positions prior to re-opening**

Based on its market engagement, the LME recognises that market orderliness may be further enhanced by reducing the volume of short positions in the market (and from which participants would be expected to wish to exit as soon as possible on the Resumption Date, with a consequent upward pressure on price).



Accordingly, the LME will consider the viability of a mechanism to net-off, on a voluntary basis, large long and short position-holders on each Prompt Date for Contracts in Nickel, prior to the Resumption Date (a "Voluntary Net-Off"). Such an approach would provisionally operate as follows, for each Prompt Date:

- a. The LME would first establish which large long and short position-holders wished to exit their positions, indicatively at the Closing Prices on 7 March 2022 plus a percentage (indicatively 10%). This would allow the agreed netting-off of long and short position holders, up to the lower amount of voluntary long and short interest.
- b. The LME currently anticipates defining "large" position holders as those holding positions of over 100 lots, although the LME will confirm the threshold to be applied in due course.

In order to effect the analysis required for Voluntary Net-Off, the LME requires Members to

provide, for (i) their house account, and (ii) for each of their Clients (in either an OSA or ISA), and for each nickel Prompt Date on which that house or Client has open interest (long or short), the desire of that house or Client to engage in Voluntary Net-Off (at the indicative 10% premium to the Closing Prices on 7 March 2022). It will be permissible to identify a proportion of the open interest as wishing to engage in Voluntary Net-Off.

These data should be provided to

market.surveillance@lme.com

by close of business on 9 March 2022.

Any queries may also be directed to LME Market Surveillance. All information will, as always, be treated confidentially. Once we have the data we will work out whether this approach is possible.

Other matters

Members should direct any questions relating to this Notice to the LME Relationship Management team at RM@lme.com.

HSE SAFETY NOTICE ISSUED: MAINTENANCE OF INDUSTRIAL UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS

HSE has recently carried out several investigations into dangerous occurrences that resulted from a failure of industrial UPS systems at onshore major hazard establishments.

The failure of these industrial UPS systems typically resulted in a loss of power to industrial control systems, emergency shutdown systems and emergency mitigation systems.

Some of these incidents have led to localised fires within industrial UPS systems due to failures of either capacitors or batteries with smoke, excessive heat resulting in failure of the static switch and a failure to provide emergency power via a second UPS.

Other incidents, due to component failures and outdated firmware, have led to unplanned

shutdown of a chemical processing plant which subsequently on start-up led to an unplanned release of toxic substances into the environment, and additional demand placed upon other safety related systems.

The HSE investigations identified in all cases that:

The information for maintenance included in the original equipment manufacturer's operating and maintenance instructions did not provide adequate information to allow the continued safe and reliable operation of the industrial UPS systems prior to the incident.



PERSONAL PROTECTIVE EQUIPMENT (PPE) AT WORK REGULATIONS

FROM 6 APRIL 2022

This article explains changes to the scope of the PPE Regulations which apply from 6 April 2022. There is also basic advice on PPE at work and guidance on using PPE to protect people from COVID-19.

Amended regulations

On 6 April 2022 the Personal Protective Equipment at Work (Amendment) Regulations 2022 (PPER 2022) come into force and amend the 1992 Regulations (PPER 1992).

They extend employers' and employees' duties regarding personal protective equipment (PPE) to limb (b) workers.

Duties unchanged but extended

Under PPER 2022, the types of duties and responsibilities on employers and employees under PPER 1992 will remain unchanged but will extend to limb (b) workers, as defined in PPER 2022.

If PPE is required, employers must ensure their workers have sufficient information, instruction and training on the use of PPE.

A limb (b) worker will have the duty to use the PPE in accordance with their training and instruction, and ensure it is returned to the storage area provided by their employer.

You can find guidance on the PPE duties in:

- Personal protective equipment at work (L25)
- Risk at work - personal protective equipment (PPE)

We will publish updated guidance incorporating the changes made by PPER 2022 before the Regulations come into force.

What this means for employers

PPER 1992 places a duty on every employer in Great Britain to ensure that suitable PPE is provided to 'employees' who may be exposed to a risk to their health or safety while at work.

PPER 2022 extends this duty to limb (b) workers and comes into force on 6 April 2022. Employers need to carefully consider whether the change to UK law apply to them and their workforce and make the necessary preparations to comply.

What this means for limb (b) workers

If a risk assessment indicates that a limb (b) worker requires PPE to carry out their work activities, the employer must carry out a PPE suitability assessment and provide the PPE free of charge as they do for employees.

The employer will be responsible for the maintenance, storage and replacement of any PPE they provide. As a worker, you will be required to use the PPE properly following training and instruction from your employer. If the PPE you provide is lost or becomes defective, you should report that to your employer.

Definitions of limb (a) and limb (b) workers

In the UK, section 230(3) of the Employment Rights Act 1996's definition of a worker has 2 limbs:

- Limb (a) describes those with a contract of employment. This group are employees under the Health and Safety at Work etc Act 1974 and are already in scope of PPER 1992
- Limb (b) describes workers who generally have a more casual employment relationship and work under a contract for service – they do not currently come under the scope of PPER 1992

PPER 2022 draws on this definition of worker and captures both employees and limb (b) workers:

“worker” means ‘an individual who has entered into or works under –

- *(a) a contract of employment; or*
- *(b) any other contract, whether express or implied and (if it is express) whether oral or in writing, whereby the individual undertakes to do or perform personally any work or services for another party to the contract whose status is not by virtue of the contract that of a client or customer of any profession or business undertaking carried on by the individual;*

and any references to a worker’s contract shall be construed accordingly.’

General duties of limb (b) workers

Generally, workers who come under limb (b):

- carry out casual or irregular work for one or more organisations
- after 1 month of continuous service, receive holiday pay but not other employment rights such as the minimum period of statutory notice
- only carry out work if they choose to

- have a contract or other arrangement to do work or services personally for a reward (the contract doesn't have to be written) and only have a limited right to send someone else to do the work, for example swapping shifts with someone on a pre-approved list (subcontracting)
- are not in business for themselves (they do not advertise services directly to customers who can then also book their services directly)

As every employment relationship will be specific to the individual and employer, the precise status of any worker can ultimately only be determined by a court or tribunal.

Please note: These changes do not apply to those who have a 'self-employed' status. More on employment status (GOV.UK website)

What PPE is

PPE is defined in the PPER 1992 as 'all equipment (including clothing affording protection against the weather) which is intended to be worn or held by a person at work and which protects the person against one or more risks to that person's health or safety, and any addition or accessory designed to meet that objective'.

Where an employer finds PPE to be necessary after a risk assessment, using the hierarchy of controls explained below, they have a duty to provide it free of charge.

Hierarchy of controls

PPE should be regarded as the last resort to protect against risks to health and safety. Engineering controls and safe systems of work should be considered first.

Consider controls in the following order, with elimination being the most effective and PPE being the least effective:

- **Elimination** – physically remove the hazard
- **Substitution** – replace the hazard
- **Engineering controls** – isolate people from the hazard
- **Administrative controls** – change the way people work
- **PPE** – protect the worker with personal protective equipment

Employers with both employees and limb (b) workers

By 6 April 2022, you need to ensure that there is no difference in the way PPE is provided to your workers, as defined by PPER 2022. This means assessing the risk and ensuring suitable PPE is provided, when needed, to all people that fall under the definition of worker.

The PPE provided must be compatible, maintained and correctly stored. All workers must use the PPE properly following training and instruction in its use from their employer. If the PPE you provide is lost or becomes defective, your worker should report that to you.

Employers with only limb (b) workers

You need to ensure that your workers are provided with PPE free of charge, where required, by 6 April 2022. This means assessing the residual risk once all other measures (such as engineering controls) have been taken.

You then need to ensure suitable PPE is:

- provided
- compatible
- maintained
- correctly stored
- used properly



You will also need to provide training and instruction in its use to all your workers. You cannot charge workers for PPE they require to carry out their work.

How this legislation will be enforced

HSE inspectors already include assessment of PPE as part of their routine inspections. Enforcement action can range from verbal or written advice to enforcement notices and, in the most serious cases, prosecution of dutyholders.

PPE not regulated and enforced under PPER 1992

Workers may be required to wear items of PPE under legislation other than PPER 1992. For example, crash helmets worn by workers on the road which is legally required under road traffic legislation.

The full list of circumstances where PPER 1992 do not apply is contained in regulation 3.

PPE that is required to reduce risks arising from the following is regulated and enforced under regulations other than the PPER 1992.

These risks include those from:

- lead exposure
- ionising radiation
- asbestos
- noise
- substances hazardous to health (for example chemicals, fumes, dusts, non-water vapours, nanotechnology, and/or gases)



MANAGING SHORT-TERM SICKNESS ABSENCE

The government reports that two-thirds of small businesses (62%) do not have formal sickness absence policies in place. In order to manage this in the best possible way it is important that you, as the employer, consider implementing a fair and clear process to help identify repeat offenders, deter other employees from not turning up to work, and ultimately retain as many employees as possible in the workplace.

To support you in overcoming this, our HR & Employment Law experts have put together an exclusive guide on managing short-term sickness absence, covering from what processes you should put in place, managing recurring absences and more.

This includes insightful advice from our experts on how to best manage sickness and absence through an ever changing working environment.

Citation

YOUR SEA MEMBER BENEFIT

If you'd like to chat about how **Citation** can help with the HR and Health & Safety side of your business, just give them a call on **0345 844 1111**, or fill in their call-back form and they'll get right back to you.

Quote '**Surface Engineering Association**' when enquiring to access your member benefit.

[DOWNLOAD](#)

As we and the world learns to live with a wider range of sickness absences, the Health and safety experts of SEA Member Benefit, Citation, have created this vital free guide, packed with key ways to manage short-term sickness absence and prevent long-term sickness absences.

We always welcome suggestions of hot topics or key projects Citation and SEA could work together on to support members. So, please do let us know any questions, comments or feedback.

TWELFTH INTERNATIONAL CONFERENCE ON FUNDAMENTALS AND INDUSTRIAL APPLICATIONS OF HIPIMS 2022

15 - 17 JUNE 2022

Following a number of successful years, the Joint Sheffield Hallam University - Fraunhofer IST HIPIMS Research Centre is pleased to invite you to the twelfth edition of the International Conference on HIPIMS. The traditional scope of High Power Impulse Magnetron Sputtering plasma and coating technology is now expanded to include a broad range technologies for plasma coating, plasma surface treatments and non-plasma advanced surface engineering.

The conference goals are to:

- promote High Power Impulse Magnetron Sputtering
- (HIPIMS) as a novel manufacturing technology for surface modification and coating deposition
- provide a scientific forum for discussion of the fundamentals of plasma science
- exchange ideas for new industrial applications of HIPIMS
- connect the academic research community with the industrial world to foster progress of plasma-based technologies.

Sheffield is one of the largest cities in UK and as the birthplace of stainless steel has a long history of innovation in materials science and industry. Sheffield Hallam University is leading the way in scientific understanding and industrial implementation of HIPIMS for a range of applications and is said to be the most in-depth facility in this field. The University has provided a home for Industrial HIPIMS for many years and hosted the National HIPIMS Technology Centre in the UK since 2014. We are strengthened by

our collaboration in the Joint Sheffield Hallam University - Fraunhofer IST HIPIMS Research Centre - the first of its kind in UK. We strive to contribute to society through our partnerships with the High Value Manufacturing Catapult - one of the largest catalysts for future growth and success of manufacturing in the UK, and have the support of the Henry Royce Institute, the Institute of Materials, Minerals & Mining and the Surface Engineering Association on the organising committee to further strengthen the impact of HIPIMS for Industry and Academia.



Topics of HIPIMS 2022

HIPIMS 2022 will provide a forum for presenting the latest research by scientists and engineers from industry, engineering institutes and academia. Contributions will cover fundamental scientific aspects as well as application oriented research and development. In addition, successful introduction to market of new products utilising HIPIMS will be addressed.

HIPIMS 2022 will focus on the following topics:

- Generation of HIPIMS and highly ionised plasmas
- Plasma diagnostics and discharge physics
- Coating characterisation and performance
- Reactive and non-reactive HIPIMS processes
- Simulation of HIPIMS processes
- HIPIMS systems and hardware

David Elliot, CEO of the Surface Engineering Association, will be chairing our panel of experts discussion session "Quo Vadis Surface Engineering?" on the topic of "Surface Engineering for net zero".

Call for Papers

As a truly international conference, HIPIMS 2022 will present the most recent results of scientific research as well as new applications in the field of HIPIMS technology. If you wish to present your latest research results or you have developed a new application, your contribution will be very welcome. We encourage you to submit your abstract to: hipims@shu.ac.uk

Exhibition

Company participation has always been at the heart of this event with exhibits which are held in parallel with the conference and are in the immediate vicinity of the lecture theatre. Take the opportunity to present your products and services with precision to your target audience. Make valuable contacts. During the conference you will be exposed to key players in the industry accurately, concisely and with a minimum expenditure. We are looking forward to welcoming you here.

Sponsorship Opportunities

As a sponsor, your company or organisation gains a clear presence within a select circle of participants. During the event we offer a number of possibilities to position your company and connect with potential customers. Take advantage of sponsoring HIPIMS 2022 to address an existing target group, and to enhance your profile in a new industry. Please contact us if you would like to join the group of sponsors.

Experience Sheffield

Sheffield's growth came about during the Industrial Revolution when it became the centre for cutlery industry in the country. Inventions of high adhesion Sheffield Plate, crucible steel, stainless steel, I8/8 steels and the first industrial production of steel by the Bessemer conversion process all originated in Sheffield and are featured in the Kelham Island Industrial Museum.

Contact

Submission of Abstract
Prof. Arutun P. Ehasarian
Phone: +44 114 225 3500

Exhibition and Sponsoring
Prof. Papken Eh. Hovsepien
Phone: +44 114 225 3500

EMPLOYMENT LAW CHANGES

APRIL 2022

2022 is the year when lockdown fully eased in England. With everyone focusing on the remaining restrictions easing, companies could easily miss the big employment law changes coming into force in less than a month's time.

April is always a busy time for employment law, so don't get caught unaware when it comes around.

April 2022 Changes

Increase to the minimum wage and other statutory rates.

The government has confirmed that minimum wage rates will increase from April 2022.

The rates are to change as follows:

National Living Wage (23+)	8.91	9.50
21-22 Year Old Rate	8.36	9.18
18-20 Year Old Rate	6.56	6.83
16-17 Year Old Rate	4.62	4.81
Apprentice Rate	4.30	4.81
Accommodation Offset	8.36	8.70

Family friendly leave rates are also changing. This includes maternity, paternity, adoption, shared parental, and parental bereavement leave. This will go from £151.97 to £156.66 per week.

Statutory sick pay (SSP) is also set to change from £96.35 per week to £99.35 per week.

The lower earnings limit, through which entitlement to family leave and sick pay is calculated, will rise to £123 per week.



Gender pay gap reporting

If you have at least 250 members of staff, that means you've had to publish annual gender pay gap reports since 2018. The Government paused the compulsory production of gender pay gap reports in 2020. However, they brought it back in 2021, and it remains a legal requirement today.

Your report should outline the differences in the average earnings between men and women in your company. To do this you should take a snapshot of your company's pay data on a specific date. For 2022 this 'snapshot date' will be 30 March 2021 for public sector companies. If you are a private company, then the 5 April 2020 is your snapshot date.

Last year, the reporting deadlines were delayed. However, in 2022, the deadlines have reverted back to their normal slot:

- 30th March 2022 for public sector employers
- 4th April 2022 for private sector employers and voluntary organisations.

COVID-related changes

From the 1st April the current guidance on voluntary COVID-status certification in domestic settings will be removed. Also, the government will no longer recommend that certain venues use the NHS COVID Pass.

For full insight into all of the COVID changes coming up in the next few months, check out our article on self-isolation & other COVID updates [here](#).

Other upcoming changes

2022 could turn into an incredibly busy year for HR, with a number of changes set to be put in motion without a concrete date. This includes:

- **Flexible working** – following a consultation, the government is considering the option to allow employees to request flexible working from day one of employment.
- **Ethnicity and disability pay gap reporting** – 2022 could see the first real step towards standardising this type of report.
- **Data protection** – the ICO is due to issue updated employment practice guidance on data this year.

- **Sexual harassment** – A new duty for employers to prevent sexual harassment in the workplace is expected to come into force this year.
- **Right-to-work checks** – The scheme became digital as a result of the pandemic, and was met with overwhelming positive feedback. As a result, the government is set to make the change permanent later this year.
- **Modern Slavery** – Reforms to the Modern Slavery Act are expected late this year. When this happens, you may need to review your anti-slavery statements.

Call our experienced employment law advisors

If you're concerned about any of the upcoming changes in April, or beyond, speak to one of our experts today for confidential, professional advice on 0844 5618133 and quote 26255.



I HOLLAND

A true British manufacturing success, I Holland have been established for 75 years. We use these decades of experience, research, and engineering know-how to provide precision tablet tooling solutions to over 100 countries around the globe. Applications for I Holland tools extend into the pharmaceutical, nutraceutical, confectionery, and industrial industries, amongst others.

I Holland recognise the importance of research and collaboration with customers, scientific partners, research, and technical institutions alike. We use specially developed materials of the highest quality and combine state-of-the-art manufacturing processes with Quality Assurance technology. Our partnerships with the finest material suppliers, coupled with ongoing research into the science behind tableting, has resulted in our extensive range of steels and coatings that are designed to overcome the biggest challenges faced in modern tablet production.



LAKE ENGINEERING SOLUTIONS

With over 15 years of innovation and experience, Lake Engineering Solutions is committed to providing leading edge and environmentally responsible corrosion solutions for the manufacturing and heavy industry markets.

Our team of Corrosion and Preservation experts provide tailored solutions that meet the specific needs of the customer, paired with responsive customer service and a strong record of quick turnarounds and on-time shipments.

With the support of our corrosion engineers, and testing facility, Lake Engineering Solutions provide simple, environmentally friendly, cost-effective solutions to your corrosion problems.

At Lake Engineering Solutions, we provide effective and sustainable corrosion prevention solutions to help our customers to achieve operational excellence and considerable cost savings throughout the supply chain.

No matter if it's for packaging, metalworking, construction, electronics, oil & gas, energy & utilities or automotive, our corrosion prevention solutions bring results.



PROTECTING PRECISION MACHINED COMPONENTS



LAKE ENGINEERING SOLUTIONS WORK INNOVATIVELY TO ANALYSE CORROSION PROBLEMS AND DEVELOP WORKABLE SOLUTIONS TO AUTOMATE WORKFLOWS, PROVIDE LONG-TERM PROTECTION, PREVENT NON-CONFORMITIES, AND REDUCE COSTS.



Our EnviroRinse™ solution serves across a range of fast-moving engineering industries who manufacture precision components, allowing them to continue to innovate whilst knowing component corrosion and failure is no longer an issue.

Industries served include:

Automotive	Power Generation
Commercial vehicles	Medical
Construction Equipment	Aerospace
Oil and Gas	

We offer turnkey services with our survey report pin-pointing corrosion locations, selecting products and documenting corrosion control procedures. We will apply the solution or will supervise site activities.

www.envirorinse.co.uk

envirorinse@lakecm.co.uk



ADVERTISE ON THE SEA WEBSITE

Advertise your ...

- Products and Services
- Product / Website Launches
- Events
- Accreditations / Achievements

Including ...

- Web Advertising
- E Newsletter Button Adverts
- Surface Matters Newsletter Adverts
- Sponsorship Opportunities



Advantages of Advertising with the SEA:

- Over 3,500 unique website visits per month from prospective buyers, specifiers and designers
- Affiliate yourself with the most proactive industry association in our sector
- Our comprehensive sourcing facility attracts both UK and international buyers – you can benefit from this traffic now
- Update your online advertising at any time FREE of charge
- Reach out to members of the Surface Engineering Association through advertising in our E Newsletter
- Support the industry by sponsoring various publications, events and our prestigious Surface Engineering Gala Dinner & Awards

Web Advertising Options

Banner adverts offer maximum coverage as they appear at the top of every SEA web page. All adverts rotate on a random cycle (maximum of 6 banners at any one time). The artwork must measure 525 x 110 pixels and be provided in Jpeg format. Moving Gif adverts with up to 3 slides can be displayed at an extra £75 + VAT per banner.

Top Banner Advert	
Members	£1000 + VAT per year
Non-Members	£2000 + VAT per year

Central Homepage Banner Advert

Our homepage receives the majority of our unique page views. All adverts rotate on a random cycle (maximum of 4 adverts at any one time). The artwork must measure 760 x 110 pixels and be provided in Jpeg format. Moving Gif adverts with up to 3 slides can be displayed at an extra £50 + VAT per button.

Central Homepage Banner Advert	
Members	£500 + VAT per year
Non-Members	£1000 + VAT per year

Most Visited Pages Advert

One year's coverage on 4 of the 10 most popular SEA web pages, including Find a supplier search/Find a Member, Membership, Member Services and about the SEA. All adverts rotate on a random cycle (maximum of 4 banners at any one time). The artwork must measure 218 x 100 pixels and be provided in Jpeg format. Moving Gif adverts with up to 3 slides can be displayed at an extra £40 + VAT.

Most Visited Pages Advert

Members	£450 + VAT per year
Non-Members	£700 + VAT per year

E Newsletter Button Advert

In addition to the Banner and Button advertising, your advert can be placed in the monthly issues of our E Newsletter, for an additional £50+VAT (members only).

A stand alone advert in the E Newsletter is £100 + VAT (members only).

Our E Newsletter is sent to our membership 8 times a year.



PROMOTE YOUR BUSINESS WITH THE SEA MOBILE APP

The audience you want to reach is among the nearly two billion people using Apple and Google products every day.

With a dedicated mobile app, the SEA will enable your brand to reach your target market conveniently, wherever and at any time via mobile technologies.



SEA App Banner Advertisement rates

Members	£50.00 + VAT per month £500 + VAT per year
Non-members	£80.00 + VAT per month £860 per year + VAT

Dimensions: 640 x 150pxl landscape
Please supply as JPEG

For further information, please contact
Michaella Mais at michaella.mais@sea.org.uk
or call 0121 237 1161.

ADVERTISE WITH THE SEA

Surface Matters welcomes advertising from SEA members and suppliers to the trade.



2022 Rates

Single-insertion charges for full colour ads

Size	Dimensions	Cost
Quarter Page	62wide x 95mm deep	£190 +VAT
Half Page	128wide x 95mm deep	£335 +VAT
Full Page	128wide x 190mm deep	£600 +VAT

Advertisers in four consecutive quarterly editions of Surface Matters are entitled to a series rate where all of the above prices are discounted by 20% per insertion.

Deadlines for booking ads	
14 March	Spring edition
6 June	Summer edition
22 August	Autumn edition
28 November	Winter edition

Advertisers are also welcome to sponsor Surface Matters, which entitles the sponsor to the company name featured on the front of the publication as 'sponsored by' and a full colour, full page feature in each edition at the cost of £1500+VAT per annum.

If you are interested in advertising with the SEA through one of our mediums, please visit:

<https://www.sea.org.uk/advertise-on-sea-org-uk/>, or contact Michaela Mais at **michaella.mais@sea.org.uk** or call **0121 237 1161**.

If you have news and would like to feature in the next issue, please send details to David Elliott at: **dave.elliott@sea.org.uk**

The SEA provides the 'focus' for all aspects of the surface engineering industry.



Federation House 10 Vyse Street Birmingham West Midlands B18 6LT
T: +44 (0)121 237 1123 **F:** +44 (0)121 237 1124 **E:** info@sea.org.uk **W:** www.sea.org.uk



[@SEA](https://twitter.com/SEA)



[@SurfaceEngineeringAssociation](https://www.facebook.com/SurfaceEngineeringAssociation)



[Surface Engineering Association](https://www.linkedin.com/company/SurfaceEngineeringAssociation)