

IMFormation May 2015

Environment, Health & Safety

Supplementary report on the exposure to carcinogens in surface engineering.

The report details work undertaken following an HSE research project OH36 which examined the use of biological monitoring in the surface engineering (electroplating) industry and reported in HSE research report RR963 “Exposure to hexavalent chromium, nickel and cadmium compounds in the electroplating industry”.

Two separate projects were conducted to investigate the efficacy of chemical protective gloves in various electroplating scenarios as a result of which they have raised 12 points by HSE field inspectors.

Company News and Products

Crest Pumps Group

The new AMX fully plastics process pumps offer improved efficiency, greater simplicity and reduced maintenance for even the hardest of acidic and corrosion chemicals.

To keep process streamlined, all polypropylene parts and complete pumps are available ex-stock for next-day delivery. Both full polypropylene (AMX-GG) and original AMX magnetic drive pumps can be built to ATEX standards Zone 1-2 with a maximum temperature of 110oC and an efficiency of up to 80%. The AMX increases the mean time between maintenance and servicing with the pumps patented buffer system which absorbs vibration & shock caused by adverse operating condition.

For further information please contact James Dashwood Tel: 01425 627700

Layton Technologies

Flammable Solvent Cleaning Machine IG200 Latest cleaning machine designed to safely use an azeotropic blend of clohexane and isopropyle alcohol for cleaning electronic components to sub-micron level. This azeotrope has been shown to be effective in removing a wide variety of contaminants since alcohol’s polar molecular chemistry results in the repulsion forces between particles and surface.

These forces tend to shield the effect of Van de Waals forces and dissipate electrostatic forces to the extent that alcohol is approximately twice as effective for the removal of sub-micron sized particles than water.

Cyclohexane, a solvent with physical properties akin to alcohol, is effective for removing organic films when used in similar equipment. Drying is carried out in the vapour phase and freeboard area below the sealed lid with components cleaned by immersion and or sprayed.

Further information Tel: +44 (0)1782 370400

E. Braude (London) Ltd

This company has specialised in acid proof equipment for heating and cooling of corrosive liquids. The product range is used in various industries within Surface Finishing and other specialised ones like Aerospace. The range of heaters includes for solutions where corrosion resistance is not a requirement. – The Polaris Neptune electric immersion heater was created for these processes where the full chemical resistance of Teflon is not a requirement.

They are available to suit single or three phase electrical supply. Where the standard heater dimensions are not suitable for your tank sizes, they can be formed in suitable configuration to suit your installation. For more information please contact the sales team either by phone



on 01252 876123 or email sales@braude.co.uk

Hart Materials

Dr Tony Hart has revised the Nickel Sulphamate Working manual which is a practical guide for shop floor and laboratory personnel.

It has been dedicated to the late Dr. Alex Watson, a well known person that Tony worked with for over 30 years and from whom Tony acquired his enthusiasm for nickel plating and for sulphamate nickel in particular. This manual is a revived version of the one which was produced in 1991.

It is available for purchase in two formats, as a CD version and printed version. For further information or to place an order please contact: info@hartmaterials.com

Powerstax

DP Energy Services (formally Drake Power) is now owned by Powerstax one of Europe's power solutions manufacturers. The Essex based company continues to supply high-reliability power systems which the many challenges equipment designers face to meet the many harsh environmental conditions needed to control surface finishing processes.

Tim Worley, CEO of Powerstax, comments. "Drake is a great brand with an excellent range of products, some 50 years experience of manufacturing transformers with more than 30 of those years making large power systems and has experience and with the expertise Powerstax brings to Darke, we are anticipating rapid development of new products for traditional and emerging markets and greater opportunities for growth".

Powerstax-Drake transformer-rectifiers offer output rectifiers units from 2V up to 600V, output currents to 5,000A, and output power up to 1000kVA and beyond. Systems can be oil, air or water cooled and can be sealed up to IP65 if the environmental dictates with purge and pressure systems and heat exchangers incorporated if desired.

For further information contact Powerstax direct Tel: +44 (0) 1252 407800 or email sales@powerstax.com

IMF News

Education and Training

Functional Plating Short Course This tutored course is designed to give students an understanding of the subject from basic principles to in-depth information needed by experience applicators. It will benefit electroplaters, technicians, process engineers and also specifiers of deposits. Students do not require knowledge of science to take this course. Selected units from the Foundation Certificate Course are used followed by two new sessions which includes comprehensive information on the most common types of functional plating deposits used for engineering applications in many engineering sectors.

The course is delivered in four tutored sessions; each of about 3 hour's duration and has a marked assignment.

A short multi-choice style test is held at the end of the course.

For further information please contact David at IMF Exeter House, Tel: 0121 622 7387.

New Professional Member

Fellow - FIMF

Gardner, Robert Hubbard Hall Incorporated

Downie, Stuart Lloyds Register Global Technology Centre



Member - MIMF

Whelen, Michael Dublin Institute of Technology

The next enrolment date for Education & Training courses is Friday 29th May.
Prospective students should contact David at IMF Exeter House, Tel: 0121 622 7387

Courses available, currently for study are:

Foundation Certificate

Study consists of a total of 15 units of which 7 are mandatory, 5 from one of 3 Technology Blocks covering Electroplating, Aerospace or Organic Coating subjects and a further 3 from units from an optional units block of subjects not already included in the mandatory section to be studied.

This course is designed to provide personnel in surface finishing and related technologies with the opportunity to improve and increase their knowledge and thus be able to deal with shop floor problems more effectively. It is also of value to line management and sales personnel to better increase their knowledge of the processes operated within the company.

Technician Modules

Following on from the Foundation Certificate there are currently several more Advanced Modules:

Principles of Electroplating • Electroplating Practice Paint, Lacquer and Varnish • Powder Coating Environment, Health and Safety • Electroforming Automotive • Materials Science

Subject to passing the examination in any two of the above subjects the student is awarded a “Technician Certificate”, which subject to passing a written examination, may be endorsed as a Credit or Distinction.

Events

Surface World Exhibition

23 –24 September 2015

National Exhibition Centre Birmingham

Major event for the Surface Finishing and Treatment Industry

Includes free seminar and free exhibition directory.

Book now for your exhibition stand.

Contact Nigel Bean - 011442 826826 or Email: nigelbean@surfaceworld.com

Surface Engineering & Heat Treatment Industry Conference 2015

Friday 16th October 2015

Stratford Manor Hotel

Warwick Road, Stratford-upon Avon CV37 OPY

The event is organised by the surface Engineering Association in partnership with the CHTA and Wolfson. It is the first national event with an associated exhibition encompassing heat treatment in England for over ten years.

Offers of conference presentations or request for table top space please contact Diana Blair at the SEA

Tel: 0121 237 1123 or Fax: 0121237 1124