

Environment Matters

Got concerns about coolant, swarf, air quality, water filtration, component cleaning/degreasing? Then take one day out to discuss them with up to 15 experts at *Environment Matters*

geared to bringing users with environment-related issues and suppliers of cleaning/degreasing equipment, coolant, coolant management/filtration systems, water processing, swarf processing and air filtration together to discuss solutions.

There are areas where environmental legislation is having an impact – the Solvent Emissions Directive, for example, in the cleaning and degreasing area, for which the final deadline is 31 October this year.

Workshop air quality standards are also an issue, while the increasing cost of hazardous waste disposal is causing manufacturers to look at managing swarf and coolant more effectively.

The *Environment Matters* event is expected to see up to 15 suppliers attend the one-day event (10 am to 4 pm), allowing companies to make the most of valuable time. If you have concerns in any of the areas mentioned, then a couple of hours spent at the event offers you the best opportunity for cost-effective, time-efficient, thorough discussion.

Suppliers signed up include: Air Cleaning Systems (coolant/oil mist/smoke filtration); Eclipse Magnetics (coolant condition maintenance); FUCHS Lubricants (coolants, lubricants); Geo Kingsbury (Dürr degreasing equipment); Houghton (coolants, air filtration); IB Industries (degreasing); Kitagawa Europe (coolant/oil mist/smoke filtration); Kyal Machine Tools (degreasing); Layton Technologies (degreasing); Master Chemical (coolants); MecWash/AquaSave (degreasing/water recycling); Safechem (degreasing);

Nearly three-quarters of the small and medium-sized enterprises (SMEs) polled in a NegRegs' commissioned *YouGov* survey released recently, believe good environmental practice is important to small businesses, and

nearly four-fifths know more about environmental issues than they did five years ago.

Respondents in manufacturing industry identified waste disposal as a real area of concern for the industry; more than three-quarters identify it as a problem, compared with two-thirds across all sectors.

When it comes to environmental regulations that affect their particular industry, many small manufacturing businesses are still unaware of their obligations. Fewer than half of the manufacturers polled were aware of the regulations affecting their industry, compared with over three-quarters in the agricultural sector and almost two-thirds in construction.

Machinery's Environment Matters event (Tuesday, 11 September, Hilton Hotel, Warwick) is

Visit www.machinery.co.uk/environmentmatters to sign up for the event or register your interest



Turbex (degreasing).

By talking to these companies, you can enjoy the benefits that others have already gained.

Take the investment in the Aqua-Save Technologies Waste Water Recycling Unit by Universal Engineering Company (Charlstown) which is set to save the precision engineers over £5,000 per year by virtually eradicating the amount of waste coolant and wash water taken off site for disposal.

The company, based in Weymouth, is a 'complete product life cycle' supplier to the MoD for aerospace, surface and submarine vessels as well as military and civil broadcast and telecommunications equipment. It carries out machining of exotic alloys such as titanium, high carbon steels and high nickel alloys.

CENTRAL COOLANT PROCESSING

The Aqua-Save Junior is now the central processing point for the company's waste coolant that is stored in an adjacent 205 litre drum. Waste coolants that are processed in the Aqua-Save produce clean water that is set to be passed for disposal to drain.

The Aqua-Save treats, recovers and re-uses the waste water by separating out oily emulsions. This concentrated oily waste, which typically represents less than 5 per cent of the original volume, is then the only material that needs to be transported off site for safe disposal.

"The Aqua-Save is set to give us a payback within 18 months and will also contribute in our advance towards ISO 14001 accreditation," says Luke Thorpe, production manager at Universal Engineering.

Moving to coolant filtration, Honda at Swindon is benefiting from Eclipse Magnetics' Micromag filters. As a result of European demand for the Civic three and five door models and the



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commencement of production of the company's new off-road CR-V model, Honda has been busy hiring extra staff. With a workforce now numbering approximately 4,900, the vast majority of the new jobs are production related, and have allowed an extra shift be added at the plant. The company is set to increase production from last year's figure of 190,000 cars to 250,000 in 2007.

Honda uses a special-purpose boring and reaming machine that was designed and manufactured by Honda's own Engineering Division for the critical task of machining engine valve seats. In line with the company's philosophy of continuous improvement, the Honda Engineering staff came to the conclusion that potential existed for micro particles of metal, that were carried away in the machine's coolant, to adversely effect the critical surface finish of the machined valve seat, which in turn could have impaired the efficiency of the engine concerned. Peter Jones, Honda engineer responsible for the process, considered the various filtration options that would help to eliminate this possible problem and opted for Eclipse Magnetics' Micromag.

"Eclipse Magnetics convinced us that Micromag's outstanding filtration

capability and short investment payback period exactly matched our needs," says Mr Jones. "Since incorporating Micromag into our process, we have found that, in addition to it efficiently removing potentially harmful metal particles, the unit's maintenance friendly characteristics ensure that we now experience minimum machine downtime compared to our previously used filtration system."

The benefits currently enjoyed by users of the Eclipse Magnetics high intensity filter system include: no running costs;

no maintenance cost; an end to the downtime normally associated with the changing of filter media; no fluid loss due to changing sodden cartridges; no back-pressure – even when the magnetic cores are totally saturated with fluid; extended machine tool, cutting tool and coolant/oil life.

SAFELY USED SOLVENT

And at machine tool manufacturer Mazak, Worcester, new component cleaning equipment from Layton Technologies is allowing the company to use the solvent perchlorethylene safely.

Mazak has taken two Layton Blueseal SP20V systems to provide a new, safe and environmentally compliant component cleaning system using perchlorethylene solvent. The Blueseal system is a hermetically sealed process which features spray, vapour and full immersion cleaning with ultrasonics, and super-fast vacuum drying. It has a closed solvent recovery process with full carbon adsorption and automated regeneration – all within a compact package designed to comply with the latest Solvent Emissions Directive. □

Visit www.machinery.co.uk/environmentmatters and sign up for the free event today.