



Press release

Düsseldorf, September 01, 2009

A world innovation from Henkel

Bactericide-free cutting fluids without bacterial growth

Henkel has developed novel water-miscible, bactericide-free cutting fluids. Even the addition of bactericides is unnecessary. The new Multan products are easy to use, decrease health risks to employees, and successfully implement prospective EU Biocides Regulations.

With its novel formula, Henkel has successfully composed a re-formulation of its patented emulsifier-technology, marking a breakthrough in the development of next-generation cutting fluids. The new technology prevents bacteria from absorbing nutrients from the degradation of emulsifiers, once a certain minimum bacteria concentration has been reached. This way, Henkel's cutting fluids fully comply with the prospective EU Biocides Regulations. Unlike previous technologies, the formula of the new Multan products 71-2 and 77-4 avoids precarious bacterial growth, which usually occurs upon the use of cutting fluids, completely without any toxic bactericidal additives.

Conventional water-miscible cutting fluids as used in metal machining inevitably show high bacterial exposure due to organic substances they contain. Though a natural biological phenomenon, bacterial growth causes numerous technical problems in the production process and involves health risks to employees. Once a certain amount of bacteria has evolved, a "splitting" of the cutting fluid emulsion is imminent. As a consequence, the emulsion cannot be used and needs to be exchanged. Furthermore, bacterial metabolism results in a drop in pH value and therefore increases risk of corrosion. Not least, uncontrolled growth of microorganisms can become a threat to human health.

Up to date, two different approaches have been implemented in order to resolve the problem of bacterial growth. In the case of bactericide-free cutting fluids, bacterial growth is tolerated. Only upon high bacteria concentration a “one-shot” disinfection is implemented. This treatment reduces number of bacteria and the cycle of bacterial growth repeats itself. The disadvantages of the method, however, are that employees are permanently exposed to bacteria and to end products of bacterial metabolism as well as to highly concentrated biocides. This involves health risks to the staff. Eliminated germs provide excellent nutrient solution for next generation germs, which as a result makes necessary an increased frequency of disinfection. In the case of cutting fluids containing bactericides, bacterial growth is avoided when used appropriately. However, since the formula includes bactericides, employees are at high health risk when exposed to bactericide containing cutting fluids, too.

— Now, Henkel is offering a solution to these problems with its new product line that provides high performance without any bactericidal additives. The new Multan cutting fluids exclude employees from being exposed to health risks that occur due to bacteria or bactericides while high quality and performance of the product are maintained. Currently, two products of the Henkel product portfolio feature the new technology. Generalist Multan 71-2 is multifunctional. Due to its high lubricity, it is suitable for coarse machining. By providing fine dispersion it also qualifies for grinding. For high-alloy steel and aluminum machining specialist Multan 77-4 is the ideal product that provides extremely high lubricity even at low concentration. By using the new Multan products customers fully comply with the revised EU Biocides Regulations that will come into effect in 2014 and from then on will clearly restrict the use of bactericides.

Further material is available at <http://www.henkel.com/press>

— Henkel has been committed to making people's lives easier, better and more beautiful for more than 130 years. A Fortune Global 500 and Germany's most admired company according to a recent Fortune survey, Henkel offers strong brands and technologies in three areas of competence: Home Care, Personal Care and Adhesive Technologies. Each day, more than 52,000 employees in 125 countries are dedicated to fulfilling Henkel's claim "A Brand like a Friend." In fiscal 2008, Henkel generated sales of 14,131 million euros and adjusted operating profit of 1,460 million euros.

Contact

Peter Kreft

Phone: +49 211 797 - 1458

Fax: +49 211 798 - 11458

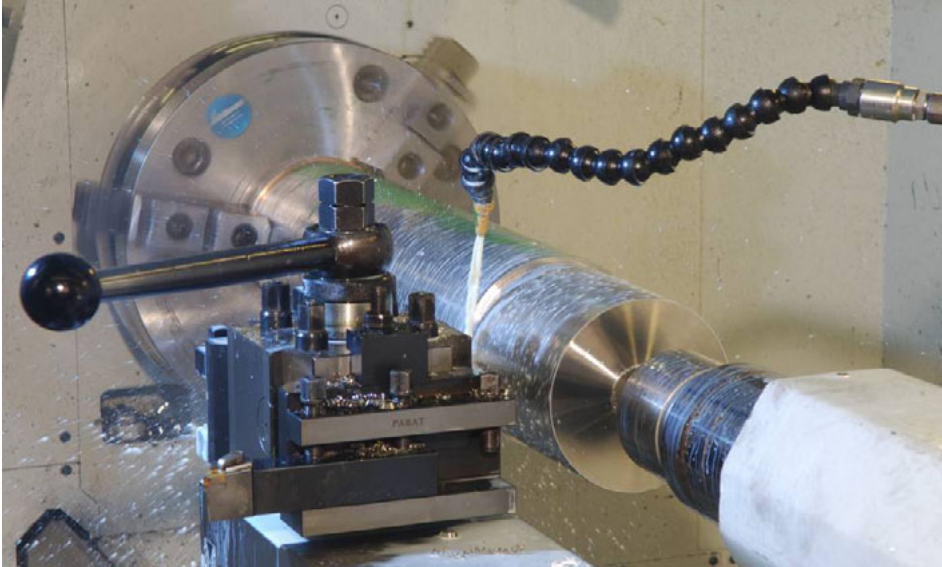
Christoph Schmidt

Phone: +49 211 797 - 9933

Fax: +49 211 798 - 11458

Henkel AG & Co. KGaA

Following images are available:



The new emulsifier-technology inhibits precarious bacterial growth in cutting fluids without any toxic bactericidal additives.



The new cutting fluids significantly reduce health risks to employees.