

Press release: Public Health/HVAC

## Europe's First certified Antimicrobial Copper coil

### Air Handling Unit is Produced in France

*Improving Indoor air quality in Hospitals is at the Heart of Hydronic's strategy*

Brussels, October 3<sup>rd</sup> 2011: The first certified Antimicrobial Copper coil air handling unit has been produced in Europe by French manufacturer Hydronic, in association with Centre d'Information du Cuivre-Laitons et Alliages (CICLA). This ground-breaking product for France will harness the antimicrobial properties of copper for hospitals.



*The Cu+ mark is used by Hydronic to indicate that their products contain Antimicrobial Copper, the world's most effective antimicrobial touch surface material*

Consumers today are becoming more health conscious and, in a proactive response to this market trend, Hydronic's air handling units are Europe's first to be permitted to use the Antimicrobial Copper Cu + mark. Everywhere that air quality is essential, Hydronic's Antimicrobial Copper coil air handling units would respond perfectly and efficiently. These large scale air-conditioning coils can vary from 300 x 600mm to 1.600 x 1.800mm, contain copper tubes of 12.7mm and 15.45 mm internal diameter and handle an air flow between 300 m<sup>3</sup>/hour - 0,1 m<sup>3</sup>/s to greater than 130.000 m<sup>3</sup>/hour - 36 m<sup>3</sup>/s.

HVAC system components operate in warm, dark, humid environments that are ideal breeding grounds for contamination that causes odours and can reduce system efficiency. Laboratory testing has shown that copper can inhibit the growth of these organisms. After 24 hours of exposure to copper surfaces, total elimination was observed in several common mould species, and the commonly-used aluminium had no effect on reducing the growth of the fungi.

*"Controlling the quality of air in healthcare units is at the heart of our strategy" explains Thomas Dupire, Product Manager for Hydronic. "Our air handling unit was designed to comply with air hygiene standards. Integrating Antimicrobial Copper into our products was the logical way to proceed. Moreover, these certified Antimicrobial Copper coil units have a better thermal efficiency, up to 8% higher than standard aluminium fins coil".*

In December 2010, the Chinese air-conditioning giant Chigo launched the world's first Antimicrobial Copper room air conditioner with the Cu+ mark. This new product pioneered a new trend towards healthier home appliances. Today, Hydronic manufactures the first large scale Antimicrobial Copper coils air handling units in Europe, designed for off-shore, hospital, industrial and commercial applications.

This practical implementation builds on laboratory work by University of Southampton researcher Professor Bill Keevil, assessing the effectiveness of copper as an antifungal surface for air-conditioning systems, and is a tremendous advance for both Antimicrobial Copper implementation, and innovation in HVAC.

**Editor's Notes:**

The latest published research into copper's efficacy against the spread of fungi in air conditioning systems appeared in *Letters in Applied Microbiology*:

[Potential for Preventing Spread of Fungi in Air-Conditioning Systems Constructed Using Copper Instead of Aluminium](#)

L Weaver, H T Michels, C W Keevil, Letters in Applied Microbiology

<http://www.ncbi.nlm.nih.gov/pubmed/19943884>

**About The European Copper Institute**

The European Copper Institute (ECI) is a joint venture between the world's leading mining companies, custom smelters and semi-fabricators (represented by the International Copper Association, Ltd) and the European copper industry. Its mission is to promote copper's benefits to modern society across Europe through its headquarters in Brussels and its network of eleven national Copper Development Associations. [www.eurocopper.org](http://www.eurocopper.org)

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