

Press Release April/May 2002

**Stora inneklimatpriset (a Swedish Indoor Climate Award) has been distributed for the first time. The award was founded by VVS-Slussen in collaboration with VVS-Tekniska Föreningen (The Swedish Society of Heating and Air Conditioning Engineers, SWEDEVAC) Svenska Kyltekniska Föreningen and Svensk Ventilation. The jury was composed by representatives from each of these associations and Per Fahlén, professor of Building Services Engineering at Chalmers University of Technology, was the chairman. Out of the 40 companies that entered the contest, the jury chose four finalists that were nominated for the award. One of these four finalists was SenseAir AB.**



SenseAir's contribution:

## **Energy Optimized Personal Safe Climate Control**

### **Background**

SenseAir AB in Delsbo is, despite the position as world leader since ten years, quite an anonymous actor on the market of carbon dioxide sensors for climate controlling. This is because SenseAir distributes the greater part of its products to OEM customers, which are large and global automation and control companies (for example Honeywell, Yamatake, TAC and Sauter). The fact that these companies mark the products with their own names contributes to an unawareness of the true origin of the products, that they actually are developed and produced by another company!

The development of inexpensive and well working carbon dioxide transmitters has resulted in controllable indoor climate and cost effective automated ventilation. This assures correct ventilation regarding both healthy indoor environment and minimal consumption of energy.

### **The Problem – Cost and Complexity**

Traditional building automation has developed from industrial process techniques, which has resulted in an expensive and partly old fashioned system architecture. High costs are associated with traditional control of demand which implies that the majority of properties remains without. The traditional solutions often results in “tangled” drawings of cables and badly-arranged functionality and climate control systems are not known for working correctly at all times. To be able to assure the quality continuously, on-line sensors are needed. However, when cuts in costs are made these components are the first to be removed.

### **The Solution – Distributed Intelligence**

SenseAir’s wish to lower the costs for their customers has driven the development of products forward, not just regarding the carbon dioxide sensor, but also regarding its increased functionality. Today, not only carbon dioxide but also other interesting parameters (such as temperature, humidity and enthalpy) could be measured by the same wall mounted unit. This platform is called *aSENSE* and includes all necessary functions to control the indoor climate. This is done by four flexible and programmable exits for sequence controlling of air flow, heat and cold in several steps, or what is necessary in certain application. A totally new architecture for building automation will hereby be possible, where a distributed intelligence can handle the climate control. This provides an easier and cheaper system construction, lesser computers to keep in mind, fewer drawings of cables, increased installation and service friendliness, and possibility for individual control of the indoor climate where the user is able to affect his or hers own surroundings. Central surveillance is also possible through network solutions.