

Company story

Why measure the carbon dioxide?

Carbon dioxide is an invisible, odorless gas that is heavier than air and accumulates in low areas such as basements/cellars. This creates a risk to staff or customers that, without noticing it, might walk down into a room filled with carbon dioxide that has leaked from a CO2 tank or originated from a process where the byproduct is CO2, for example when making beer or wine.

Carbon dioxide affects humans by dizziness, nausea and visual disturbances even at doses as low as 2% of the air. Over 4% of CO2 is considered directly harmful and air with more than 8% is lethal after just a few minutes of exposure. The military, with experience from submarines, has also found that carbon dioxide can also, over time, in very small doses create irreversible damage to vital organs and mental capacity, therefore it is of utmost importance to be able to quickly alert if long term limits, so called TWA (Time Weighted Average), are also exceeded.

The use of CO2 in the world is increasing rapidly in numerous application sectors. In the restaurant and hospitality area, CO2 is added to cause the fizz in soft drinks, as well as to push beer to the taps. New fantastic applications are constantly being introduced; from dry cleaning, metal processing, neutralizing water in swimming pools, the whole greenhouse sector, cleaning the outside surface of old buildings, as a refrigerant in coolers and freezers, flash freezing of fish, bakery items and vegetables. But it must be remembered that in a modern slaughter house, it is the gas that is used in putting pork and poultry down. It is important to understand that the increased use is often driven by the fact that CO2 is a very environmentally friendly alternative to processes used in the past.

LogiCO2's journey

LogiCO2 is a spin-off from the Gothenburg-based company Calectro that for over 45 years has been a world leader in duct smoke detection. At the same time as Germany introduced legislation in 1995 regarding CO2 Alarms in beer cellars, Calectro launched its first CO2 Alarm System. Parallel to this Raytheon launched its Dry Cleaning project together with among others the Swedish gas company AGA. This dry cleaning process replaced cancerous perc with recycled CO2. An incredible process which does not use any environmentally dangerous detergents or even, any water. But it did need a CO2 safety system and Logico2 developed it. Insuring that no accidents would happen. At the same time McDonald's in the United States were sadly hit by a number of CO2-related accidents and asked for Calectro's assistance with technical know-how of CO2

safety. To meet the increasing demand in this specialized area, and to streamline operations, Calectro in 2005 started LogiCO2, with Bo Hansson leading the way.

It soon became clear for the young company that there were a strong unmet need for knowledge and technologies around CO2 safety and LogiCO2 quickly a bonded partner with several large industrial actors such as Coca Cola, McDonald's, AGA, Air Liquide and Praxair in this CO2 safety field.

Large-scale production of LogiCO2 CO2 security system (for fixed installation) starts and the entire production process, from design and development to final production is situated in Sweden. Through intensive data gathering and lobbying LogiCO2 in 2001, helped to convinced the European Union to introduce a clear directive on exposure to carbon dioxide and safety (Directive 2001/95 / EC), a directive that clearly defines what percentage of carbon dioxide continuously (measured per hour) an employee or customer maximum may be exposed to.

McDonald's decided CO2 safety systems to be mandatory in all their restaurants worldwide. In numerous countries, including the United States the LogiCO2 CO2 safety system was the only product that met McDonald's requirements. During the next few years the LogiCO2's CO2 safety system became the norm-setting system in the industry and is today the only CO2 safety system that meet all countries laws and regulations.

Future

With over 100,000 units installed worldwide LogiCO2 looks forward and continues to improve its existing products, but also develop new products for new markets and applications. As a part of this, LogiCO2 this summer released LogiCO2 - Scout. LogiCO2 - Scout is a wireless CO2 sensor that fits easily in the palm of your hand. It's controlled via Bluetooth and a smartphone app (both Android and iOS are supported) and helps safety personnel, firefighters and many others to remotely read the level of CO2 in a space , from a safe distance.

This unit provides a previously unequalled mobility and flexibility and can help service personnel to quickly find leaks in a CO2 system, which otherwise could be both costly and dangerous to health.

LogiCO2's products are designed and produced in Sweden.

With products installed in over 125 countries worldwide, LogiCO2 is contributing in making the world a safer place to be in.