

Non Toxic Pest Control

By: Douglas Wright, President

Thermal pest control is a well-established procedure in facilities doing grain storage, milling and baking operations. In addition, it is also used in hospitals and long-term care facilities, hotels, apartments and other commercial buildings. The process is quite simple and has several advantages over standard chemical treatment methods.



- 1) The removal of chemicals helps to allow Organic Certification
- 2) Regulations relating to the use of most chemical pesticides are making it harder to use them and as with CFC's their usage is supposed to be phased out.
- 3) COST, once heat treating is implemented as a regular process ,the cost can be much cheaper than chemical treatments.
- 4) The method is completely non-toxic as it leaves no chemical residue

The principle of thermal Pest Control is simple, by heating the building or areas of concern up to a specific temperature for a specified time and you will kill most if not all of the insects, their eggs and any other vermin. If done at regular intervals it is an effective means of keeping insect populations under control without the use of traditional chemicals treatment methods. The catch-22 with this procedure lies with monitoring the facility and ensuring that all points have reached the appropriate temperature. Normally this involves running 1000's of feet of thermocouple wiring throughout the building(s) just to verify the temperatures. This is a time consuming and costly procedure. Just to set up, conduct a heat treat and disassemble all the thermocouples can take up to 3 days.

Scigiene on the other hand can do this using a cost effective wireless system that can be set up and taken down quickly (30 minutes or less!). The savings from one treatment using our wireless sensors will easily pay the system costs. The other benefits are that this minimizes the personal having to run about inside the extremely hot building that would otherwise violate Health and Safety rules.

So next heat treatment a much easier and far less costly procedure is to place wireless temperature sensors throughout the plant at Critical Control Points (CCP's). Our wireless systems will allow wireless sensors to be placed or hung throughout the plant quite easily. Hereafter, live monitoring of each CCP can be done simply by turning on a computer or mobile phone app running our [Scigiene cloud based software](#) to easily view all the sensors, room by room, zone by zone or in whatever groupings you choose. After testing is over, the sensors can be removed just as easily and/or left in place and used for other Q.A., Health & Safety or Engineering monitoring purposes.



And because its cloud based one or more supervisors can view the readings and receive alerts live from anywhere! A typical system will use our [Temperature sensors](#) for each CCP to be monitored and one or more [Repeaters](#) at key points to relay the signals from the sensors to our [Receivers](#). The Receiver is connected to any internet router where the data is streamed to the cloud for local or remote viewing using the software. You can receive alerts on emails (for free) and/or through phone and text calls.

For those interested in even more advanced solutions we can also use sensor signals to trigger relays to activate heaters or open and shut vents. Call us if you have some wild ideas. You might find out they are not that hard to integrate!

The advantages are numerous:

- Lower costs: Compare our system costs with any other systems hardware and installation costs.
- Easier to locate in difficult hard to reach areas.
- Easier to calibrate: Each sensor can be simply moved to a calibration chamber for testing and calibration is done using the software or sent yearly to Scigiene for battery replacement and certification.
- Lower labour costs, as installation and removal are faster and easier. Therefore fewer overtime staff are needed.
- Control integration/

Below we have created links to the products mentioned for convenience- Click on the items. More [Wireless](#) and [Monitoring](#) sensors are also available based on needs (such as for **humidity, light, Carbon monoxide, Open/Close** doors etc.). If you have other questions please check our [website](#) or call us with details of your application and we will be happy to assist!



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