BOSCH

PLUMBING, HEATING AND AIR CONDITIONING TECHNOLOGY

Simply see more in plumbing, heating and air conditioning technology – with the Bosch temperature measuring tools

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PLUMBING, HEATING AND AIR CONDITIONING TECHNOLOGY

Thermal imaging cameras are ideally suited to the areas of plumbing, heating and air conditioning technology.

They make your work more efficient and offer a number of different potential applications in the areas of monitoring, maintenance and repair. It doesn't matter whether you're checking heating and air conditioning systems or attempting to uncover issues such as leaking water pipes in sanitary facilities:

All these tasks primarily deal with temperature, and it is precisely in this regard that the Bosch thermal imaging cameras can assist you. For example, you can use them to quickly determine whether a heating system is distributing heat evenly – and then use the resulting thermal image to help you explain the results to your customer. Thanks to the immediate visualisation of temperature, you can determine directly whether everything is working correctly or if there is a problem. This means that you can save time whilst creating transparency for the customer through a professional documentation process – one of the most important basic principles for establishing trust.

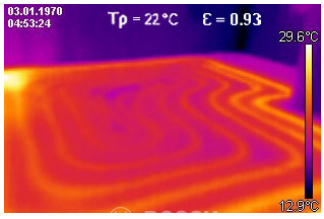
Potential applications

1. Inspection of underfloor heating and pipe routing

The naked eye alone cannot detect whether heat is being evenly distributed across underfloor heating, i.e. that the system is truly working efficiently. Often, hardly anything more is known about the system at first other than the fact that it is not working as intended. The reasons for performance issues can vary – for example, the pipes may contain dirt or air and therefore require cleaning or aeration as appropriate. Alternatively, it is also possible that the water may need to be replaced, or that a pipe even has a leak. Thanks to the thermal imaging cameras from Bosch, you can rule out numerous causes of a fault at first glance of the large-scale-display, whatever the circumstances may be. This therefore simplifies the work process and saves time.

Even in new builds or after carrying out renovation work, you want to be completely sure that underfloor heating has been optimally laid with the correct number of heating coils/spirals – which can then also be documented in the thermal image.

Note: Before you begin an examination, the underfloor heating should first be switched off, as otherwise the entirety of the floor will have already warmed up and the difference in temperature will not be visible. You can then switch on the heating and, after a few minutes, inspect the thermal image to see how the heating pipes warm up and become visible on the surface.



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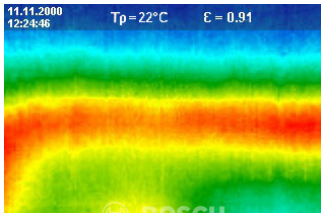
Potential applications

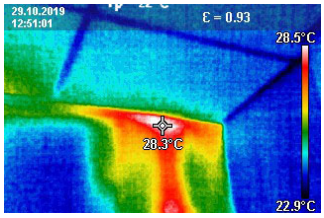
2. Locating of heating pipes and leaks

Without the right thermal imaging partner, the fault-finding process for locating issues such as leaks in heating pipes and water pipes not only becomes laborious, but also time consuming. Furthermore, if screed or floor coverings need to be removed to carry out a repair, the whole process can quickly become rather expensive, particularly if it is not known exactly where the problem has occurred.

Our thermal imaging cameras can help to relieve you of this burden, since the pipe routing of hot or extremely cold water is made visible at a glance: On the clear and easily comprehensible display, you can identify water leaks directly in the form of hot or cold sections along the pipe routing. This way, you can locate broken or clogged pipes with precision. And this also means that only the limited area of floor covering you have identified needs to be removed to carry out additional measures.

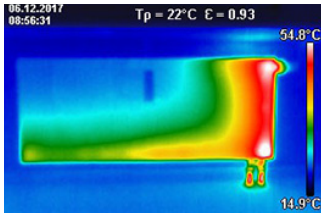
Important note: If the pipes or wall/floor coverings are too well insulated, the heat of the pipe will not penetrate through to the surface, meaning that the thermal imaging camera may not be able to determine any temperature difference.

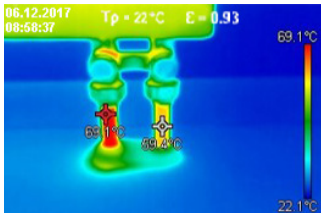




3. Examination of radiators

The Bosch thermal imaging cameras can also help you to examine radiators. Whereas previously, you would have to inspect the radiator by tapping on it and listening to the sound, the GTC models can now tell you at the press of a button whether the system is warming up evenly or if and where there are issues with the unit. Allow the radiator to cool down first and then simply switch it on to observe how it heats up, and you can quickly narrow down the problem: Does the heating system contain air and therefore need to be deaerated? Is the heating inflow defective? Does the radiator need to be rinsed out? Or do the connections simply need to be swapped? Whatever form the problem may take, our temperature measuring tools will provide you with the crucial information you need to find a solution and consequently make your work much easier.





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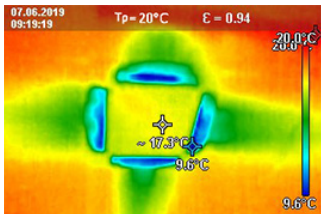
Potential applications

4. Monitoring of air conditioning systems

Problems do not always occur as a result of a failure – in fact, when it comes to air conditioning systems, a system that overperforms tends to be more of a potential issue. Leaking valves are often to blame for this, since the cooling medium will flow through these despite the control system display reporting the contrary.



In such cases, the temperature measuring tools from Bosch will considerably reduce both your workload and safety risk. From a safe distance, you can conveniently and efficiently obtain an overview of the system. This lets you locate faults or narrow down their causes even more quickly – which in turn lets you arrange repairs in the most effective manner.

To measure the air conditioning system's airflow with even greater accuracy and within the system, you can use the GIS 1000 C infrared thermometer with a special temperature probe (type K). This probe delivers precise values for the air temperature and, unlike with infrared measurements, does not only measure the cooled surface temperature.

If you want to find out more about how to use the GIS 1000 C infrared thermometer with a temperature probe, take a look at our Thermal Campus here: https://www.bosch-professional.com/gb/en/temperature-measuring-tools/thermal-campus/