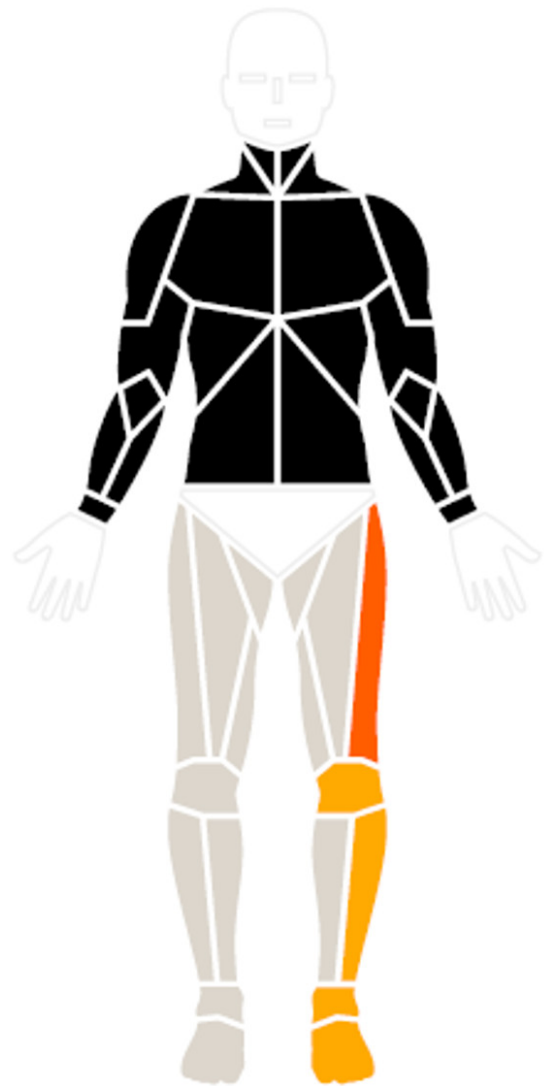
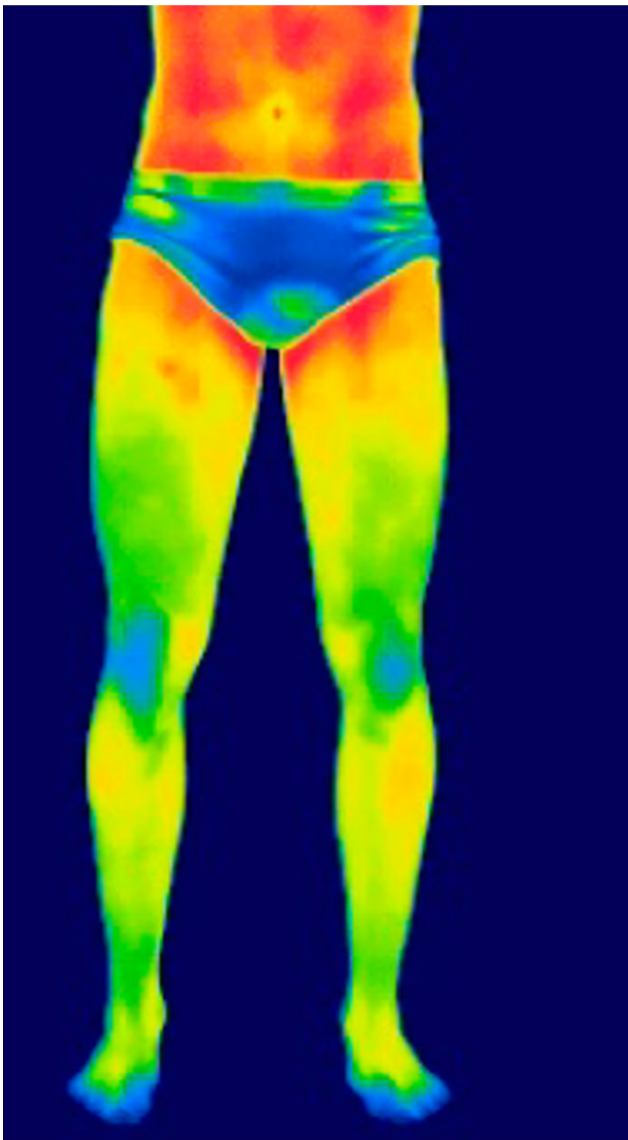


Thermography as an example of Physical Evaluation Thecnology



The objective of the Digi-Sporting Project was to design an educational program aimed at supporting sports organizations that wanted to carry out a digital transformation. Providing keys, guidelines, and knowledge to establish such change.

Throughout the educational syllabus designed for this purpose, tools known by the generic population were shown, such as GPS (Global Positioning Systems), since most of the population uses them in one way or another (for example when traveling). But in this educational syllabus, were also shown technologies unknown to most of the population, including exercise professionals, among these technologies thermography stands out.

Thermography is a tool that monitors physiological variables through skin temperature, using photographs where the infrared radiation of the athlete is captured. This technology is irradiant, safe, and does not need direct contact with the player under evaluation. In addition, it allows to evaluate the players with objectives of sports rehabilitation (follow up of the injury), prevention of injuries and / or performance.

The basis of this technology is that athletes should keep their thermal pattern constant under basic conditions, and thermal asymmetries (temperature differences) in bilateral body areas (e.g., ankle, knee ...) are related to factors related to injuries, since under normal conditions the temperature of both bilateral areas should increase equally. Asymmetry may indicate an incorrect assimilation of work caused by factors such as excessive training or secondary trauma.

In addition, this technology can serve as support for the diagnosis provided by the medical staff: The skin has hyperthermic and hypothermic responses; on the one hand, hyperthermia takes place with inflammation or processes related to increased cutaneous blood flow, such as bursitis, bone fractures, acute muscle injuries or processes related to inflammation; on the other hand, hypothermic responses occur as a result of degenerative processes, arterial or venous occlusion, or damaged nerves. Taking these factors into account, the medical staff can confirm his diagnosis or modificate it.

For all this, thermography is gradually beginning to be more and more used in sports clubs, especially elite ones; and any club that wants to improve its performance should consider the use of this technology. While it is true that at the moment there is a bit of ignorance about this technology, there are some companies like Thermohuman, which are betting on this technology and validating it, trying to increase the scientific evidence about it, and facilitating future accessibility to sports clubs of all levels.

Link to Original article: <https://www.digi-sporting.eu/news/thermography-as-an-example-of-physical-evaluation-thechnology?elem=286835>