

Project Info (2012-2015)

DAPhNE, a FP7 EU-cofunded project within the framework of the Intelligent Manufacturing System (IMS) program, aimed at introducing a completely new factory concept in three energy-intensive industrial sectors as ceramics, cement and glass, which do represent key sectors for the European manufacturing economy.

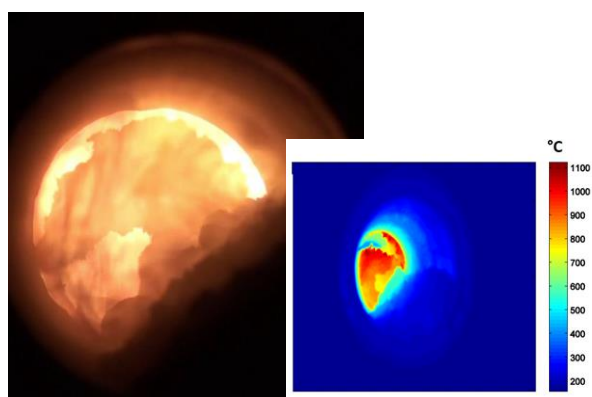


The overall scope of DAPhNE was to develop and demonstrate a package of integrated solutions for energy intensive processes (ceramics, cement and glass), based on substituting high temperature conventional heating with micro-wave technology (not yet implemented as a full-scale industrial process) and developing a set of smart monitoring and control solutions for providing real-time information about the energy consumption and product quality on the basis of Key Performance Indicators.

The multidisciplinary consortium comprised 7 industrial partners together with 1 technological-based company closely collaborating with group of 9 research organizations.

The novel, modular and reconfigurable applicator designed made possible to heat material up to 1450°C, thus making melting/calcining by MW a real evidence more than a target. Material produced using such heating technology showed the same quality of material obtained using conventional heating.

It is then clear that such innovation represents an actual breakthrough for energy intensive processes, since material can be heated up in minutes instead of in hours, with clear energy saving and with drastic reduction in CO₂ emission.



For further information about the project: <http://daphne-project.eu/en/>



This project has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 314636.