

SIT Technologies Srl

Foundation: 2018

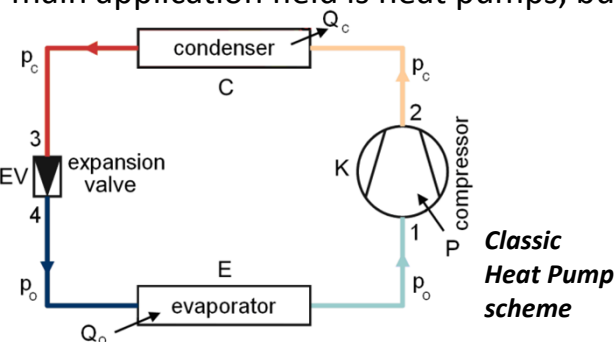
Description: SIT Technologies Srl is an innovative startup company, certified as University of Genoa spinoff, with a strong technological background that develops and offers energy harvesting solutions for disruptive applications.

SIT core business is related to Tesla turbine and its production: a technology characterized by a simple design and blade-less feature. SIT is developing solutions for introducing this technology where a pressure drop is available but not exploitable with common technologies. The main application field is heat pumps, but also automotive and power plant industry.



<http://www.sit-tesla-technologies.com/>

Market: The main target market is related to the heat pump and refrigeration market, enabling ultra-efficient heat pump cycles. The target market is initially the large size heat pumps (1-100 MWth), targeting in the mid-term the small size heat pumps, down to domestic fridges and air conditioners. The European Heat Pump Association (EHPA) shows that heat pumps scenario until 2020 in Europe will be characterized by 35,6 GWth new installations, which corresponds to approximately 10 billion euros. Other relevant markets are automotive and power systems.



Advantages: Tesla expanders feature high cost-competitiveness, simple manufacturing, easy maintenance, capability to work with dirty or multi-phase fluids, such as in heat pumps. No other technology has ever demonstrated such features. A Tesla energy haverster can reduce the heat pump electrical consumption of 10-15%, always. Tesla can succeed where others have failed, mainly for erosion problems. Tesla turbine is inherently insensitive to erosion. The Tesla expander has the potential to become a world standard for the refrigeration and heat pump sector. Those facts obviously lead to significant consumption cuts and greenhouse gas reduction.