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MATTEI

Mattei Intelligent Energy Management (M.I.E.M.) is software that analyses data about the energy consumed by a compressed air generating unit. The aim is to take a snapshot of a complete energy profile and provide precise indications about the efficiency of the system and how to increase it. Mattei is known for the exclusive vane technology that ensures a better air seal. Low speed of rotation – up to 1000 rpm – and an engine speed to pumping unit ratio of 1:1 translate into considerable efficiency and a reduction in energy consumption and costs. In recent years Mattei's eco-friendly vocation has been further reinforced and has led to the design and implementation of increasingly leading-edge solutions and instruments. Totally in tune with the company's values, Mattei proposes M.I.E.M.: "It is a proprietary software that delivers very precise information about the energy consumed by compressor units. Thanks to simulations based on the system's registered status quo, it provides possible solutions for more efficient compressed air production in terms of energy" explained Fabio Farneti, After Sales Manager at Ing. Enea Mattei.

"At the first stage" – he continued – "registrations are carried out when the system is operating. Mattei technicians acquire the electrical parameters of system machinery. Registration takes a few days, often over the weekend, in order to acquire operating data under reduced load conditions for an even more precise assessment that highlights any losses of air in the system. At this point, the M.I.E.M. software processes the data collected and provides an energy profile of the end user based on compressor unit settings. This energy profile is simulated in accordance with experimental numerical data in relation to consumption and the operating pressures being analysed. The simulation is carried out by optimizing the data collected and providing a solution, the principle requirement of which is to lower energy consumption by the system analysed".

M.I.E.M. provides useful elements so that the daily request for air from an industrial unit is regulated and optimized, thereby improving efficiency: "With the data to hand we have demonstrated that thanks to analyses with M.I.E.M., energy consumption is reduced by up to 35%. By combining the analysis with the range of Mattei's monitoring systems that minimize daily starts/stops due to discontinuous loads, the system's overall efficiency is further improved" continued Fabio Farneti.

Mattei proposes two monitoring systems: Concerto, which can simultaneously command and control up to 16 units, and Quartetto, which can manage and optimize compressor groups of up to four interconnected units.