

EXERGY BOOSTS EFFICIENCY AND SAFETY IN CEMENT PLANTS. NEW CONTRACT SIGNED WITH CEMENTI ROSSI FOR A 3.5 MW ORC WASTE HEAT RECOVERY UNIT

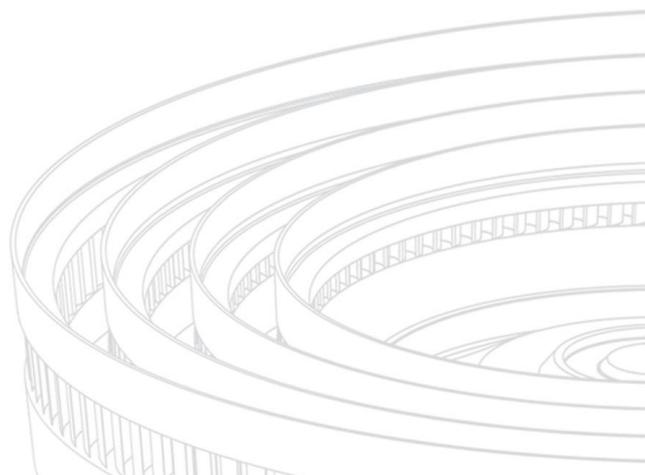
- **The ORC utilizing a safer non-flammable organic fluid will recover the exhaust gases from the clinker coolers of a cement manufacturing plant located near Treviso, Italy.**
- **The new WHR solution will cover the 30% of the energy need of the cement manufacturing process thus reducing the demand of conventional energy and the overall environmental impact**

Olgiate Olona (Varese – Italy), 24 July 2018 - EXERGY recently signed a new contract with Cementi Rossi S.P.A. for a 3.5 MW ORC Waste Heat Recovery system to be installed in a cement plant located in Pederobba, near Treviso, Italy. The scope of the contract includes engineering, design, site erection, commissioning and start up of the power plant and a long term after sales service.

For Cementi Rossi's plant EXERGY designed a customized and compact ORC solution to convert approximately 16 MWth available from exhaust heat in the clinker cooler into 3.5 MW of electricity utilizing an air cooled condensing system, the highly efficient Radial Outflow Turbine as expander and choosing a non-flammable fluid to grant maximum safety during plant operation.

The electricity produced by the ORC module will feed approximately the 30% of the energy demand of the cement plant thus enhancing the overall efficiency and profitability of the cement plant while reducing also the environmental impact. It can be estimated that once in operation the new ORC unit will contribute to save approximately 5400 toe per year deriving from the avoided use of conventional fossil fuel generated electricity and 17.000 tons of CO2 emissions consequently.

Claudio Spadacini, EXERGY's founder and CEO comments: "Waste heat recovery technology is a very profitable and proven solution for cement manufacturing process. Our ORC WHR systems, leveraging on the higher efficiency of the Radial Outflow Turbine can help to boost at maximum level the performance of cement plants. For Cementi Rossi in particular we worked to supply a tailor made solution, choosing a non-flammable fluid in the cycle and a very compact plant design with a high level of prefabricated components to reduce costs and time for erection. We are happy to have partnered with Cementi Rossi for this project and hope to develop others with them. Cement is one of the key application to develop for our WHR market in the future"



EXERGY is the developer and manufacturer of Organic Rankine Cycle (ORC) systems with the pioneering Radial Outflow Turbine technology. **EXERGY's** proprietary technologies, covered by a number of patents allow for greater energy production via the exploitation of previously unusable heat sources from geothermal, waste heat from industry, biomass and concentrated solar power. **EXERGY** are part of the Maccaferri Industrial Group and sitting within the SECI Energia holding. From the headquarters in the north of Italy (Milan), **EXERGY** export and implement its technology worldwide with a particular focus on high growth potential markets such as Turkey, South-east Asia, North and South America. Website: <http://exergy-orc.com/>

The **Maccaferri Industrial Group** is headed by the family holding company S.E.C.I, a company that since 1949 operates in several business areas through its seven divisions: Officine Maccaferri (environmental engineering), Manifatture Sigaro Toscano (tobacco), Eridania Sadam (food and agro-industry), Samp (mechanical engineering), Seci Real Estate (real estate and construction), Seci Energia (energy) and Gnosis (biotechnology). The Group, chaired by Gaetano Maccaferri, is present in the world with 58 factories, with a turnover of 1.270 million euro in 2016.

EXERGY's PRESS CONTACT:

Sara Milanesi
Marketing & Communications Manager
Ph. +39 0331 1817620
s.milanesi@exergy.it

