

TECHNICAL FACTSHEET | n. 3

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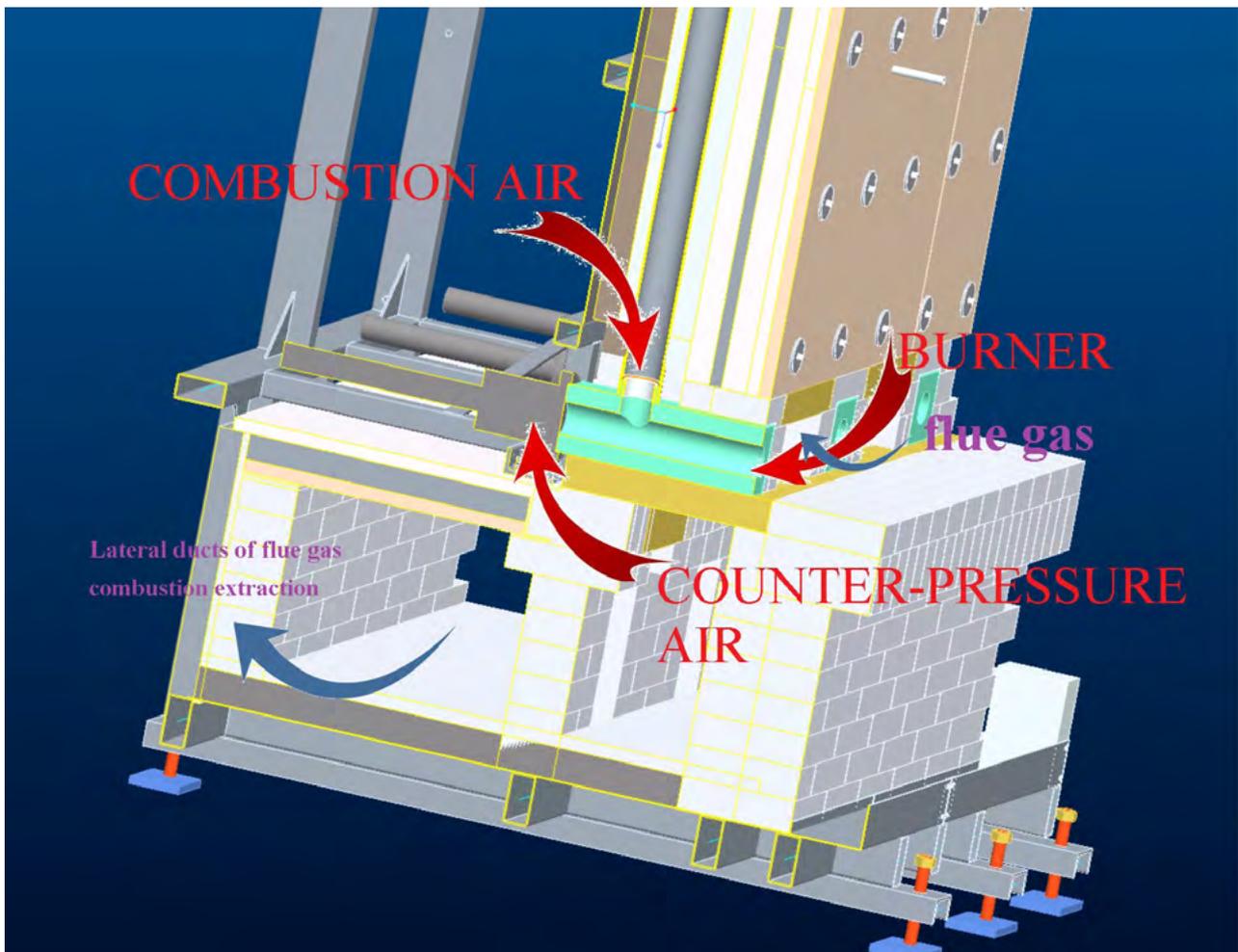
ECONOMICK HEAT RECOVERY

ECONOMICK

HEAT RECOVERY

SHORT DESCRIPTION |

The Economick kiln saves energy by preheating combustion air: an external special exchanger recovers flue gas heat to increase air combustion temperature up to 350°C. Notwithstanding this achievement, flue gases fluid dynamics are not altered in any way, which is a fundamental asset for a correct firing process.

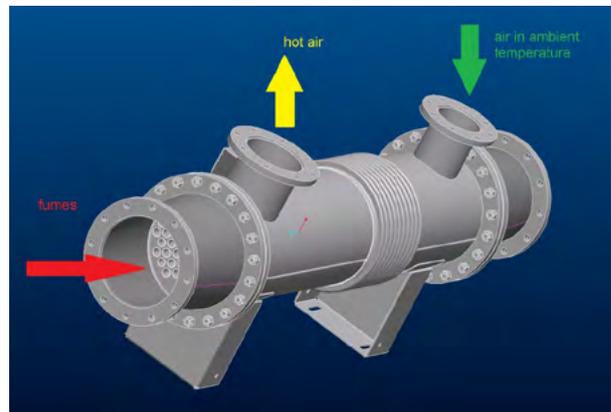
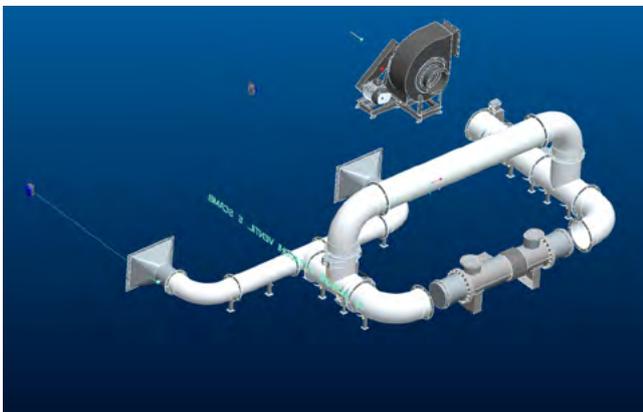


ADDED VALUE |

Economick kiln heat recovery reduces energy consumption with 20-25%: the firing process is as in a traditional kiln without any additional chimneys that could worsen the heat exchange by convection between ceramic pieces and flue gases. Thanks to the patented Ipeg burner it is also possible to choose nozzle position to optimize flame speed.

INNOVATIVE FEATURES |

-  External heat exchanger to preheat combustion air without altering firing fluid dynamics.
-  Air combustion temperature above 350 °C.
-  No additional chimneys.
-  Patented Ipeg burners to optimize flame speed.



PARTNERS |

SETEC GROUP

| www.setecsrl.it

LIFE CYCLE ENGINEERING

| www.lcengineering.eu

KERASAN

| www.kerasan.it

PROJECT DESCRIPTION |

ECONOMICK project will develop an innovative shuttle kiln for ceramic production, which consumes about 45% less energy than actually existing ones and, consequently, allows the industry to reduce costs, CO₂, NO_x, HF, SO_x and dust emissions, and raw materials.

Intermittent (or shuttle) kilns are used in about 50% of the ceramic sectors, excluding only tiles industry. Producers of sanitary and table ware, refractory or artistic ceramics use a shuttle kiln for refining ceramic artefacts with some defects, while smaller factories use such a kiln also for first firing, alternatively to a tunnel kiln that requires high production levels.

Thanks to a computerized management of air and gas flow, the almost complete reuse of warm air from cooling and advanced materials for thermal insulation, the ECONOMICK kiln will ensure a specific consumption of 1300-1400 kcal/kg of firing product, comparable to the performance of a good tunnel kiln.

By substituting their tunnel kilns with ECONOMICK kiln, European industries - in particular SMEs – will drastically reduce their costs. This will strongly boost their capacity to maintain or improve their market share, especially in the high-end market.

www.economick.eu

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