

Press release – Paris, November 2, 2023

Fives introduces the e-Ductflame[™], its first patented electric heating system

As a pioneer in the decarbonization of Industry, Fives designs solutions to help its customers improve their processes and reduce their environmental footprint. The newly launched e-Ductflame $^{\text{TM}}$ is a revolutionary electric/gas hybrid system intended for a wide range of applications, whether for replacing existing duct burners or for integrating into new installations. It has been designed to cut carbon emissions and improve the efficiency of industrial heating processes with minimum costs involved.

Fives' e-Ductflame™: decarbonizing industrial heating processes

To answer the growing demand for more sustainable and efficient industrial solutions, Fives has designed the e-Ductflame[™], a groundbreaking dual-energy-powered heating system aiming to **reduce carbon emissions** and optimize heating processes.

Fives' e-Ductflame™ is the first burner of the Group using electricity as a source of energy to heat the air stream, resulting in significant fuel gas consumption and CO₂ emissions reduction for heating processes.

Furthermore, Fives has designed the e-Ductflame™ so that it can be **connected to renewable energy sources such as wind and solar**, going one step further towards the decarbonization of Industry. Aside from electricity, the e-Ductflame™ accommodates various energy sources, including natural gas, **hydrogen** and biogas, offering exceptional flexibility in fuel selection.

At Fives, innovation is a vocation

Fives is the sole company providing the unique and patented technology behind the e-Ductflame™. It is suitable for any duct burner configuration both in new installations and in revamping solutions, highly reducing costs for manufacturers.

Always one innovation ahead thanks to its ability to anticipate its customers' needs, Fives has developed a **unique and user-friendly control interface** for the e-DuctflameTM, ensuring easy operation and maximum flexibility for fuel switching. This allows industrial players to easily adapt their operations based on specific challenges, including energy savings (both fuel gas and electricity), optimizing heating performance, reducing CO_2 emissions, minimizing operating costs and maximizing the use of renewable energies.

"Fives' e-Ductflame™ reflects our commitment to innovation and sustainability" states Francesco Giudici, General Manager of Fives ITAS. "It is the result of years of research and development dedicated to providing sustainable and versatile heating solutions, answering our customers' needs. We are proud of this achievement and eager to see how it will transform the industry landscape".

Fives' e-Ductflame™ is suitable for a wide range of markets for industrial drying applications, including cement and minerals, ceramics, paper and pulp, printing and converting, food and feed, painting and coating.

Fives will be presenting this revolutionary technology at ECOMONDO from November 7-10 in Rimini, Italy.

Technical features:

- For drying applications and hot gas generators
- Suitable for any duct configuration
- Going from 100%electricity to 100% fuel gas
- Full flexibility in electrical mode
- High turndown in the burner mode



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e-Ductflame™: Fives' first patented electric/gas duct burner

About Fives

Fives, your partner for a more efficient and sustainable industry
From the first railway lines to the Eiffel Tower lifts and factory 4.0, for over 200 years Fives has been designing the disruptive solutions and technologies that make up industry. As a pioneer of decarbonization and digitalization, Fives is always one innovation ahead thanks to its ability to anticipate customer needs. By responding to the specificities of each market locally, Fives combines economic and environmental performance in 25 countries thanks to its 8,500 employees.

More information: www.fivesgroup.com



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