

ClearSign Introduces Duplex Plug & Play Burner

Streamlined Manufacturing and Installation Achieves Revolutionary Performance

SEATTLE, Feb. 7, 2017 /PRNewswire/ -- ClearSign Combustion Corporation (NASDAQ: CLIR), an emerging provider of industrial combustion technologies that help to reduce emissions and improve efficiency, today announced that it has launched a new burner product based on its Duplex™ technology for refinery and industrial process heater applications. The market opportunity is global with over 150 refineries in North America, over 125 in Europe and close to 200 in Asia. Each refinery contains multiple heaters with multiple burners, and addressable global installed base numbering in the tens of thousands - all candidates for the outstanding performance offered by the Duplex Plug & Play™ product.

The innovative Duplex Plug & Play design provides a simple, pre-engineered and standardized direct burner replacement for traditional refinery heaters with the proven features of ClearSign's unique Duplex technology. Unlike existing burner solutions, the evolution of the Duplex technology into an off-the-shelf product reduces the customized engineering associated with typical retrofits while delivering unparalleled low emissions and the elimination of flame impingement. Globally, flame impingement has been a challenge that virtually all refineries and industrial combustion users face, costing many hundreds of millions of dollars annually in lost production, unsafe conditions, and maintenance costs.

The product derives its name from the fact that the installation does not require a heater or furnace to be shut down. Rather, the heater can continue to operate while the Duplex Plug & Play is installed through the burner mounting point, connected to the utilities, and turned on. The ability to install the Duplex Plug & Play while the system is operational allows customers to avoid costly down time and immediately start enjoying the benefits of the product while shortening the sales cycle often prolonged by scheduled maintenance, often months or years in the planning.

"This product is a game changer," said Stephen Pirnat, Chairman and CEO of ClearSign. "Our Duplex research and development team, working with customers, have set a new industry standard by capturing the features that refineries desire, literally all over the world. We are excited to deliver and install the first units within the next 60 days to a customer in Texas for field testing. Pending favorable field results, we anticipate interest from a number of OEMs for licensing and potential manufacturing arrangements."

Prior to introduction, the Duplex Plug & Play was subjected to months of rigorous laboratory testing that mimicked refinery operating conditions expected to be experienced during the field test. Field testing at the refinery in Texas will provide the last phase of product validation and allows for operational feedback from our beta site customer. The customer has expressed interest in purchasing a number of systems once the testing is completed.

About ClearSign Combustion Corporation

ClearSign Combustion Corporation designs and develops products and technologies for the purpose of improving key performance characteristics of combustion systems, including emissions and operational performance, energy efficiency and overall cost-effectiveness. Our patented Duplex™ and Electrodynamic Combustion Control™ platform technologies enhance the performance of combustion systems in a broad range of markets, including the energy (upstream oil production and down-stream refining), commercial/industrial boiler, chemical, petrochemical, and power industries. For more information, please visit www.clearsign.com.

Cautionary note on forward-looking statements

All statements in this press release that are not based on historical fact are "forward-looking statements." While management has based any forward-looking statements included in this press release on its current expectations, the information on which such expectations were based may change. These forward-looking statements rely on a number of assumptions concerning future events and are subject to a number of risks, uncertainties and other factors, many of which are outside of our control, which could cause actual results to materially differ from such statements. Such risks, uncertainties and other factors include, but are not limited to, general business and economic conditions, the performance of management and our employees, our ability to obtain financing, competition, whether our technology will be accepted and other factors that are to be detailed in our periodic and current reports available for review at www.sec.gov. Furthermore, we operate in a competitive environment where new and unanticipated risks may arise. Accordingly, investors should not place any reliance on forward-looking statements as a prediction of actual results. We disclaim any intention to, and undertake no obligation to, update or revise forward-looking statements to reflect events or circumstances that subsequently occur or of which we hereafter become aware.

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