

**LOW NO<sub>x</sub> RADIANT WALL BURNER TECHNOLOGY – OPTIMISED FOR OPERATION  
WITHIN A RESTRICTED OPERATING ENVELOPE**



Zeeco – RWSF Burners

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The industry has long since struggled to achieve Low NO<sub>x</sub> burner performance within old design ethylene crackers, where burner to burner and burner to tube spacing is very tight.

Along with the effort to achieve improved emissions performance, it has always been a balance to ensure an optimal flame pattern. Due to flame to flame interaction, associated flue gas recirculation patterns and the inherent high heat flux tied to the heater design, this has always provided an exhaustive challenge.

Zeeco engaged this requirement with a view to design a burner that could achieve sub 100 mg/nm<sup>3</sup> NO<sub>x</sub>, whilst maintaining an extremely tight flame envelope to thus ensure an optimal overall performance.

The design was rigorously tested at the Zeeco HQ development facility, where 6 off burners were installed and fired to simulate the worst-case spacing arrangement of the tightest configuration.

The burners provided the perfect balance of class leading NO<sub>x</sub>, tied with strong, consistent flame patterns.

