

## **Reliable and sustainable lining systems in ethylene crackers and pyrolysis furnaces**

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Refractory Lining is one of the key components of ethylene crackers and pyrolysis furnaces. Their purpose is to protect the external metal enclosures of high-temperature process equipment and to help ensure the safety of personnel working at the facility.

They have to be a reliable component to avoid unplanned and undesired shut down of the unit, affecting plant operations and production.

There are now lining design concepts that in addition to the above features help to reduce the carbon footprint and can perfectly fit in the sustainability concept of the companies.

This paper will investigate a different way to approach the design and specification of a refractory lining system, drawing on real-life examples and also considering the latest European legislation and regulatory system for dangerous and hazardous substances.

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