Hi Kingfisher

Industry: Metals

Plant: Fume

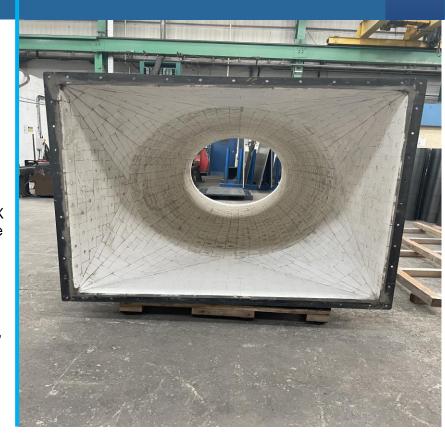
Lining System: K-ALOX

Key Benefits:

- √ Reduce material build-up
- √ Improve process efficiency
- √ Eliminate cost to repair

Problem: Kingfisher initially entered the realm of reactor lining in 2004 by introducing K-ALOX lined Reactor bottoms as a replacement for the conventional hard metal linings typically provided from other suppliers. The superior performance of the K-ALOX lined reactor prompted a shift towards using the K-ALOX lining system for all future replacements on site. In 2016, reports of lining failures surfaced, prompting a review and reassessment of the lining specification. Kingfisher sought to enhance the lining specification by implementing a high-strength epoxy adhesive system and the inclusion of mechanical fixing to secure the K-ALOX tiles.

K-ALOX LINED FUME PLANT REACTOR



Solution: The K-ALOX 92% High Alumina tailored lining system was designed to use 13mm thick weld-on tiles, with an emphasis on enhancing durability. The design also incorporated the use of 6mm thick K-ALOX 92% High alumina ceramic cylinders for lining the fresh & enriched alumina feed pipes. Additionally, the design accounted for variations in reactor height and offset across the six reactors with a bespoke K-ALOX lined make up piece. Kingfisher has proposed and installed a superior specification for the lining system, offering mechanical fixings for each tile and using K-FIX EP HT for bonding and bedding the tiles to the substrate.

Benefits: Kingfisher's journey with reactor lining underscores a commitment to continuous improvement and collaboration. By addressing challenges, refining specifications, and maintaining open communication with clients, Kingfisher aims to deliver durable and reliable solutions for reactor lining needs.

Protecting Industry Worldwide

United Kingdom