



EMISSION REDUCTION SOLUTIONS

Koch Engineered Solutions, LLC (KES) can provide a full range of solutions to help reduce your emissions. Industries worldwide leverage our nearly 25 years of expertise in ultra-low emissions control to operate with fewer emissions, maintaining compliance with ever-increasing environmental regulations. From ultra-low NOx combustion equipment to post-combustion, KES has proven capabilities to optimize your facility's performance, based on today's available technology, for pollutant reduction and add value to your bottom line.



Conceptional Design, Engineering

KES can design and adapt processes considering the individual requirements and boundary conditions of our customers. Our aim is to provide the optimum solution with respect to economical efficiency and technical reliability.



Burners and Digital Combustion Optimization

- ▶ We offer a broad range of burner solutions through some of the most trusted brands on the market:
 - Process Burners: SOLEX™, COOLstar®
 - Boiler Burners: ECOjet®, QLN®, QLN-II™ and RMB®



SCR Systems

Our expertise in combustion systems makes us the ideal choice for integrating the burner and post combustion emission controls. Our SCR systems are designed to deliver up to 99% post-combustion NOx reduction and offer multiple ammonia solutions (Aqueous, Anhydrous, Urea, etc.). CO or VOC catalyst are also available for the lowest emissions out the stack.



Heat Exchangers

➤ TWISTED TUBE® Heat Exchanger tube bundles can replace existing tube bundles in your Preheat Exchangers to enhance performance and increase the outlet temperatures of your crude oil or feed upstream of the heaters, thus reducing the load and NOx emissions from those fired heaters.



Installation, Construction & Support

KES can lead your project management, provide lump sum turnkey EPC, and offer engineered equipment services to deliver a complete emission reduction solution that meets your specific needs. We offer 24-hour emergency assistance, on-site technical support, and thousands of spare and replacement parts in stock ready to go.

Partner of Choice

GLOBAL SCALE

KES is an affiliate of Koch Industries that has \$100+ bn¹ in revenues, global presence and investment grade credit ¹As estimated by Forbes

DECISIVE ACTION

Unrivaled ability to marshal resources to move decisively and with certainty when the right opportunities present themselves

PRIVATE

KES' status as a private company and management philosophy allows partners to focus on capturing long-term opportunities

MUTUAL BENEFIT

True partnership mentality. Expectation that KES will work to make partnerships as successful as possible

KOCH LABS

Experts: Engage KES' internal subject matter experts to help better understand market and customer opportunities as well as solving technical challenges

Develop: Use KES and Koch-affiliate facilities and businesses as a test bed for product development and proof of concept, allowing for quicker time to market and product design cycles

Engage: Opportunity to engage KES and Koch affiliates as a partner, customer and supplier



KES Equipment, Engineering, and Construction

Supporting Turnkey Advanced Emission Reduction Solutions

Equipment + Turnkey Installation + EPC Services = EMISSION REDUCTION

JOHN ZINK HAMWORTHY COMBUSTION

Water-tube package boilers and ancillaries • Emissions reduction systems (Ultra-Low NOx Burners + Post-Combustion Systems) • Specialty flare gas systems

KOCH-GLITSCH

Mass transfer • Mist elimination • Phase separation equipment

KOCH SPECIALTY PLANT SERVICES

World-class installation and construction services • Unique product expertise from professionals

KOCH HEAT TRANSFER TWISTED TUBE® Heat Exchangers and hairpin heat exchangers for heat recovery optimization and demanding services

KOCH ENGINEERED SOLUTIONS FOR EMISSION REDUCTION

