



# CLEAN COMBUSTION, CLEAR SOLUTIONS™ FOR THE ETHYLENE INDUSTRY



John Zink Company, LLC is the world leader in developing next-generation combustion technologies and environmental solutions. From research and development and industrial-scale testing capabilities through manufacturing and skillful field installation, John Zink's engineers help customers improve production efficiencies and achieve their environmental goals.

## VALUE CREATION

Every day, around the world, John Zink's high-performance, low-emission combustion systems keep ethylene producers' operations running smoothly. As a total plant solutions provider, John Zink engineers products with longer life-cycles and increased capacities that help our customers work smarter, cleaner and more economically.

## JOHN ZINK® PRODUCTS AND SERVICES

- Low and ultra-low emission process heater burners
- Low and ultra-low emission boiler burners
- Advanced flaring systems and accessories
- Thermal oxidizers
- Worldwide parts and service
- Industrial-scale testing
- Educational seminars

## UNMATCHED EXPERIENCE

John Zink has an exceptional team of researchers and scientists with more than 1,400 years of combustion experience combined, and has a proven track record of success among ethylene producers with thousands of installations worldwide. This unmatched experience enables us to develop state-of-the-art combustion systems the ethylene industry needs to optimize operations.





# TOTAL PLANT SOLUTIONS FOR THE ETHYLENE INDUSTRY FROM JOHN ZINK COMPANY

## LOW-EMISSION PROCESS HEATER BURNERS

A comprehensive range of low and ultra-low emission process heater burner and signature burner technologies for gas, oil and combination-fired heater applications.

## LOW-EMISSION BOILER BURNERS

High-performance, energy-efficient, low-emission boiler burners for packaged boiler and multi-burner applications.

## ADVANCED FLARING

Advanced flare systems for virtually every application, including high-pressure, air-assisted, steam-assisted, gas-assisted, enclosed, utility, liquid and ground flares.

## THERMAL OXIDIZERS

Leading-edge incineration techniques safely and efficiently dispose of a wide variety of hazardous and non-hazardous liquid and gaseous industrial wastes, including nitrogen-bound wastes, salts, acids, exothermic and endothermic contaminants. John Zink's innovative incinerator designs enable customers to achieve fuel savings, enhanced flexibility and reliability, and improved emissions performance at a lower capital cost.

## WORLDWIDE PARTS AND SERVICE

A complete inventory of combustion product parts and around-the-clock technical service to keep your operations online. John Zink's service technicians are trained in the latest technologies to evaluate existing systems for upgrades and retrofits, to troubleshoot operations, and to help plan your next turnaround.

## INDUSTRIAL-SCALE TESTING

John Zink's Research, Development and Test Center uses state-of-the-art data acquisition monitoring and a wide variety of fuels to test burners and flares, at industrial scale, under real-world operating conditions.

## RESEARCH AND DEVELOPMENT

John Zink's research and development capabilities include sophisticated tools and technologies, and advanced problem-solving techniques like computational fluid dynamics (CFD) to develop the next generation of combustion and environmental systems.

## SIMULATION TECHNOLOGY SOLUTIONS

John Zink's Simulation Technology Solutions (STS) Group provides highly specialized flow analysis, CFD modeling and vibration acoustical analysis useful for evaluating equipment and design performance in both reacting and non-reacting environments.

## EDUCATIONAL SEMINARS

The IACET-accredited John Zink Institute™, located at our world headquarters in Tulsa, Okla., USA, offers ongoing combustion education to improve productivity and enhance employee safety. The Institute also offers regional courses bringing training nearer to your facility's location, as well as on-site seminars customized for your facility.

OPTIMIZE YOUR PLANT OPERATIONS, IMPROVE YOUR PRODUCTION AND LOWER YOUR EMISSIONS.  
CALL THE COMBUSTION EXPERTS AT JOHN ZINK COMPANY TODAY.