

# POWER

FOSSIL FUEL  
INDUSTRY SOLUTIONS



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A globally competitive environment has created many new and unique challenges for the fossil power industry:

- More stringent environmental regulations
- Increasing energy and operational costs
- Reductions in plant personnel
- Pressure to maintain or reduce rates
- Increasing demands



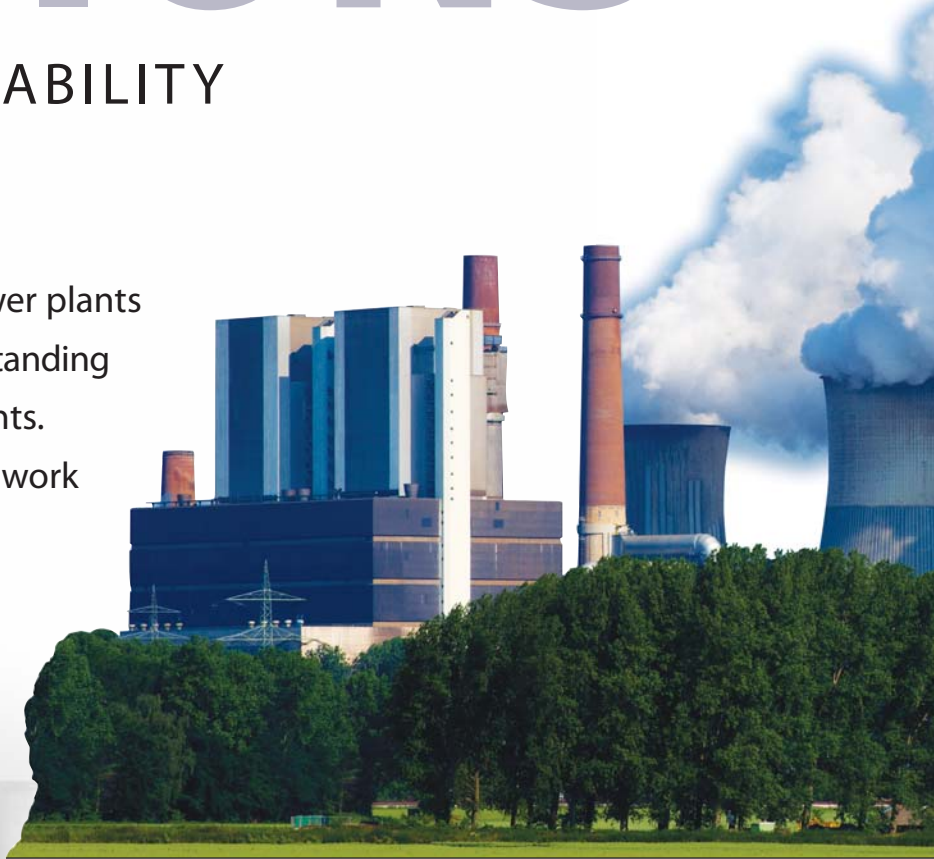
**CHESTERTON**<sup>®</sup>

*Global Solutions, Local Service.*

# SOLUTIONS

## THAT INCREASE RELIABILITY AND REDUCE COSTS

**CHESTERTON®** works with fossil power plants around the world to gain a solid understanding of the industry's needs and requirements. Our specialists and technical team will work with you to develop specific solutions that meet your plant's needs and help drive significant improvements in equipment reliability and reductions in overall costs.



**Value-Driven Solutions,** built from our portfolio of technologies, products, services, and knowledge will help you manage your plant's critical assets. This portfolio includes:



- Programs to improve reliability, optimize energy efficiency, and increase plant output
- ARC advanced composites for corrosion and wear reduction and the rehabilitation of concrete and metal surfaces
- Sealing systems for pumps, valves, flanges, and other plant equipment
- Training to support the plant's most critical assets—its people

# VALUE-DRIVEN PROGRAMS

# PROGRAMS

DESIGNED FOR OPERATIONAL EXCELLENCE, EQUIPM

*Chesterton's extensive fossil power experience combined with in-depth product knowledge produces superior power program offerings for partnership. For decades, our knowledgeable sealing specialists have worked directly with fossil power customers, solving real-world power industry problems. Chesterton's experienced specialists can help you implement industry-focused programs with high-impact results.*



## Superior Sealing Solutions for Rotating Equipment

Our innovative, high performance sealing technologies are designed to deliver efficiencies throughout the plant.

- Provide substantial cost savings
- Simplify maintenance requirements
- Improve system reliability
- Significantly reduce or totally eliminate flush water usage in slurry applications

## High Performance Sealing for Stationary Equipment

Chesterton provides reliable valve and flange sealing for plant-wide sealing needs.

- Deliver reliable valve sealing technologies
- Solve temperature cycling and vibration failures
- Improve flange sealing performance
- Reduce overall life cycle costs





# ENT RELIABILITY, AND ENVIRONMENTAL INTEGRITY

## Abrasion and Corrosion Control

Successful implementation of Chesterton ARC Composite Coatings involves multi-disciplined activities. Our program provides:

- Engineering support to ensure all the details are identified and addressed
- Product selection based on critical performance attributes to meet application demands
- Professional application capability to ensure quality and scheduled completion expectations are met



## Outage Support

Delivers knowledge and builds plant-wide skills to enhance reliability and plant efficiencies.

- Assistance in managing your turnaround schedule
- Hands-on approach to improving productivity
- In-plant seminars to build application knowledge
- Product standardization programs to increase efficiencies

# TECHNOLOGIES & PRODUCTS

# PRODUCTS

## Sealing Devices

Technology you can count on

*Chesterton specialists draw from a vast array of sealing technologies. From innovative mechanical seals and packing for rotary applications and high performance valve sealing technologies, to reliable, high-quality flange sealing, Chesterton can deliver your plant-wide sealing needs.*

### Mechanical Seals

Chesterton provides sealing solutions for the entire equipment population. Our innovative split seal technology has saved thousands of dollars in downtime and repair costs globally by eliminating equipment disassembly during seal replacement. Chesterton's slurry seal technology is designed to withstand the rigors associated with sealing tough slurries in flue gas desulfurization units or fly ash applications.



### Mechanical Packing

We have a broad range of packing solutions designed to meet your plant requirements: from high-performance, multi-purpose packings for both valves and pumps to engineered sealing sets for your most challenging valve and sootblower applications. Low friction designs ensure valve and equipment responsiveness and improve operability and reliability in demanding services, resulting in cost effective, leak-free stationary equipment sealing.

### Gaskets

Chesterton offers a complete range of gasket materials that provide excellent sealing ability and superior reliability. Our line of sheet, tape, semi-metallic, and metallic gaskets covers a broad range of applications—from critical, high performance and specialty flange sealing to general service sealing. This comprehensive line of sealing products will meet your plant's cost reduction and efficiency goals.





# THAT DELIVER REAL RESULTS

## ARC Composites Coatings

### Coatings that last

*Fossil power plants face tough conditions that corrode and wear on components and structures, compromising plant reliability and safety. Our factory-trained specialists can make specific recommendations using our ARC composite coatings, thereby increasing overall plant reliability and performance.*



### Metal Composites Systems (MCS)

Prolonged exposure to corrosive fluids, abrasive flow, and gases attacks unprotected metal surfaces, negatively impacting plant operation and reliability. ARC MCS composites are formulated to protect the equipment and structures increasing plant operational reliability.

- Ceramic reinforced claddings for abrasion and impact
- Rebuilding compounds to repair worn equipment
- Sprayable barrier coatings for corrosive and chemical services

### Concrete Composites Systems (CCS)

Concrete is widely used in fossil power plant systems and structures even though it is prone to attack by acids or damage by the environment. ARC CCS composites can repair damaged concrete and protect it against further attack.

- Primers and sealers to reduce permeation and improve adhesion
- Grouts for rebuilding and resurfacing
- Protective coatings and linings to prevent chemical attack and abrasive wear



# CHESTERTON

## Chesterton Support Products and Programs

*In addition to sealing needs, Chesterton offers supporting products developed specifically for the challenging environments in slurry-intensive industries. These products are designed around user's application needs and deliver real solutions with measurable results.*

### Engineered Polymer Solutions

*Improving equipment performance*



Chesterton manufactures high-performance polymer seals for use in a broad range of hydraulic, pneumatic, and rotating equipment. We combine our engineering expertise with state-of-the-art material technologies to provide industry-leading solutions that help improve the overall reliability of your equipment.

### Maintenance Products

*Performance-engineered products that keep your plant running reliably*

Chesterton formulates and manufactures products and solutions for your facility's maintenance needs. State-of-the-art technologies, including cleaners and degreasers, lubricants, maintenance specialty products, and corrosion control products, will give you innovative and unique ways to increase reliability, performance, and productivity.



*Contact your local Chesterton representative for advice on how these materials can reduce your costs today.*

## GLOBAL SOLUTIONS, LOCAL SERVICE

Since its founding in 1884, the A.W. Chesterton Company has successfully met the critical needs of its diverse customer base. Today, as always, customers count on Chesterton solutions to increase equipment reliability, optimize energy consumption, and provide local technical support and service wherever they are in the world.

Chesterton's global capabilities include:

- Servicing plants in over 100 countries
- Global manufacturing operations
- More than 500 Service Centers and Sales Offices worldwide
- Over 1200 trained local Service Specialists and Technicians

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[www.chesterton.com](http://www.chesterton.com)



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