

Why Pyrotek?

Pyrotek® is a global engineering leader and innovator of technical solutions, integrated systems and consulting services for materials processing industries including aluminium, cement, glass, steel and more.

Founded in 1956, Pyrotek offers expertise in high-temperature applications with global resources and local support in more than 35 countries.



Rotary kiln with ISOMAG® structural insulation

Meeting a Need

Over 4 billion tonnes of cement are produced each year globally. Throughout the cement plant, many components that wear due to heat and erosion must be replaced.

Plants have a short seasonal downtime for maintenance which result in costly lost production time. Downtime and replacement costs, scheduled or not, can hinder a processor's production and profitability.

From the raw mill to the kiln to the finish mill, Pyrotek's variety of solutions can help reduce replacement costs, ensure more consistent processing and consolidate your supplier base. Products include ceramic wear-resistant materials that are highly durable compared to others on the market, structural insulation for rotary kilns, expansion joints and more.



Clockwise from left: Ceramite® guillotine tertiary air duct (TAD) damper, Ceramite butterfly TAD damper, air blaster

Durable Refractory Materials

Pyrotek offers a diverse range of refractories, including Ceramite®, which is optimized for cast parts and unshaped applications in high-temperature, extreme wear conditions.

- Tertiary air duct (TAD) dampers—Pyrotek TAD dampers, manufactured using Ceramite, provide extreme wear resistance and longer life than steel and other wear ceramics, due to Ceramite's low porosity and high-density.
- Air blaster nozzles—Pyrotek's Ceramite air blaster is heat resistant to 1200°C (2200°F), effectively resisting chemical attack, abrasion and erosion. Ceramite refractory improves blast efficiency and durability.
- Precast nose block systems
- Cooler plates
- Cooler curb blocks
- Cooler throat blocks
- Precast cooler bullnose blocks
- Prefabricated and lined sugar scoops
- Tail rings
- Cast-in-place linings:
 - Pipe and bends
 - Flap valves
 - Inlet lips

Repair Materials

Ceramite refractory's wear resistant properties make it an effective repair material for patches or relines. Ceramite refractory is also available as a trowellable, gunite or shotcrete material.

Structural Insulation

At operating temperatures, Pyrotek's ISOMAG® structural insulation board offers an optimum balance between excellent insulating properties and strength. Due to its dimensional stability and excellent mechanical strength up to 1000°C (1830°F), ISOMAG board provides lining tightness and enhances the thermomechanical stability of refractory systems in mineral treatment applications. The forsteritic board reduces thermal shock of the lining and protects the shell from excessive temperature, increasing productivity and operating efficiency.

Ideal for cement and lime kilns, ISOMAG insulation board provides cost and energy savings, more uniform processing temperatures, better lining stability and more process control.

Other Offerings

- Gaskets and seals, including fibreseal fabrics
- Acoustic enclosures
- Heat shielding
- High-temperature clinker curtains
- Flex/expansion joints
- Ferrous castings
- Thermocouples, protection tubes and assemblies

