

Commodity and Systems Management for Energy

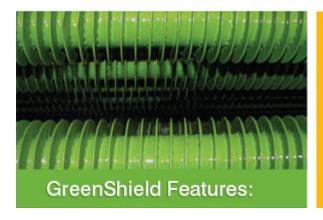
Environmental Chemical Mineral and Metal Industries

Advanced Material Technologies Pty Ltd is an independent partner of Furnace Mineral Products Inc Canada





With over 25 years of continual development and refinement, our products ensure that wherever corrosion, abrasion, slagging, chemical attack and thermal wear are problems, you'll find a proven GreenShield product to solve it! At one-tenth the cost and one-tenth the time of thermal spray and weld overlay, GreenShield delivers true performance and value.



Protection for all your critical fireside components

Superheat Economizer Water Wall

Advanced Material Technologies Pty Ltd | 28 Charlton Street, Mt Warrigal. NSW 2528 john.pulbrook@bigpond.com | www.advancedmaterialtechnologies.com



- Superior adhesion designed to withstand the extreme thermal, physical and chemical conditions within a boiler environment.
- Forms an impervious barrier, preventing corrosive products of combustion from attacking the metal tubes.
- Environmentally safe, no volatile organic compounds (VOCs) which can affect the environment and human health.
- Non-catalytic technology, molten ash will not sinter and adhere to the surface of the coated tubes, preventing the buildup of an insulating layer.
- GreenShield is harder than carbon steel and will protect against abrasion. When used as a wear
 indicator, if the surface remains green the substrate material underneath has lost zero thickness.
- The uniform surface finish offers a much higher emissivity (0.95) than uncoated fireside water tubes, Improving heat distribution.

Our range of products for boiler protection is unmatched. There are a variety of GreenShield formulas available for every facet of boiler protection.

GreenShield MaxMohs:

[Abrasion Coating]

Application of this product is direct to a prepared steel substrate. GreenShield MaxMohs cures to form an extremely hard film that protects vital boiler components from abrasion and erosion. It may be applied in multiple passes to a higher film thickness. GreenShield MaxMohs demonstrates excellent adhesion and high mechanical strength, providing effective protection.

GreenShield ER:

[Economizer coating]

GreenShield ER is designed to specifically address economizer tubes. These areas are often hard to reach and must be sprayed by specialized equipment requiring specific coating rheology. GreenShield ER is also designed to allow for a greater variation in final cure temperature.

GreenShield CR:

[Corrosion resistance]

GreenShield CR is designed to maximize corrosion resistance. It forms an impervious barrier that bonds with the substrate, preventing corrosive products of combustion from attacking the underlying substrate material. This is especially important in oxygen starved corrosive atmospheres.

GreenShield XT:

[Slag resistance]

This is the slickest of the GreenShield products, offering outstanding resistance against slag buildup on contact with the coating film. The glass-like film allows for easy cleaning of the boiler tubes, improving heat transfer and maximizing boiler efficiency.

GreenShield SSR:

[Stainless steel]

This product is designed to be applied to prepared stainless steel offering maximum adhesive strength as well as thermal and mechanical properties.

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GreenShield TSS:

[Thermal spray sealant]

Thermal spray sealant specifically designed to seal the porostry of newly applied thermal spray coating.

GreenShield CX:

[Custom formulated]

GreenShield CX represents a line of custom formulated products that have been designed with performance attributes specific to the application and service environment.



September, 2012, Mississauga, ON - InsulCorr the newest industrial grade thermal insulative coating by FMP outperforms the competition.

PDF check http://www.fmpcoatings.com/media.html

December 19, 2011, Stouffville, ON - Furnace Mineral Products' ceramic coating protection for coal fired boiler tubes is featured NACE's Material Performance "Material Matters

PDF http://www.fmpcoatings.com/media.html

Furnace Mineral Products launches CeramaClad.

June 01, 2011, Stouffville, ON – Advanced two component polymer ceramic composite chemistry, incorporating a blend of ceramics in a modified epoxy resin. CeramaClad offers unprecedented wear resistance characteristics in service temperatures up to $500\,^{\circ}F$.

PDF http://www.fmpcoatings.com/media.html

Furnace Mineral Products a feature on the Industry Today show.

March 07, 2011, Sugar Land, TX – Industrial Info Resources hosted special guest Furnace Mineral Products as part of their "Industry Today" webcast. Join Antonio Liberatore and host of "Industry Today," to learn more about

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how the company can help maximize your boiler uptime and profitability.

PDF http://www.fmpcoatings.com/media.html

Furnace Mineral Products launches new website

November 8, 2010, Stouffville, ON – Furnace Mineral Products is pleased to release the launch of its new updated website. With a full feature video and news feed, the new website is a leading edge resource to boiler operators and other facility owners. We will continue to grow upon our virtual platform to bring in more exciting and industry related tools in the coming months as we continue to build on this development. Check it out often to get the most up to date industry related news.

The Economic Report show to feature Furnace Mineral Products

August 15, 2010, Deerfield Beach, FL – The producers of The Economic Report are pleased to announce that Furnace Mineral Products will be featured in an upcoming episode as part of the show's series on Business Management Solutions. Since 1985, the Guelph, Ontario-based Furnace Mineral Products has been focused on the development, manufacture and application of high temperature, proprietary ceramic coatings. With principal applications in the power generation industry, the company's GreenShield ceramic coating protects the interior surface of boilers from abrasion, corrosion and the build-up of slag.



When it comes to blasting and coating, we are the best and the fastest in the business. We are industry leaders in preparedness for mobilization in the field – whether domestic or international. From our surface preparation to coating application equipment, Furnace Mineral Products has invested in state of the art field coating equipment to ensure that we are always operating and that our coating application is done right, on time, all the time.

Furnace Mineral Products has qualified personnel and project management experience to successfully complete all high performance coating applications throughout your facility. Our safety systems in the field are unparalleled and we are in compliance with all local, state and federal Environmental and Safety regulations.

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Coating Application

Whether it's an in-the-shop or in-the-field application, Furnace Mineral Products is specialized in applying all formats of coating systems. Our mainstay technology is our proprietary line of GreenShield high temperature ceramic coatings.

From conventional to airless to plural components, our technical staff is highly competent in applying a variety of high performance technology designed for extreme conditions.

Abrasive Blasting

From instrument quality air compressors to proprietary blasting nozzles, there is little that will stop us from blasting any around in a boiler unit. Our crew is specialized in blasting with all types of abrasives from mineral to synthetic to agricultural. Blasting to a SSPC SP 5 white metal finish is all we ever do – there is no compromise when it comes to surface preparation for extreme conditions. This service is provided by our Australian Contractors.

Boiler Mapping

Tracking the thickness of your coating system as well as boiler tubes is an important best practice to ensure that you're not caught by an unscheduled outage. Learn how to take advantage of the resources available to you with Furnace Mineral Products, to put together a best practice management approach to protecting your critical fireside boiler components – reducing your long term costs and down time.

Off Site Coating Services

With accessibility to one of the largest industrial furnaces in North America, FMP also offers office site coating services. Simply divert your shipment from your supplier to our facilities and we will apply GreenShield to your desired specifications with appropriate allowances for welding and installation.