

REFRACTORIES —— FOR —— INDUSTRIAL APPLICATIONS



Global Refractory Solutions

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WHAT WE DO

In 1961 Allied Mineral Products began producing monolithic refractories for the foundry industry. Since then we have become a global force in the design and manufacture of monolithic refractories and precast refractory shapes for a wide range of metallurgical and industrial applications. We pride ourselves on providing leading products, custom engineering services and exceptional field support.

WORLDWIDE SALES & SERVICE FORCE

With Allied, you have a partner committed to *being there worldwide with refractory solutions*. Our technically trained sales and service teams ensure efficient and effective product recommendations and installation support. Additionally, our product services team provides troubleshooting and technical field service to our customers.

12 MANUFACTURING FACILITIES OVER 160 INTERNATIONAL SALES REPRESENTATIVES 3 RESEARCH AND TECHNOLOGY FACILITIES SALES ACTIVITY IN MORE THAN 100 COUNTRIES 7 PRECAST SHAPE FACILITIES

INNOVATION

We're a technology frontrunner in patented new product design and continuously work to improve our core product lines. We design comprehensive refractory systems to help customers optimize their equipment life and minimize down time. We are focused on developing and applying time saving practices for refractory installation.





THE ALLIED DIFFERENCE

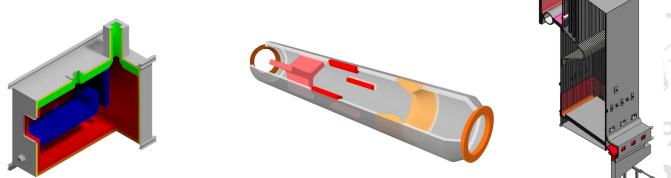
Allied Mineral Products is a long-time refractory solutions supplier to industrial markets. Our experience and approach leads to success in very challenging applications. Allied is known for our diverse range of high-quality, high-performance products, along with excellent technical support, engineering and customer service.

INDUSTRIES

- Cement and Lime
- Mining and Refining
- Petrochemicals
- Mineral Processing
- Power Generation
- Waste to Energy
- Hazardous Waste
- Agriculture
- Ferro Silicon
- Pulp and Paper
- Incineration

EQUIPMENT

- Boilers
- Rotary Kilns
- Incinerators
- Heat Exchangers
- Chemical Chambers
- Metal Refining Furnaces
- Secondary Combustors
- Crematoriums
- Reaction Vessels



HIGHLIGHT OF INNOVATIVE PRODUCT TECHNOLOGIES / FAMILIES

Steel Fiber Enhancement—**ARMORMAX**[®] & **METAL-ROK**[®] are product families designed to contain and evenly distribute high concentrations of metallic fibers. The addition of metallic fibers increases thermal shock resistance and mechanical strength. These products come in a wide range of formulas.

Rapid Heat Up—REZIST ABRADE, FAST-DRY, FAST-TURN[®], and FASTMAX[®] can be heated to operating temperatures at accelerated rates. These products provide options for reduced overall down time with minimal loss of physical properties.

No Cement Castables—**QUICK-FIRE**[®] & **QUICK-FIRE**[®] **ONE** (phosphate bonded), **NANO-TEK**[®] & **Z-TEK** (colloidal silica bonded) product lines. These products have excellent installation properties and can be installed as either a new lining or as a repair of an existing lining. Accelerated heat up features are included in this all-encompassing no cement product group.



METAL-ROK®



NANO-TEK[®] installation in a settling chamber.



QUICK-FIRE® 88 installed



PRODUCTIECHNOLOGY

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		101	10000	V)				
Family	Description	Cast	Pump	Shot- crete	Gun	Trowel/ Ram		
Low cement								
	Wide range of high-performance products with versatile installation features.							
TUFF-FLO	Enhanced flow products for intricate shapes and castings.					(\bigcirc)		
FAST-TURN [®]	Fast firing capabilities to reduce overall downtime.					13		
CASTMAX®	High performance products for ambient to extreme temperature applications.				$X_{L}\Delta 1$			
	Enhanced flow products that require minimal vibration for installations.				ermal	expansio		
FASTMAX®	Short cure rapid fire products for quick turnaround with minimal heat up control required.					+		
DURACON®	Standard high strength vibration casting products.					- 00-		
ARMORMAX®	Metal fiber containing products for mechanical abuse resistance.							
FAST-DRY	Fast firing high performance gunning products.					- %		
REZIST ABRADE	High performance special purpose gunning products.					2		
GUNMAX®	Versatile low rebound gunning products.					•		
METAL-ROK [®]	High performance steel fiber reinforced ceramic shapes and castings.					7		
Conventional Cement								
KAST TECH®	Broad range of general purpose refractory castables.							
Ultra Low Cement								
ULTRACON	Specialized products for precast shapes and castings.							
ALPHAMAX[®]	High performance high temperature application products.							
No Cement/Colloidal								
NANO-TEK [®]	Two component colloidal silica bonded castable products.							
Z-TEK	Single component silica gel bonded castable products.							



PRODUCTIECHNOLOGY

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Family	Description	Cast	Pump	Shot- crete	Gun	Trowel/ Ram	ch
Chemical Bond							
	Two component phosphate bonded castables.			6		K	R
QUICK-FIRE [®] ONE	Single component phosphate bonded castables.					A	
STACKLINE	Special purpose chemical resistant castables.					AT	
Insulating							
INSULMIX®	Full range of insulating castables and gun mixes.			LO			nsia
PUMPLITE	Pumping insulating castables.						t
Mortars							1
BRIKSET	Full range air set mortars for brick and coatings.						3
ARMORSET	Full Range of chemically bonded high temperature mortars.						%
Plastics							
RAM MAX [®]	Wide range of ready to use ramming, patches, and seals.						Γ.
REDIGUN	High performance low rebound gunning plastics.						
Specialized Concrete							
	Industrial flooring castable.						

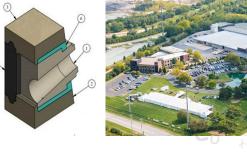


ALLIED EARNS YOUR BUSINESS

- We offer high quality products designed and selected for particular applications.
- We manufacture and deliver on time.
- We provide excellent technical support from start to finish.

MANUFACTURING CAPABILITIES

- Flexible manufacturing systems
- Multi-shift production
- 12 manufacturing locations worldwide
- Ongoing operations analysis and improvements



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We focus on quality and strive to supply products that perform consistently.

- Global quality management team to maintain consistency between all plants.
- Raw material pre-qualified before approval for use at any plant.
- All raw materials tested and verified when received.
- All batches verified before production to ensure high quality and consistent product.
- Finished products tested by batch and held to strict specifications.
- Shelf-life control
- All plants ISO 9001:2015 certified.

CUSTOM DESIGN ENGINEERING

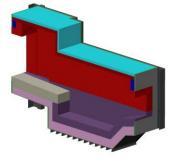
Our experienced engineering team can create a custom refractory system for each application and unique service requirement. Our engineered solutions are based on equipment design, thermal considerations, and material characteristics.

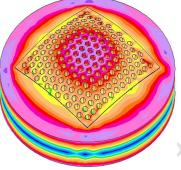
- Patented technologies
- Optimized product zoning
- Proven safety lining system designs
- Unique installation techniques

THERMAL INTEGRATED MATERIALS

In addition to our extensive refractory products, we offer a range of ancillary items to support your processes.

- Installation Equipment (mixers, pumps, gunning and vibration systems)
- Firebrick and Insulating Firebrick
- Ceramic Fiber Insulation
- Insulating Board and Blocks
- Stainless Steel and Ceramic Anchors
- Thermocouples and Wire

















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The Allied Difference Being There Worldwide with Refractory Solutions



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Scan to view our locations

alliedmineral.com



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