Allied Mineral Products is a world leader in the design and manufacture of monolithic refractories and precast shapes. With strong sales and service teams in the foundry, aluminum, steel, heat treat/forge and industrial markets, our success is based on our dedication to Being There Worldwide with Refractory Solutions.

Producing quality, consistent products is top priority at Allied and we have the products to meet your refractory needs. Our extensive product line includes innovative refractory technology and longstanding refractory alternatives.

Allied’s focus on quality at every stage in the production process is unparalleled. A stringent raw material standard and global quality control testing before and after each batch is produced, provides customers with consistent products. We provide quick response times to any urgent request through flexible manufacturing systems at all our manufacturing facilities.

Global Refractory Solutions

13 MANUFACTURING FACILITIES
OVER 145 INTERNATIONAL SALES REPRESENTATIVES
3 RESEARCH AND TECHNOLOGY FACILITIES
SALES ACTIVITY IN MORE THAN 100 COUNTRIES
6 PRECAST SHAPES FACILITIES
After gaining a detailed understanding of your specific needs, our team evaluates operating criteria and physical design parameters to create a detailed engineered design encompassing:

- Patented technologies
- Optimized product zoning
- Thermal models to optimize and validate designs
- Proven safety lining system designs
- Unique installation properties and techniques
- Leading edge refractory system designs

We’re focused on developing new products, improving existing products and perfecting installation techniques. Our product development and testing is conducted in our state of the art research and technology center. We have an on-site gunning and shotcreting lab allowing extensive testing of installation properties.

As an innovative, technology-driven supplier we’re devoted to providing customized refractory solutions for various industry operations. We offer a wide variety of high performance refractory products with superior raw material quality.

Flow Testing  FEA Thermal Analysis

Contact Tests  Strength Tests
CORELESS IRON ALLOYS

**TOP CAP / SPOUTS**
- DRI-VIBE® 54A-FR
- DRI-VIBE® 53A
- MINRO-SIL® RAM 1001
- MINRO-SIL® 2001
- STEEL-PAK 86Cr
- TITAN PLASTIC / MINRO-AL® PLASTIC A76

**COVER**
- MINRO-FIRE CAST F80
- INSULMIX® 33100
- LCF 52A

**WORKING LINING**
- MINRO-SIL® RAM 1001
- MINRO-SIL® 2001
- DRI-VIBE® LGS HTC
- DRI-VIBE® LGS
- TEK-SIL
- TEK-SIL LGS

**GROUT**
- GROUT 163AF
- GROUT 563A
- GROUT 663A
- COIL-CAST 97A
- MINRO-AL® CAST A44

**STRUCTURAL COMPONENTS**
- LCF 47A-FR
- MINRO-AL® CAST A43
- QUICK CAST® 62

**SPECIALTY LINING**
- DRI-VIBE® 462S
- DRI-VIBE® 461S
- DRI-VIBE® 458Cr
- DRI-VIBE® 149Z
- DRI-VIBE® 799A
- DRI-VIBE® LGS 258S-CR
## CORELESS | STEEL ALLOYS

### TOP CAP / SPOUTS
- DRI-VIBE® 480CR
- CW HS 85 PLASTIC
- DRI-VIBE® 88A
- STEEL-PAK 86Cr / 90Cr
- MINRO-AL® PLASTIC A91
- DRI-VIBE® 493A

### COVER
- MINRO-FIRE CAST F80
- INSULMIX® 33100
- LCF 52A

### WORKING LINING
- DRI-VIBE® 388A
- DRI-VIBE® 883A
- DRI-VIBE® 682A
- DRI-VIBE® 931A / 975A / 985A
- DRI-VIBE® LGS

### GROUT
- GROUT 163AF
- GROUT 563A
- GROUT 663A / 763AF
- COIL-CAST 97A
- MINRO-AL® CAST A44

### STRUCTURAL COMPONENTS
- LCF 47A-FR
- MINRO-AL® CAST A43
- QUICK CAST® 62

### SPECIALTY LINING
- MINRO-MAG RAM M20
- MINRO-Z RAM Z73-W
- DRI-VIBE® 529M / 673M
- MINRO-AL® RAM A55-W
- MINRO-AL® RAM A60-W
- AC RAM
- DRI-VIBE® 967Cr
### CORELESS | COPPER ALLOYS

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<td>MINRO-FIRE CAST F80</td>
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<tr>
<td>MATRIFIRE® 8085ACX</td>
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<tr>
<td>PRECAST SHAPES</td>
<td></td>
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</tbody>
</table>

### WORKING LINING

- DRI-VIBE® 31A
- DRI-VIBE® 252A / 253A
- DRI-VIBE® 351A / 357A
- DRI-VIBE® 390A
- DRI-VIBE® 462S
- DRI-VIBE® LGS Cu
- DRI-VIBE® 401Z
- PRECAST SHAPES

### STRUCTURAL COMPONENTS

- LCF 47A-FR
- MINRO-AL® CAST A43
- QUICK CAST® 62

### GROUT

- GROUT 263AF / 563A
- GROUT 663A / 763AF
- MINRO-AL® CAST A44
- COIL-CAST 97A
# Coreless | Aluminum Alloys

## Souts
- TITAN PLASTIC / MINRO-AL® PLASTIC A76
- MINRO-AL® PLASTIC A91
- QUICK-FIRE® 88
- MATRIFIRE® 8085ACX
- PRECAST SHAPES

## Working Lining
- X-ACT® Technology*
- DRI-VIBE® 520A
- DRI-VIBE® 622A
- PRECAST SHAPES
  - DRI-VIBE® 558A-FR*
  - DRI-VIBE® 522A-FR*
*Patented / Patent pending

## Cover
- MINRO-FIRE CAST F80
- INSULMIX® 33100
- LCF 52A

## Structural Components
- LCF 47A-FR
- MINRO-AL® CAST A43
- QUICK CAST® 62

## GROUT
- GROUT 263AF / 563A
- GROUT 663A / 763AF
- MINRO-AL® CAST A44
- COIL-CAST 97A
CHANNEL FURNACE | NON-FERREOUS

**COVER**
- MINRO-FIRE CAST F80
- LCF 52A
- INSULMIX® 33100

**RECEIVER / POUR SPOUTS**
- CW 965 CASTABLE
- METAL KAST 68
- V-CAST® 426A

**WORKING LINING / UPPER CASE**
- V-CAST® 426A
- MINRO-AL® RAM A29
- DRI-VIBE® 351A
- V-CAST® 707A
- TUFF-FLO 608
- MINRO-SIL® 1001
- LCF 579A
- LCF 596Cr

**INDUCTORS**
- DRI-VIBE® 351A / 355A
- MINRO-AL® RAM A34W
- DRI-VIBE® 432Cu
- DRI-VIBE® 800Cu
- TUFF-FLO 608
- DRI-VIBE® 252A
- V-CAST® 426A
- MINRO-SIL® 2001

**GUNNING / SHOTCRETE / REPAIRS / MAINTENANCE**
- DURAGUN® 90NF
- STEEL-PAK 90Cr
- MATRIGUN 70AC-H
- V-CAST® 397Cr
- TEK-GUN 31A
- V-CAST® 426A
### PRESSURE POUR | FERROUS

#### COVER
- MINRO-FIRE CAST F80
- LCF 52A
- INSULMIX® 33100

#### RECEIVER / POUR SPOUTS
- CW 965 CASTABLE
- V-CAST® 426A
- DRI-VIBE® 336Cr
- V-CAST® 707A / 712A

#### WORKING LINING / UPPER CASE
- MINRO-AL® RAM A29
- CW 921 CASTABLE
- V-CAST® 418A / 426A
- DRI-VIBE® 336Cr
- DRI-ROK® 2029 / 2036
- V-CAST® 707A / 712A
- V-CAST® 720A / 724A
- MINRO-AL® RAM A26
- V-CAST® 397Cr
- V-CAST® 701A

#### INDUCTORS
- DRI-VIBE® 696M
- DRI-VIBE® 305A, 306A
- MINRO-MAG RAM M10

#### GUNNING / SHOTCRETE / REPAIRS / MAINTENANCE
- DURAGUN® 90NF
- STEEL-PAK 90Cr
- MATRIGUN 70 AC HOT
- V-CAST® 397Cr
- TEK-GUN 31A
- V-CAST® 426A
### PRESSURE POUR | NON-FERROUS

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<tr>
<th>COVER</th>
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<tr>
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<td>METAL KAST 68</td>
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<td>TEK-GUN 31A</td>
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<tr>
<td>V-CAST® 426A</td>
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</table>
Allied provides the refractory and Allied Mineral Technical Services, Inc. provides the technical expertise. Allied Mineral Technical Services provides value added technical support for refractory systems and specializes in the following.

- Melt zone monitoring and modeling
- Data collection and analysis
- Engineering and design services
- Analysis of melt practices
- Emergency responsiveness
- On-site supervision and assistance
## LADLES | FERROUS & NON-FERROUS

### IRON ALLOYS

**WORKING LINING**

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<tr>
<th>LADLE KAST</th>
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<td>DURACON® 32</td>
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<td>MINRO-AL® PLASTIC A76</td>
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**LADLE COATINGS / MAINTENANCE**

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<tr>
<td>LADLE WELL</td>
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### STEEL ALLOYS

**WORKING LINING**

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<td>METAL KAST 90</td>
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**LADLE COATINGS / MAINTENANCE**

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<tr>
<td>LADLE WELL</td>
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### NON-FERROUS ALLOYS

**WORKING LINING**

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<tr>
<th>LADLE KAST</th>
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<tr>
<td>MATRIFIRE® 8085ACX</td>
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<td>MATRISIL CV</td>
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<td>VIB RAM 70</td>
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<td>LADLE WELL</td>
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<tr>
<td>PLASTER 55AC</td>
<td>DRI-LITE® 79AL-M</td>
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<tr>
<td>MATRIFIRE® 8085ACX</td>
<td>QUICK-FIRE® 88</td>
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</table>
PRECAST SHAPES

Allied’s precast center is a leading supplier in the manufacture of precast, prefired refractory shapes in a variety of industries. Allied has locations worldwide which provide access to over 1000 product formulations for custom designed refractory solutions.

PRECAST BENEFITS:
- Consistent quality
- Extensive product offerings including the ultimate ceramic-metal composite for shapes, METAL-ROK®
- Shapes manufactured from Allied’s flagship product lines
- Solution-driven: Collaboration between Sales, Research and Technology, Manufacturing and Engineering
- Shape capabilities from 2 lbs to 10 tons (1 kg to 9 MT)

PRECAST APPLICATIONS:
- Coreless Induction Furnaces
- Channel Induction Furnaces
- Cupolas
- Gas-fired Furnaces
- Resistance Rod Furnaces
- Heat Treating & Forging Furnaces
- Reverberatory Furnaces
- Vacuum Induction Tundishes
- Transfer Ladles
- Ductile Treatment Ladles
- Pouring Tundishes / Boxes
- Launders
- Centrifugal Casting Feed Equipment
- Impact Shapes

ALLIED’S PRECAST SHAPES LOCATIONS:
- Columbus, Ohio, USA
- Pell City, Alabama, USA
- Chehalis, Washington, USA
- Tianjin, China
- Tholen, The Netherlands
- Germiston, South Africa
MINRO STIR PRO NOZZLES & FLOW KITS
MINRO STIR PRO NOZZLES bring the advantages of inert gas stirring of molten metals to the coreless induction furnace and foundries. These nozzles are available in various sizes to fit a range of coreless furnaces. MINRO STIR PRO FLOW KITS are also available to ensure accurate and consistent delivery of the inert gas to the furnace.
Headquarters:

Allied Mineral Products, LLC
Columbus, Ohio, U.S.A.
614-876-0244 - info@alliedmin.com

USA Manufacturing Locations:

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Visit alliedmineral.com for more information.