

Product Information Sheet



Saffil 72HD Anchor-Loc® Modules

DESCRIPTION

The Anchor-Loc® Module system is specifically designed for high temperature industrial equipment, constructed of high temperature, lightweight, thermally efficient blankets and proprietary attachment hardware.

Saffil 72HD Anchor-Loc Modules are constructed with Saffil 72HD Blanket to provide a superior, polycrystalline wool (PCW) module with the highest degree of dimensional stability and high temperature thermal efficiency. Saffil 72HD Anchor-Loc Modules are made of virtually "shot" (unfiberized particles) free PCW blanket, making them an ideal candidate for applications where the presence of shot is undesirable. The low shot content (high fiber index) yields a module with extremely low thermal conductivity, outstanding service life, and resiliency at elevated temperatures.

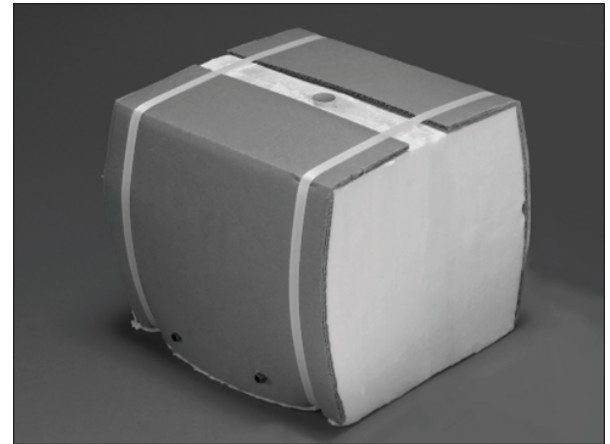
Anchor-Loc Modules are completely customizable to best accommodate the thermal performance requirements and mechanical design constraints of high temperature equipment. Anchor-Loc modules can be produced with various anchoring systems to enable quick, easy and efficient installation for most lining applications. Available in a wide range of thickness, sizes, and density combinations, the Anchor-Loc Module offers effective engineered solutions to thermal management problems in many industry sectors.

GENERAL CHARACTERISTICS

Saffil 72HD Anchor-Loc® Modules have the following outstanding characteristics:

- High temperature stability up to 1600°C (2912°F)
- Exceptional insulating properties (Low Thermal Conductivity & Low Heat Storage)
- Light weight
- High installation rates and ease of installation
- Thermal and Corrosion Protection of Insulation Anchoring Hardware
- Customizable & Ease of Modification
- Immune to thermal shock
- Superior gas velocity and abrasion resistance
- Superior Anchoring Support
- Compatible with hot face coatings

Information on other applications is available upon request. Any new and/or special use of these products, whether in an application listed in our literature, is advised to be submitted to our Alkegen Application Engineering department for review and guidance on material selection.



TYPICAL APPLICATIONS

Ferrous (Iron & Steel)

Continuous Annealing & Galvanizing Lines, Reheat Furnaces, Forge Furnaces, Molten Metal Transfer Ladles & Preheat Stands

Ceramic & Glass

Car Bottom Kilns, Shuttle Kilns, Bell Kilns, Tunnel Kilns, Kiln Cars

Hydrocarbon Processing (Petrochemical & Refinery)

Fired Heaters, Cracking/Pyrolysis Furnaces, Reformers, Crude Furnaces, Cokers

Pollution Control

Regenerative Thermal Oxidizers (RTO), Flares, Combustion Chambers / Exhaust Stacks, Incinerators, Air Heaters

Non-Ferrous (Aluminum)

Aluminum Transfer Ladle Covers, Aluminum Melting/Holding Furnace Doors, Carbon Baking Furnace Covers, Casting

Power Generation

Heat Recovery Steam Generators (HRSG) Duct Insulation, Gas & Steam Turbine Exhaust Insulation

General Use & Other Industries

High Temperature Furnaces & Kilns, Chemical Furnaces, Ethanol Processing Equipment, Fertilizer Dryers

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TYPICAL PRODUCT PARAMETERS

Fiber Classification	Polycrystalline Wool
Alkegen Brand	Saffil
Alkegen Grade	72HD
Physical Properties	
Classification Temperature*, °C (°F)	1600 (2912)
Density, kg/m ³ (lb/ft ³)	160, 192 (10, 12)

Chemical Properties	
Typical Chemical Analysis (wt. %)	
Al ₂ O ₃	72
SiO ₂	28
Trace Elements	< 0.5

Thermal Properties		
Thermal Conductivity		
Density, kg/m ³ (lb/ft ³)	160 (10)	192 (12)
Mean Temperature	Thermal Conductivity, W/m-K (Btu in/hr ft ² °F)	
600°C (1112°F)	0.14 (1.0)	0.13 (0.9)
800°C (1472°F)	0.20 (1.4)	0.17 (1.2)
1000°C (1832°F)	0.26 (1.8)	0.23 (1.6)
1200°C (2192°F)	0.35 (2.4)	0.32 (2.2)

Permanent Linear Shrinkage (EN 1094-1)	
After 24 Hour Soak @ 1600°C (2912°F)	< 2.0%

Attachment Systems & Accessories

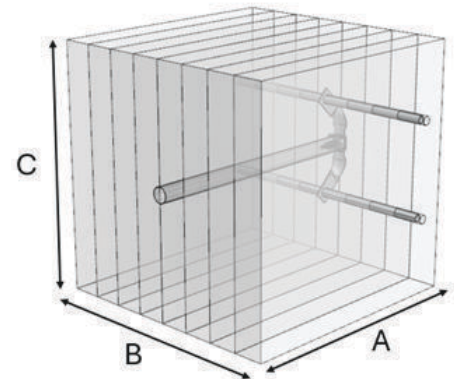
See Page 3 for details on Anchor-Loc Module attachment systems. Contact Alkegen Application Engineering to determine which attachment system is just right for your equipment, as well as to understand the standard module accessories/packaging options (endcaps, access tubes, compression bands, plastic bags, etc.) for the specific constructions produced in your region.

SIZE & AVAILABILITY

Saffil 72HD Anchor-Loc Modules are produced and distributed worldwide; the standard constructions, density, and thickness offerings may vary worldwide. Please reach out to your nearest Alkegen representative to discuss standard supply options, and work with Alkegen Application Engineering to define custom module requirements.

In general, Saffil 72HD Anchor-Loc Modules are typically supplied in the standard dimensions shown below:

Constructions: Edge Stacked
 Thickness (A): 100 – 350 (4"-14")
 Compression (B): 300mm (12")
 Width/Height (C): 300mm (12")



HEALTH AND SAFETY INFORMATION

A Material Safety Data Sheet has been issued describing the health, safety, and environmental properties of this product, identifying the potential hazards and giving advice on handling precautions and emergency procedures. This must be consulted and fully understood before handling, storage, or use.

*For polycrystalline wools, the Classification Temperature is also representative of its Continuous Use Temperature. The Continuous Use Temperature is a recommended maximum operating temperature for the material usage under clean, oxidizing atmosphere conditions. The classification temperature is the temperature at which irreversible linear shrinkage does not exceed a given value after a 24-hour heat soak test. For certain application conditions (specific chemical contaminants, reducing atmospheres, etc.), the Continuous Use Temperature may be reduced.

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MODULE ATTACHMENT SYSTEMS

Thread-Loc

The Thread-Loc attachment system utilizes a central fixing, pre-positioned stud approach. Threaded studs are welded to the casing, and a flanged hex nut is used to secure the module tightly into place.

ADVANTAGES:

1. Highly detailed engineered linings, ensures precise module installation
2. Quality assurance of stud welding
3. Compatible with backup insulation, mastic coatings, and foil vapor barriers
4. Ease of field modifications to anchor assembly

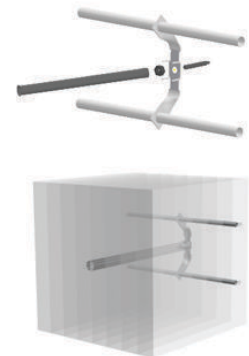


Weld-Loc

The Weld-Loc attachment system enables users to weld the stud and anchor the module in one step. A welding gun and timer box are used to weld the stud to the casing and torque a hex nut onto the stud in one step.

ADVANTAGES:

1. One step, center fixed module installation
2. Extremely fast, efficient installation
3. Permits random placement of modules on the casing
4. Ease of field modifications to anchor assembly



RX2

The RX2 attachment system utilizes a side-fixing, pre-positioned stud approach. Threaded studs are welded to the casing, and a clamp and hex nut are used to secure the module tightly in place.

ADVANTAGES:

1. Highly detailed engineered linings, ensures precise module installation
2. Quality assurance of stud welding
3. Compatible with backup insulation, mastic coatings, and foil vapor barriers
4. Exposed stud and ease of access to stud during module installation

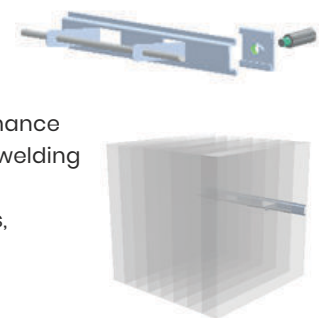


Cerlock

The Cerlock attachment is designed for installation on a prepositioned stud pattern. A Cerlock module consists of a sliding channel, piercing rod, clip-nut and stud to provide a sliding-type anchor system.

ADVANTAGES:

1. Sliding fixation system
2. Easy installation & maintenance
3. Quality assurance of stud welding
4. Compatible with backup insulation, mastic coatings, and foil vapor barriers



NOTE: Other attachments systems (Power-Loc, Stack Bond Anchors, Hefty-Loc, Bolt-Thru, U & H- Anchors, Screw-Loc, etc.) available upon request. Anchor-Loc Modules can also be provided without internal anchoring hardware, as well as are compatible with a handful of other attachment systems not listed. Contact Alkegen Application Engineering team today to choose the attachment system that is right for you.

The test data shown are average results of tests conducted under standard procedures and are subject to variation. Results should not be used for specification purposes.
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