

PROLOK™ FERRULES

Ceramic Two-Piece Ferrules for Severe Temperature and Thermal Cycling Conditions

The Blasch family of patented precast ferrule systems provide more effective protection and increased design flexibility than traditional refractory systems due to the separation of the structural and insulating functions that are addressed by the cast shape and the fiber backup, respectively.

Operational advantages of our precast ferrule systems include thermal management system, improved performance, and reduced pressure drop.

Thermal Management System (TMS)

TMS is a pre-fired tubesheet protection system that allows for the extensive use of fiber insulation in conjunction with the ProLok two-piece ferrules and provides greater insulating value than castable alone, in a greatly compressed area, saving space, and refractory.

Improved Performance

Large expanses of castable refractory undergo tremendous thermal and mechanical stresses as they heat up and cool down, resulting cracking in the castable refractory. Tubesheet protection systems consisting of our precast two-piece ferrules perform with built in expansion joints, limiting damage to a confined area.

Reduced Pressure Drop

Blasch's ProLok ferrules are available with a wide range of tapered inlet and outlet profiles. In addition to reducing the refractory mass in the furnace, ProLok ferrules have been shown to reduce pressure drop over conventional round ferrules and castable installations.



ProLok Twist and Lock Two-Piece Ferrules for Significantly Enhanced Reliability



Our ProLok two-piece ferrules have several advantages over traditional one-piece systems and offer increased reliability over current two-piece ferrules available.

Increased Thermal Expansion Tolerance

By separating the ferrule's head and stem, stress is removed from the concentration point where the two connect in a one piece design, allowing for better thermal expansion tolerance.

Improved Design Means Longer Life

Sinking the stem deep into the head reduces stress on the stem by decreasing its length, also allowing the head to pivot slightly around the stem. This flexibility allows the ferrules to better accommodate warped or out of spec tubesheets while also allowing the ferrules to naturally adjust to each unit during start up, with each ferrule having the ability to independently shift into the ideal position.

Patented Twist And Lock Design Keeps Ferrules In Place

With other two piece ferrule designs, you run the risk of having the stems fall out of the tubes during service. Our ProLok twist and lock design addresses this concern by utilizing a locking mechanism. This lock retains the flexibility of the ferrule while ensuring that the ferrule stem does not separate from the head while in service.

Fast, Simple Installation

Blasch ferrules are pre-engineered for each installation and come properly sized, accurately molded, and completely wrapped with all required fiber insulation. Installation is as simple as taking them out of the box and slipping them into the boiler tubes. No castable refractory is used between the ProLok ferrules and only a minimal amount is required around the periphery. Operators can save days on turnaround without the need to painstakingly install, and then cure out, large expanses of castable refractory.

Superior Material Properties

With a wide range of high alumina compositions available, Blasch is able to offer exceptional resistance to corrosion, erosion, and thermal shock. Additionally, these two-piece ferrules are fired under controlled conditions in a plant environment, resulting in consistent, predictable properties; rather than ferrules that require the extensive use of castable refractory and field curing. Due to its design, ProLok two-piece ferrules are not subject to the vagaries of weather, installation expertise, and time constraints.

