

VECTORWALL™ MIXING CHECKERWALL

Engineered Mixing Solutions for Lower Pressure Drop and Higher Process Throughput

Blasch VectorWall Mixing Checkerwall is a versatile, mechanically stable system consisting of a series of stackable, six-sided blocks incorporating alternating tabs and slots on each side that are designed to ensure the blocks are positively locked together at installation. Blasch VectorWall is offered in a highly creep-resistant mullite bonded composition, designed to resist deformation under load.

The VectorWall is stronger, more precise, and uses far fewer parts than standard 9" brick and refractory mortar baffles or checkerwalls for a faster, more secure installation. Rapid disassembly and reassembly of the Blasch VectorWall can easily be achieved for major maintenance turnarounds. Spanning the entire inside diameter of the burner or furnace, the Blasch VectorWall becomes structurally integral with the furnace wall.

The VectorWall replaces and significantly improves upon traditional, weak, unsupported refractory brick baffle walls or checkerwalls with what is usually a smaller overall number of walls that perform the same function, more efficiently, in a shorter distance.

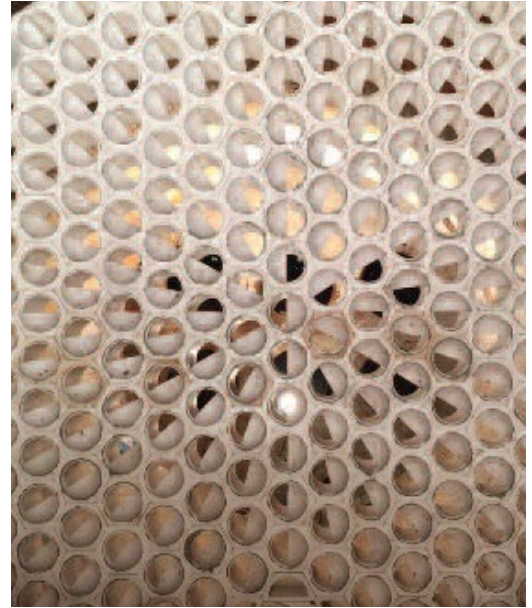
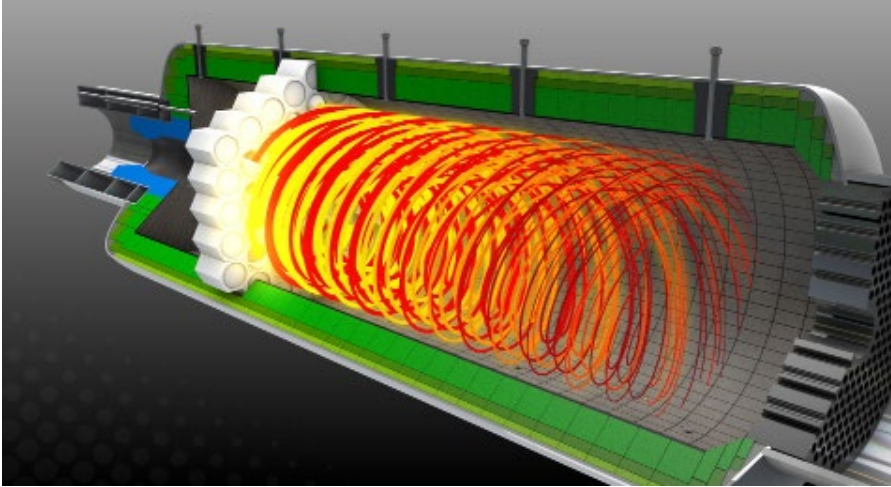
Advantages:

- Lower pressure drop
- Improved mixing
- Increased process throughput
- Lower total installed cost



Engineered Mixing Solutions

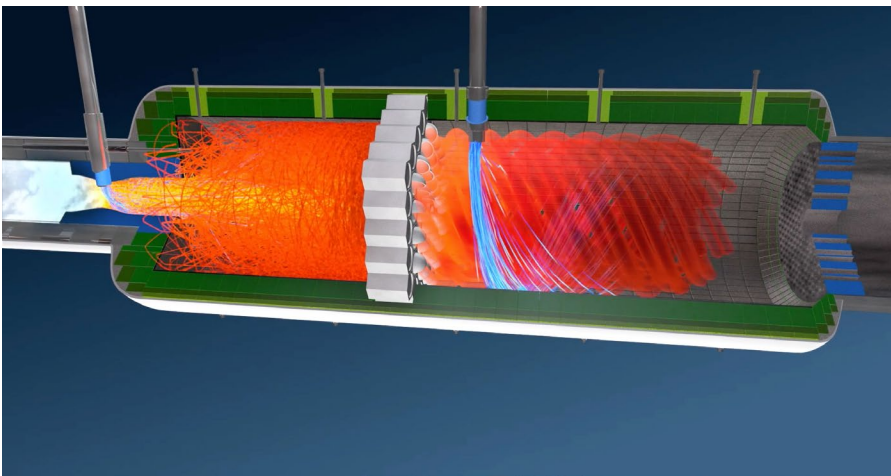
Blasch VectorWall Flow Design



- Single vortex configuration
- Very tight Residence Time Distribution (RTD)
- Long path length
- Plug Flow (PF) characteristics
- Ideal for sulfur burning furnaces

Furnace Volume Management System

Blasch VectorWall Flow Design



- Create multiple zones in a single furnace
- Hotter first zone for better destruction of ammonia or BTX
- Back mixing in first zone
- Cooler second zone for lower NO_x
- Plug flow in second zone for improved throughput

Features and Benefits:

- Lower pressure drop
- Lower total installed cost
- Higher process throughput
- Virtually unlimited number of mixing configurations available
- Inherently stable large hexagonal ceramic blocks
- Design ensures that all blocks are fully supported
- Patented tongue & groove interlocking joints can withstand thermal expansion
- Structural stability even in an upset condition
- Mortar-free installation results in easy, fast construction with no specialized labor
- May be removed and re-used for maintenance
- Successful track record in severe service with no failures