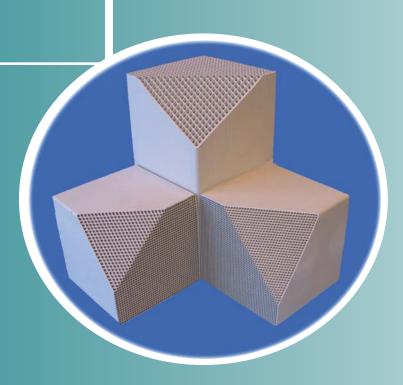


High-quality,
reliable products
and design
services for
Regenerative
Thermal
Oxidizers

## LEXCO, Inc.

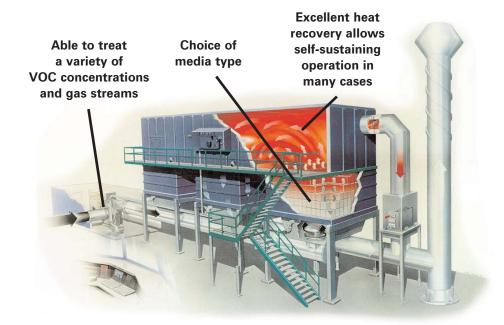
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## The LEXCO advantage

**Lexco, Inc.** serves the environmental demands of industry with high quality, reliable products and design services for **Regenerative Thermal Oxidizer Systems (RTOs)**. We distribute ceramic heat exchange media throughout the Americas, Europe, and Asia. Lexco, Inc. and our partners were the first companies to supply **high performance ceramic monolith** for RTOs. Together with our partners, Lexco, Inc. has more heat exchanger monolith in use and more experience in operating RTOs than any other ceramic monolith manufacturer in the world.



Our most important goals are quality and reliability. In pursuit of these goals, all our monolith manufacturing facilities are **ISO 9001** and 14001 certified. We will meet or exceed even your most demanding quality standards. We rely on our 30 combined years experience selling ceramic heat exchanger products and in new product development. We continue to develop better products to reduce your total RTO, gas, and electrical operating costs.

The following chart shows available geometries and their corresponding specifications in our line of monolith products. Special cell geometries are available upon request.

#### **Cell Geometries**

| Length x Width<br>x Height<br>(mm x mm x mm) | Channels/<br>Element  | Width of<br>Channels<br>(mm) | Thickness<br>of Wall<br>(mm) | Active<br>Surface<br>(m2/m3) | Free Cross<br>Section |
|----------------------------------------------|-----------------------|------------------------------|------------------------------|------------------------------|-----------------------|
| 150 x 150 x 300                              | $5 \times 5 = 25$     | 26.0                         | 3.0                          | 150                          | 76%                   |
| 150 x 150 x 300                              | $13 \times 13 = 169$  | 9.0                          | 2.0                          | 310                          | 64%                   |
| 150 x 150 x 300                              | $25 \times 25 = 625$  | 4.9                          | 0.9                          | 580                          | 68%                   |
| 150 x 150 x 300                              | $32 \times 32 = 1024$ | 3.8                          | 8.0                          | 724                          | 66%                   |
| 150 x 150 x 300                              | $40 \times 40 = 1600$ | 2.9                          | 0.7                          | 880                          | 63%                   |
| 150 x 150 x 300                              | $43 \times 43 = 1849$ | 2.9                          | 0.5                          | 1000                         | 72%                   |
| 150 x 150 x 300                              | $50 \times 50 = 2500$ | 2.4                          | 0.55                         | 1090                         | 64%                   |
| 150 x 150 x 300                              | $50 \times 50 = 2500$ | 2.5                          | 0.45                         | 1136                         | 69%                   |
| 150 x 150 x 150                              | $60 \times 60 = 3600$ | 2.0                          | 0.45                         | 1310                         | 64%                   |
| 150 x 150 x 300                              | $60 \times 60 = 3600$ | 2.0                          | 0.45                         | 1310                         | 64%                   |

## **Advantages of monolith structure**

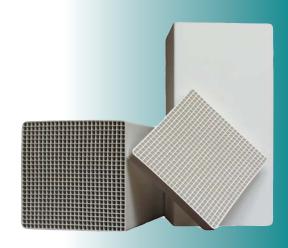
Our monolith can increase flows of existing RTOs or reduce the media volume of new units, compared to any other structured or random packing. Monolith provide the **lowest pressure drop**, yielding **lower energy costs** without sacrificing capacity. With the greatest surface area of all available heat exchange media, monolith provide **more efficiency per unit of volume** than any other packing.

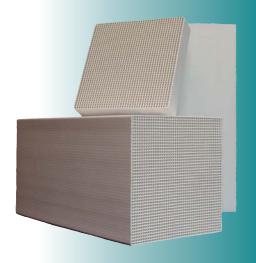
#### **Monolith material**

The **NT monolith**, our most common and versatile monolith, is non-porous porcelain block with the **highest available thermal recovery**. Chemical durability is rated very good to excellent for acids and good for alkali and alkali with earth contaminants. NT is available in all cell geometries we carry.

Our MK20 material is designed to better withstand thermal shock and thermal gradients by identifying the best relationship between performance (cracking resistance plus heat capacity per volume) and price. As a result, MK20 is primarily used in applications requiring high crack resistance and low thermal expansion coefficients. MK20 can be mixed with other materials to reap the benefits of each materials' strong points and is available in all cell geometries.

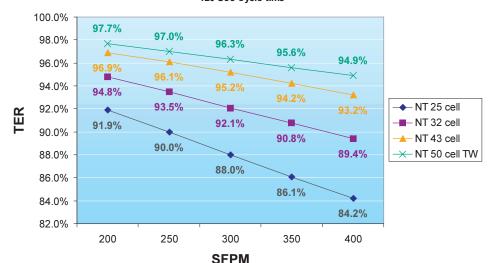
**CR20** is the result of continued efforts to develop a more chemically resistant material. This material exhibits increased alkali resistance and **significantly reduced material loss** by leaching out effects. CR20 has the longest life of all chemical-resistant materials being used today in applications involving earth alkali contaminants.





#### **NT Thermal Efficiency**

1500 F Combustion 100 F Inlet 640 ft3 Media Volume 4 ft Bed Height 120 Sec Cycle time

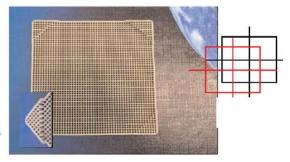


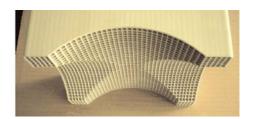


# Additional monolith shapes

A variety of patented and licensed monolith shapes are available, including integrated honeycomb spacers, or "stype." The s-type spacers **avoid blockage** caused when cell walls directly overlap subsequent cell walls thereby reducing impact areas for particulate-laden air streams.

The arch block shape **increases homogeneous flow** distribution in areas of differing flow rates, leading to better distribution—and therefore better heat exchange. This structure also has the same benefit as the s-type in that the shape **avoids blockage** caused by cell wall overlap.





### **Warehouse Facilities**

Our warehouse facility in Medina, Ohio, is staffed by service-oriented professionals. For your convenience, this clean, dry facility near the crossroads of America (I–70, I–71, I–75, and I–80/I–90) offers both truck load and LTL service on a daily basis. Lexco maintain an inventory of various monolith types to offer you the ability to resolve unexpected problems quickly and efficiently. We are ready to meet your heat exchange media needs.



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