• Precious metal based coating technology
• Range of metal loadings to suit variable requirements
• Torturous path foil pattern for better performance
• Robust construction
• Available in sizes & styles to fit other manufacturers’ housings

Precious Metal Coating Choices

Controlling the emissions from an engine falls solely upon the catalyst element to achieve. The role that it plays in permitting an engine to operate is underappreciated and discounted in the tug of war between price and value. Yet when an engine falls out of compliance unexpectedly, how much money is needlessly spent to get it back up and running?

Far too often the catalyst is a black box where the composition is unknown to the people who have to use it. This situation leads to poor decisions when only the price of the catalyst is the determining factor in a purchase decision. Catalytic Combustion is a different type of catalyst company in that we strongly believe that the user should know enough about the catalyst to make an informed decision.

We don’t hide the amount of precious metals on our catalyst under the cloak of “proprietary information” as others do. We’ll work with you to evaluate your performance requirements, the lifespan you want to see from the catalyst and then provide you choices from which to pick the catalyst to use.

Substrates and Foil Patterns

A strong foundation is key to giving the coating the opportunity to do its job. That is where having a substrate constructed to withstand years of pounding that it will see from an industrial engine is critical.

Brazing the foil together represents the best method of constructing a round element that will stay together through the vibration, temperature cycles and backfires it has to endure. Does it add cost to the catalyst? Yes, but we concluded that doing otherwise just doesn’t make sense.

Our Herringbone foil patterns, available in a number of cell densities, offer enhanced performance compared to straight cell geometries. The Herringbone foil pattern’s tortuous path creates better contact between the exhaust and the catalyst’s surface so the pollutants get to the precious metals more efficiently.

With many thousands of Herringbone elements produced, our experience has shown that despite what others may say they do not show any more tendency to ash up than straight cell patterns.
Tell Us What You Have

Whether your converter or combo housing is new or ancient, we can make a replacement element for it. We’ve made elements as small as 4” in diameter to as large as 48”. Our range of available shapes and styles includes:

- Round
- Square
- Rectangular
- Octagonal
- Elongated Octagon
- Round with Bulkhead
- Round with V-Band Flanges

And if we haven’t made it before, we can develop the parameters with you to provide the element that has the advantages we offer.

Shaped Elements

Non-round elements pose special challenges to manufacture. Originally conceived so that you had to go back to the housing company for replacement elements, they have historically been poorly constructed and subject to frequent failures.

Using a brazed round element as the starting point, we cut away the un-needed sections to create a monolithic form that is solid as a brick. These are then coated to provide you a catalyst that achieves the best performance possible in these unusual housing designs.

Rectangular Elements

Drawing on our experience in making catalysts for other industries, we manufacture rectangular elements using our folded foil technology. This yields an element that is structurally solid that won’t telescope or open bypass channels. This technique of manufacturing elements is very flexible so any square or rectangular element can be produced on short notice.