Project Summary

Catalytic Combustion Corporation (CCC) was approached by scientists developing an innovative new process for 3D printing. While 3D print technologies, otherwise known as additive manufacturing, have been around for decades, this firm was developing the first commercial 3D printer that would produce metal products. The new system produces metal parts through a printing, binding, washing, and curing process. During the curing process the part transforms into a solid piece of metal and it is during this phase of production in which the majority of the emission control needs occur.

Initially, the developer of this new technology reached out to CCC’s Vice President of the Catalyst division asking for samples of a catalyst. The client provided drawings and sought a catalyst manufacturer to create a part for their machinery. The client knew they would need a catalyst to control the emissions generated by the curing process. CCC provided product samples for the company to consider. The printer manufacturer provided drawings to CCC and wanted CCC to simply manufacture the catalyst.

For the most effective and efficient destruction of harmful emissions our engineering team determined that a heating element was needed. CCC partnered with Tutco Heating Solutions Group to develop a combined technology to offer new and improved results. The entire component was designed in-house by the CCC team from fixture to fittings, insulation,
thermocouple, etc. for mass manufacturing. The component is now manufactured for the client by CCC.

This project is an excellent example of collaboration between Catalytic Combustion Corporation and other leading manufacturers to create solutions to bring new products and technologies to market quickly.

Innovations in manufacturing are happening at an accelerated pace and provide many improvements in efficiency and open up new possibilities for research, development, and production. With each advancement, industry leaders encounter new challenges. In nearly every case, one of those challenges includes emission control systems to work with the new process or technology.

Catalytic Combustion Corporation is a world-renown manufacturer of catalyst technologies and emission control systems for a wide range of products and processes. In addition to manufacturing effective systems, CCC team is leading the industry by utilizing our expertise in emission control and manufacturing to customize solutions based upon standard mass-produced parts for efficient, effective solutions to help speed development of these new technologies.