

## CASE STUDY

**G** We are now able to bring a better product to our customers by leveraging the capabilities that York Metal Products has to offer.



## 🔝 CLIENT

Global Emissions Systems Inc., (GESi®) specializes in designing, engineering and manufacturing world leading emission control technologies for any commercial fuel burning engine. From small gas powered lawnmower engines, to on road automotive, truck and bus, to generators in large natural gas co-generation plants, GESi delivers technological solutions that dramatically reduce smog and greenhouse gas exhaust emissions.



CHALLENGE

Most of GESi's work is driven by regulatory requirements. Not only do they design, engineer and manufacture emission control technology, but they also work with many of the world leading engine manufacturers who utilize GESi technology to certify or verify their engines with the United States Environmental Protection Agency (US EPA), the California Air Resources Board (CARB) and other regulatory bodies.

GESi's products are purpose built and engineered so they are unable to take advantage of economies of scale as they have very few long runs. It was critical for GESi to source a cost effective, short run solution provider for manufacturing metal parts and components. They also required a manufacturer that would collaborate with them on design, engineering and customization to ensure all the metal parts met engineering specifications for fit, strength and durability regardless of the application requirement or geographical destination.



One of GESi's partners introduced them to York Metal Products (YMP) as an ideal solution for tooling their emission control components. "York manually spins prototypes on soft tooling to verify part functionality prior to making final hardened tooling that is run on one of their CNC spinning lathes," said Gary Jarosz, Vice President of GESi. He went on to say, "If I had opted for expensive dies rather than tooling, then I'd have to punch out 100,000 pieces - and that would mean I would be paying for and carrying 100,000 pieces in inventory. Tooling allows for much smaller runs, is much more cost effective and YMP was able to help."

YMP was also able to turn around those short runs very quickly, which satisfied GESi's just-in-time inventory requirements. Jarosz comments, "Our products are on the floor less than 30 days - otherwise that's cash on the shelf. York allowed us to get to market faster and to minimize our inventory hold. But what really set them apart was that they allowed us to be a lot more flexible in terms of the product we could design."

YMP is known for their holistic, end-to-end collaborative approach to design and manufacturing. GESi was able to bring projects to YMP and ask them to come back with ideas to perfect the design. "We would send them all the requirements and all the engineering design and they would then look through them and come back with recommendations that would work better for us long term and better for them in terms of their ability to produce a quality product. It was always a win-win," said Jarosz.





GESi believes the key to their successful relationship with YMP is collaboration. As their relationship has grown, they are involving YMP with projects earlier in the cycle to collaborate on solutions.

YMP's technology, skills and ability to handle just-in-time requests has also helped GESi meet their customers' diverse and specific requirements. Jarosz comments, "We were somewhat familiar with the technologies YMP uses, but we didn't know the scope of what they could do. Over time they demonstrated their capabilities, which gave us ideas for new design possibilities to meet our customers' requirements. We are now able to bring a better product to our customers by leveraging the capabilities that YMP has to offer."

## About York Metal Products .....

York Metal Products (formerly York Metal Spinning) specializes in new product and process development. They simplify even the most complex metal fabrication assemblies through their unique combination of high-tech equipment, an expert team and a start-to-finish valuebased approach. Their experienced engineers, technologists and skilled trades are trained in multiple facets of engineering. They work with a number of industries including HVAC, Power Distribution, Emission and Exhaust, Food and Pharmaceutical, and Architectural and Industrial.

## **York Metal Products**

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