# TURNING A MANUAL BOTTLENECK INTO A MODEL OF EFFICIENCY

Using an automated carousel finishing system to coat parts to exacting specifications







## THE SITUATION

Anodizing is a finishing shop specializing in coating tier one parts for the automotive industry.

## THE **CHALLENGE**

Anodizing developed a special anti-corrosion coating that they manually spray onto parts. Their process was having a material handler stack smaller parts onto a rod and carry the rod of parts into the booth for the painter. The

painter would then twist and spin the rod to spray every angle with multiple coats of the specially formulated coating to get an exact mil thickness. This process was being done in 8 booths at one time, and it was a very tedious application that led to fatigue due to poor ergonomics and the sheer weight of the parts. As demand grew, Anodizing was looking for help as they struggled to keep up with volume, finding painters, and maintaining quality.

# THE SOLUTION

After a consultation with DeGeest, a fully automated Lesta Self-Learning Robotic Carousel solution was selected to allow for use of their existing team, spray booths, similar spray equipment, and special coating application.

The carousel contained four arms, and DeGeest engineers designed a custom rack to hold a large number of rods to automatically present the parts to the robot on each carousel arm at precise angles for coating the parts

evenly. The Lesta Self-Learning Finishing Robot was taught programs by their painters for applying the unique coating to the complex geometries of the parts.



## THE **OUTCOME**

Using the DeGeest Day One Ready process, our applications, automation, and engineering teams designed a repeatable process with a fixture system for the parts to easily hang, an automated material handling system with four arms of the carousel, and the self-learning robot, which repeats the taught program to maintain consistent quality.

As a result, Anodizing automated

their finishing process, increasing production 300% in each booth with 50% less labor. They were able to cut labor in half and reallocate human resources to other areas of their business.

We help our customers in one of two ways: We use automation and manufacturing expertise to produce parts for them, or we create automation solutions to help them do it themselves. What can we do for you?

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