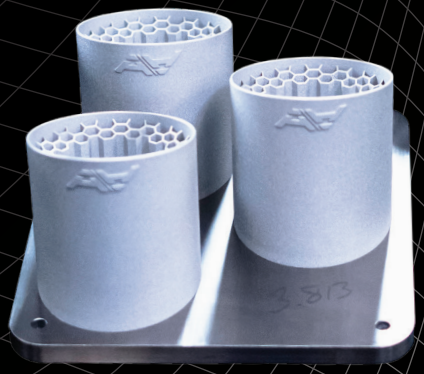
CASE STUDY

VEHICLE TAILPIPES



Burloak Technologies has extensive experience collaborating with high-end automotive customers to develop scalable solutions that address the most pressing manufacturing challenges. Burloak leveraged the full potential of AM to give a customers' hypercar's tailpipe design a facelift, which resulted in a significant weight reduction, cosmetic enhancements and a shortened build time.

Tailpipes are metal tubes designed to emit gases away from the vehicle. They are located at the rear section of a vehicle's exhaust system, connected to the muffler and oftentimes attached to the vehicle with a bracket.

CHALLENGE

- **Reduce** weight

SOLUTION

- Swapped original material for titanium 6Al4V
- **Uniformed 1.2mm wall thickness at the base** to complement tubes the part is welded to; the top is **slightly thicker**

IMPACT

- **Cosmetically enhanced part** – mimicked hexagon design on vehicle's rear bumper and included the two-color logo
- **Reduced weight** to 450g per tailpipe
- **Shortened build time** to 13 hours

AM Technology: RenAM 500Q
Material: Titanium 6Al4V

450g
REDUCED WEIGHT

13 hours
TOTAL BUILD TIME

Burloak Technologies
a division of SAMUEL