

## Case Study

### UBRacing throttle and brake pedals



### Designed, optimized, and built for speed

#### Challenge

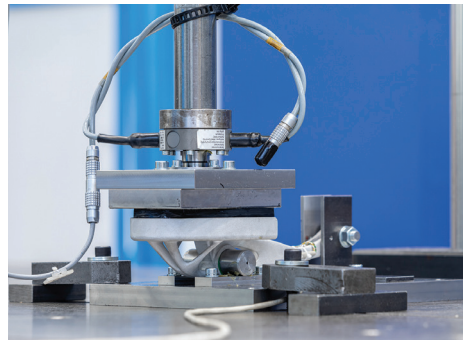
- Reduced component weight
- Part count reduction
- 500N load for throttle pedal
- 2400N load for brake pedal

#### Solution

- Strong, lightweight Scalmalloy (AlMgSc) material
- Structure designed for AM, PBF-LB
- Topology Optimized for the process and load conditions
- Bionic and Lattice structures to reduce weight
- Tested under loading conditions at IABG

#### Impact

- ~ 19% weight savings achieved per pedal



Oerlikon AM partners with global manufacturing leaders to co-develop and launch high quality metal AM materials, processes and components. Consult with our team of experts on your industry-specific challenges.

Contact us at [am@oerlikon.com](mailto:am@oerlikon.com)





**Congratulations to the 2019 UBRacing team!**



Brake test



Endurance run



2019 University of Birmingham racing team

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