

Title of the Challenge

**Aero Edge:
World-Class Track Cycling Handlebar Design**

What is the main issue the challenge addresses?

The current cycling industry is too expensive for cyclists who are not from a well-off background. This impacts the opportunities, especially for junior riders and student athletes who have no sponsorships. The component for this challenge is very crucial for endurance track cycling athletes. In the current market, there are two brands that charge over 1000 Euros for such a handlebar because it is very lucrative with little but strong competition. It is a big disadvantage for cyclists who cannot afford such an investment. While there are carbon fibre counterparts, it is not a sustainable way of production compared to 3D-printing the handlebar out of metal material.

Call to Action

Design the most aerodynamic handlebar within UCI (Union Cycliste Internationale) rules with ergonomics in mind. Think of a way to 3D-print the handlebar in metal material with the lowest possible costs passing EN ISO 4210 requirements. In order to support less privileged athletes.

What is the desired impact of the challenge?

Introduce more competition into the market and provide better opportunities for underprivileged athletes. Achieve equality for world-class competition, by developing a 3D-printed racing handlebar.

Related SDGs



Category for the challenge

- People
- Nature
- Economy

Who is behind this challenge?

TUM.Additive