

# THE COUNTDOWN COMPANY

ENGINEERING OFFICE

**Partner in Innovation**  
**Supplier of Engineering**



## VALUES



### Technical Excellence

Functional and optimized solutions for complex systems



### Innovation

Young minds close to most recent technical processes and academic work



### Responsiveness

Competitive mindset, ready to answer challenges with tight schedule



### Flexibility & Agility

Tight-knit pluridisciplinary team solving problems

## TAILORED SERVICE

The Countdown Company offers a large spectrum of services. While the complete process describes how we develop a functional prototype from scratch, feel free to simply **pick the expertise** your project requires.

## HISTORY

The Countdown Company finds its roots in the EPFL Rocket Team, today among the university's most popular student technical associations. We shared a unique engineering and entrepreneurial experience taking us overseas at the Spaceport America Cup in New Mexico, USA, in 2018.

Ever since then, we kept building up our strength as a team tackling complex challenges and developing high quality engineering solutions. From this adventure emerged the Countdown Company, an **engineering office bringing your ideas to life**.

## VISION

Space technologies brings us together, fascinates us and pushes us to explore new horizons. We believe that the best engineers must master the complete development process of a product from definition, to design, analysis and all through manufacturing. At the Countdown Company we aim to deliver these skills in a convenient **package tailored to your need**.

The various academic and professional backgrounds of our members allow us to boost a wide range of engineering projects in the domain of **space, aeronautics, automobile and industrial robotics**.

### Specifications & Feasibility

Feasibility study  
Design review  
Technical specifications  
System engineering plan

### Preliminary Design

Mechanical system design  
CAD  
Motor dimensioning  
Fluid mechanics  
Continuum mechanics  
Custom physics model

### In Depth Design & Analysis

Tolerance analysis  
Modal and structural FEM  
Electromagnetic FEM  
Thermal model & FEM  
Control system  
C/C++/Python development

### Manufacturing & Assembly

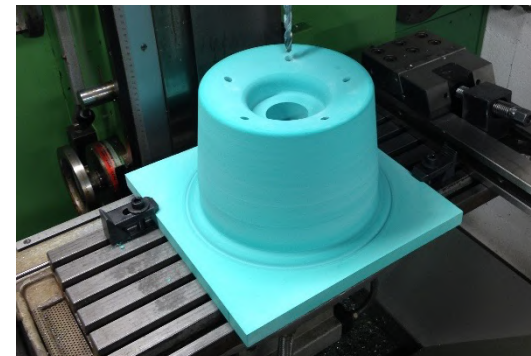
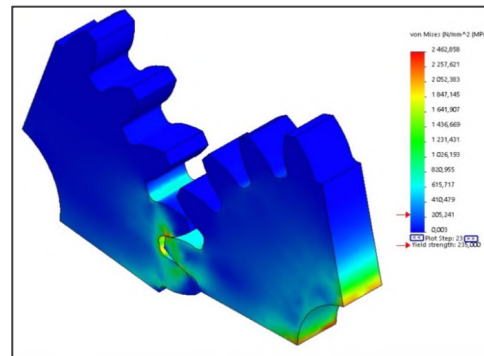
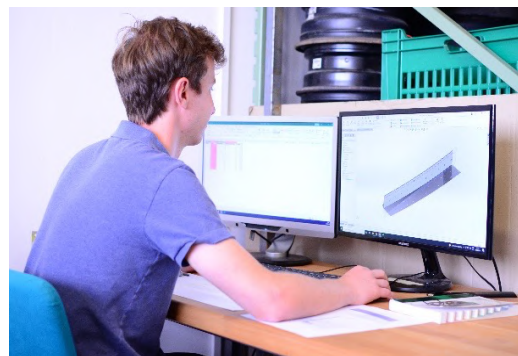
Machining & Welding  
Mechanical adjustment  
System integration  
Assembly procedures

### Testing & Reporting

Validation plan  
Test procedures  
Test setup and execution  
Technical report  
Metrology

### Installation & Commissioning


On-site system integration  
On-site commissioning  
Week-end interventions








Matterhorn II Rocket launch, June 2018, Spaceport America, New-Mexico, USA, EPFL Rocket Team

## Get in touch for a fast quote

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