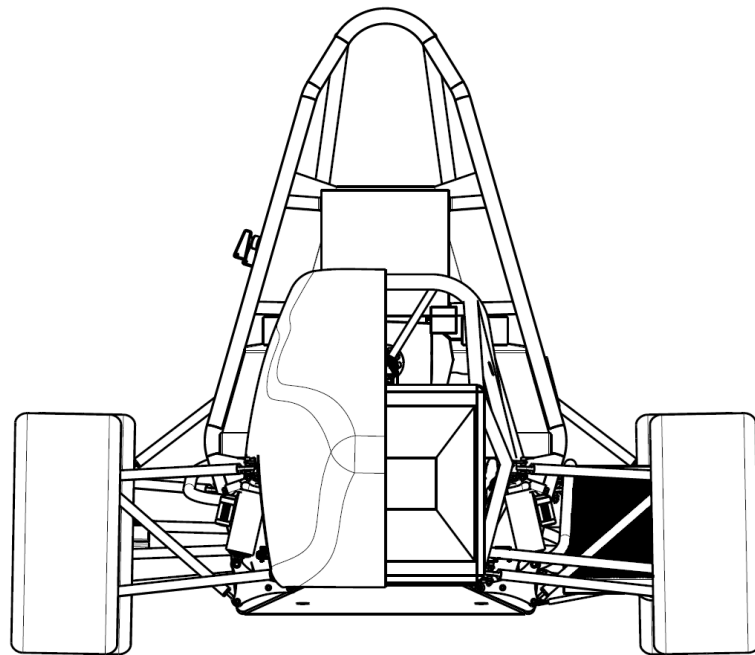




## A - Overall vehicle concept

Concept Class FSUK 23/07/2021

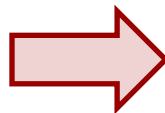


# Objectives

1st electric vehicle: Pass the **Scrutineering** + **Finish** endurance

Focus on **reliability**

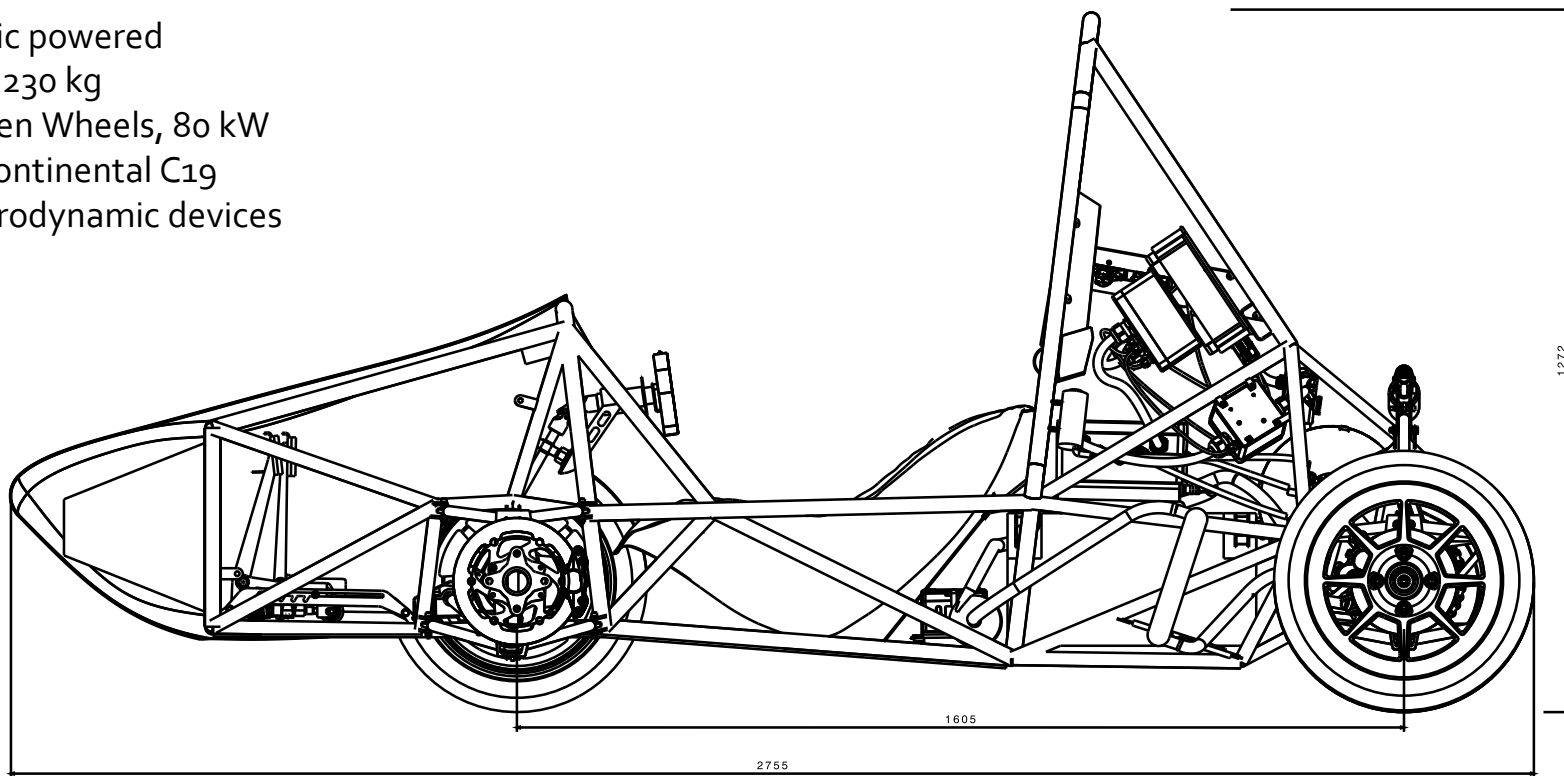
| Event          | Objective | Max pts |
|----------------|-----------|---------|
| Cost Event     | 75        | /100    |
| Business Event | 60        | /75     |
| Design Event   | 80        | /150    |
| Skid Pad       | 30        | /75     |
| Acceleration   | 30        | /100    |
| Autocross      | 40        | /125    |
| Endurance      | 125       | /275    |
| Efficiency     | 10        | /100    |
| Total          | 450       | /1000   |



| Event        | Objective |
|--------------|-----------|
| SkidPad      | 5,3 sec   |
| Acceleration | 4,4 sec   |
| Endurance    | Finish    |

# The vehicle: Valkyriz

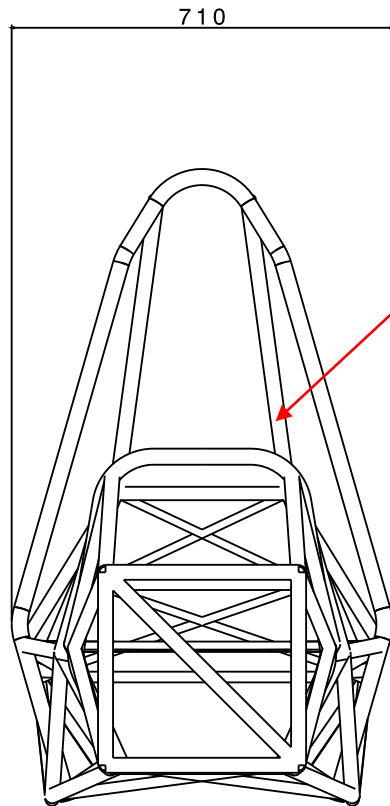
- Electric powered
- Mass: 230 kg
- 2 Driven Wheels, 80 kW
- 13 " Continental C19
- No aerodynamic devices



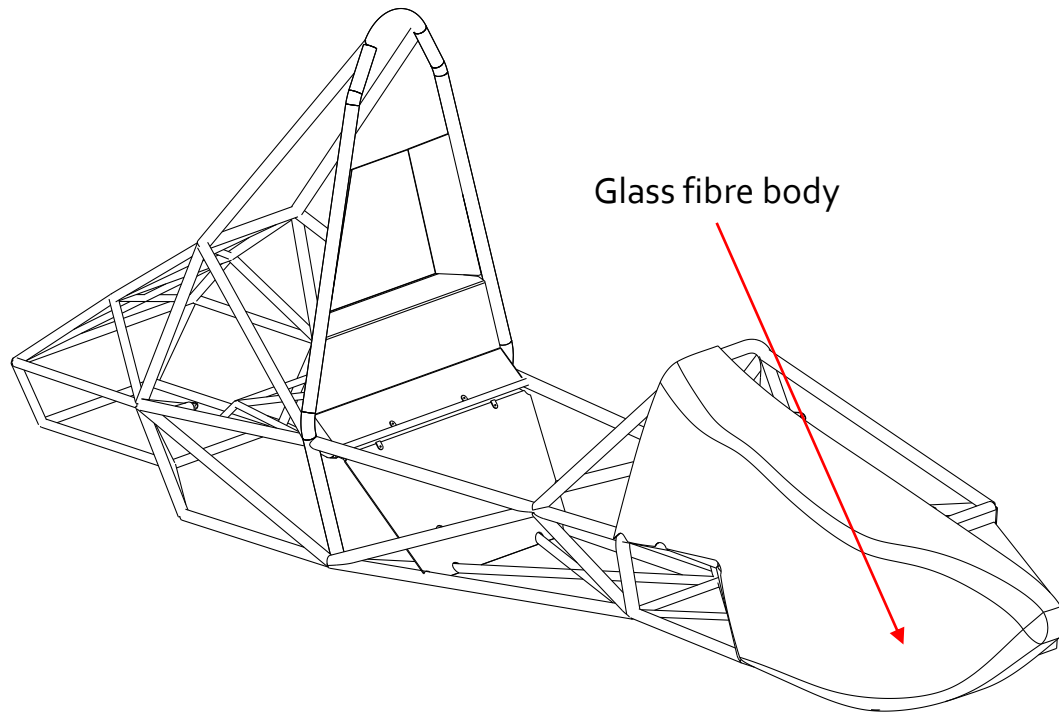
# Frame & Body

A close-up photograph of a dark, possibly black or dark grey, metal frame. The frame has three horizontal slots or cutouts, each with a red interior surface. The frame is positioned diagonally across the frame, with the top-left corner pointing towards the upper left. The background is blurred, showing hints of red and white.

# Frame & Body



Steel space frame: 34,6 kg

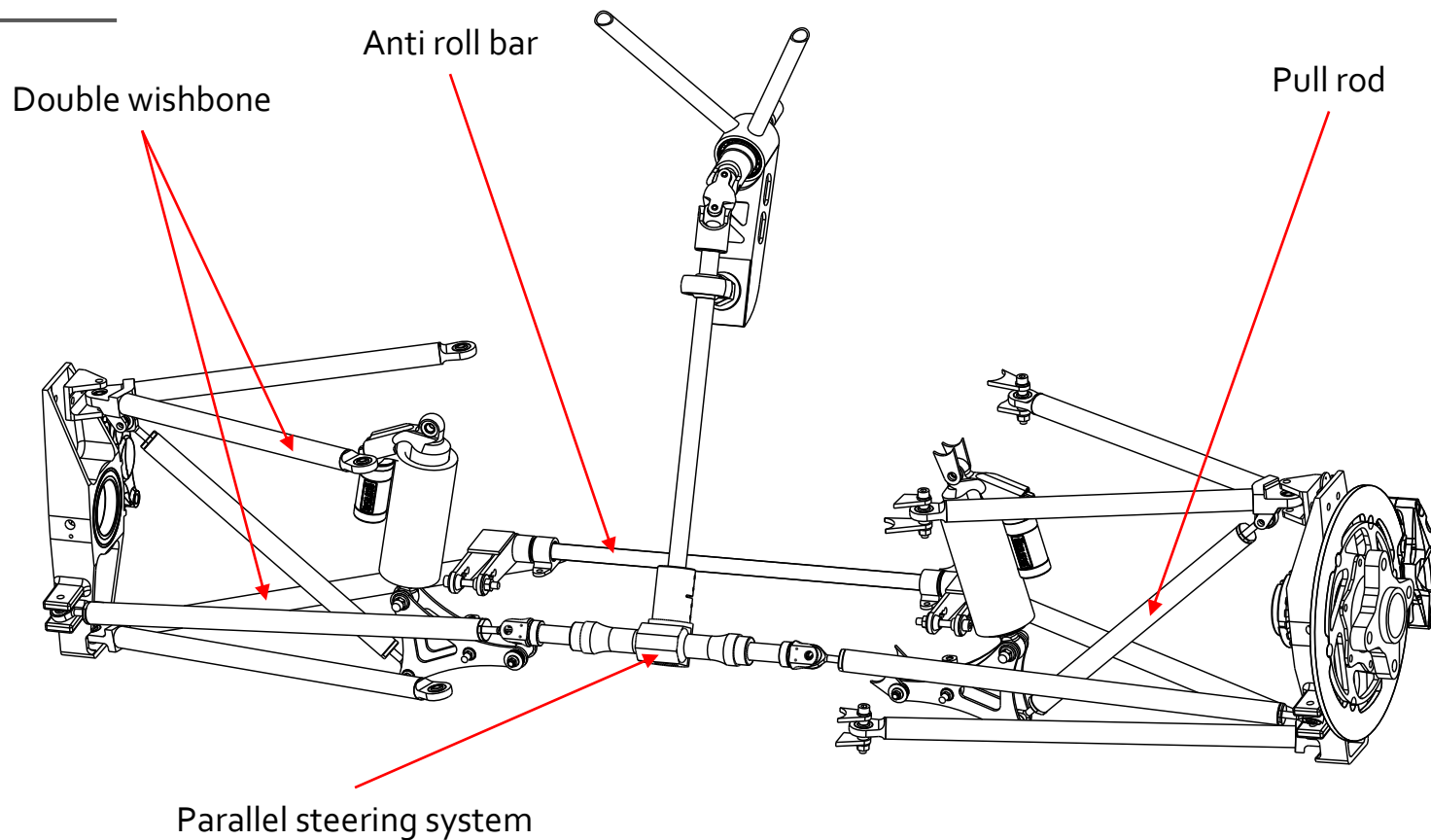


Glass fibre body

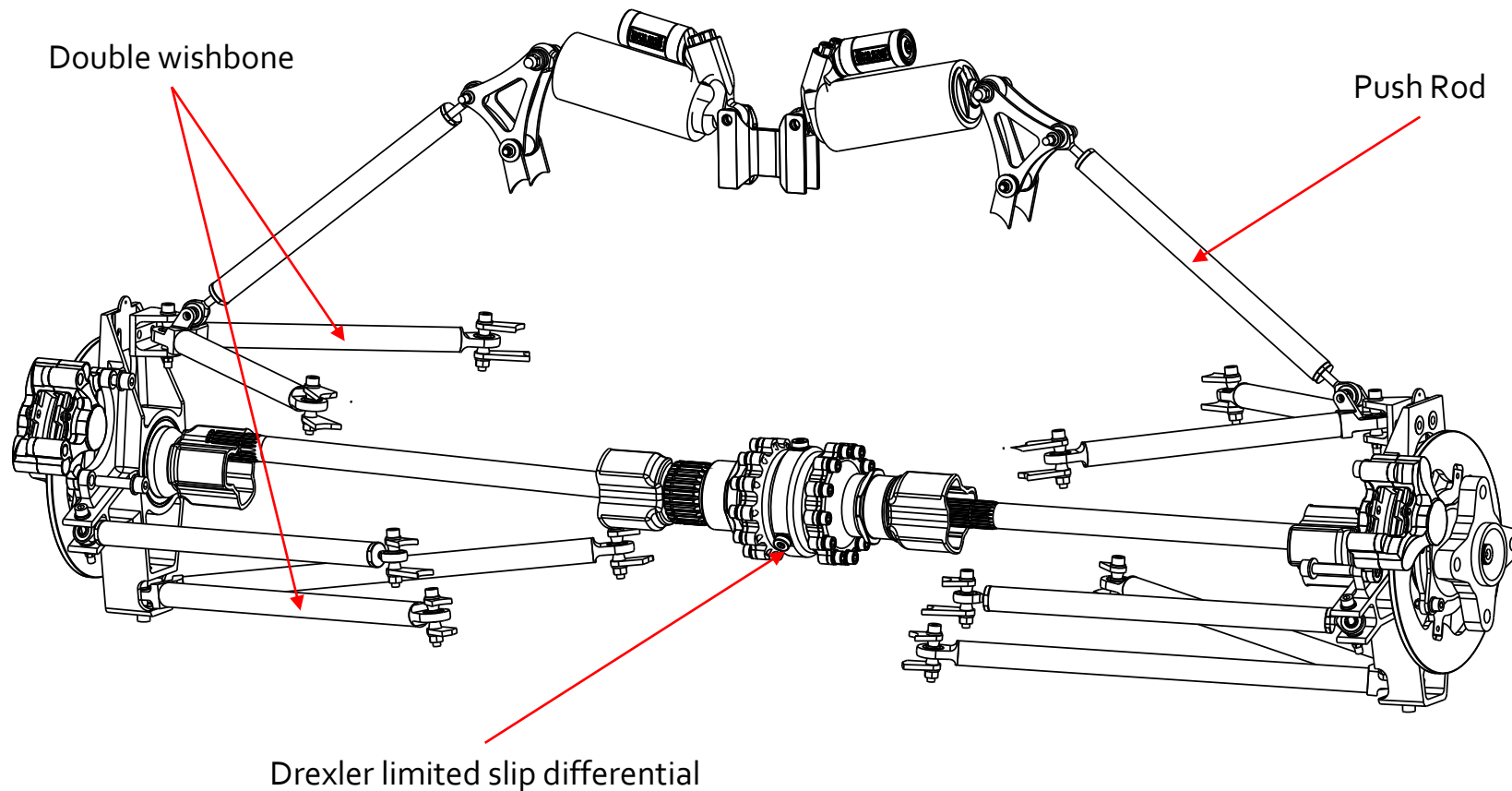
# Suspension system



# Front Suspension System



# Rear Suspension System

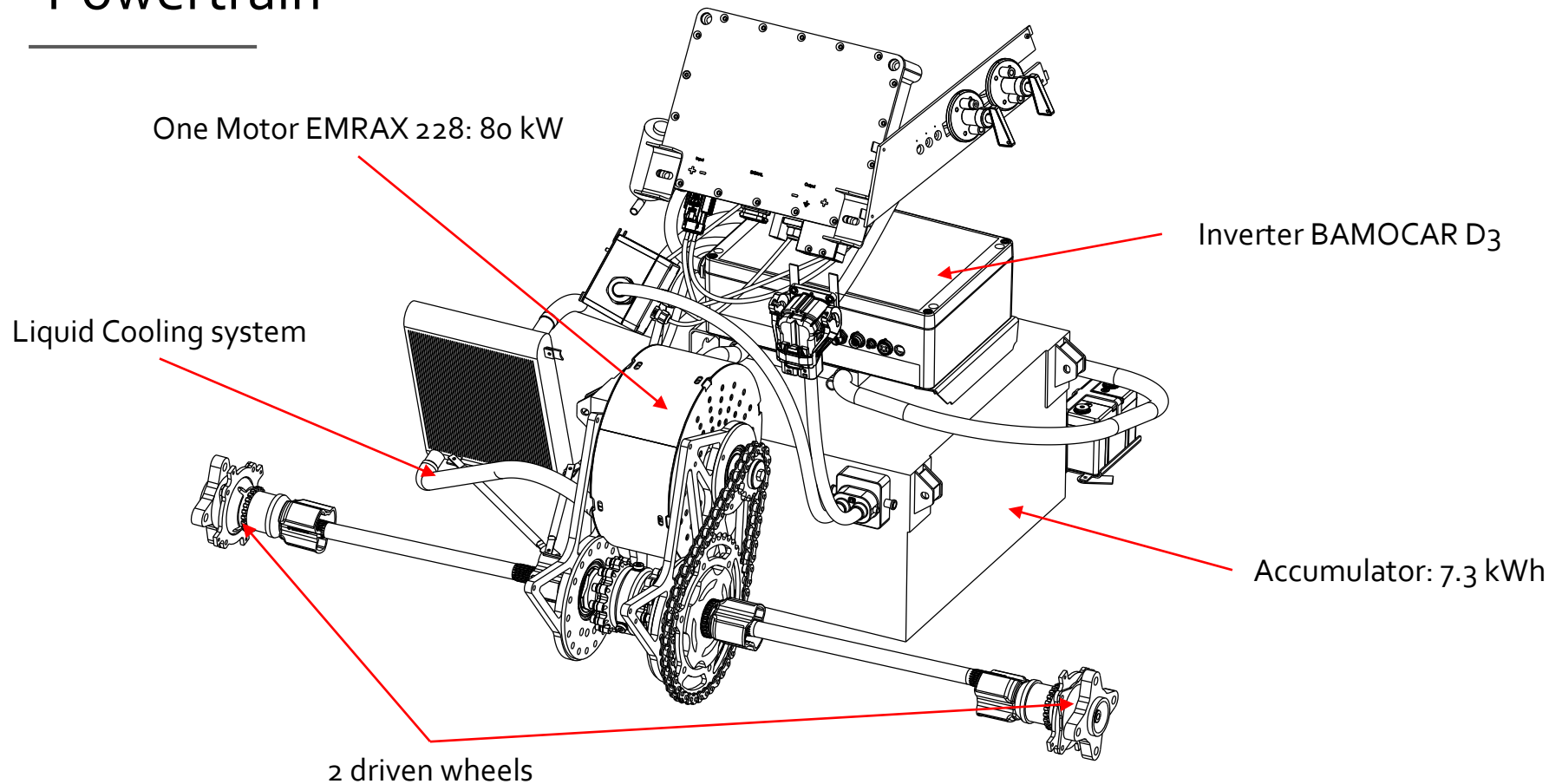




# Powertrain



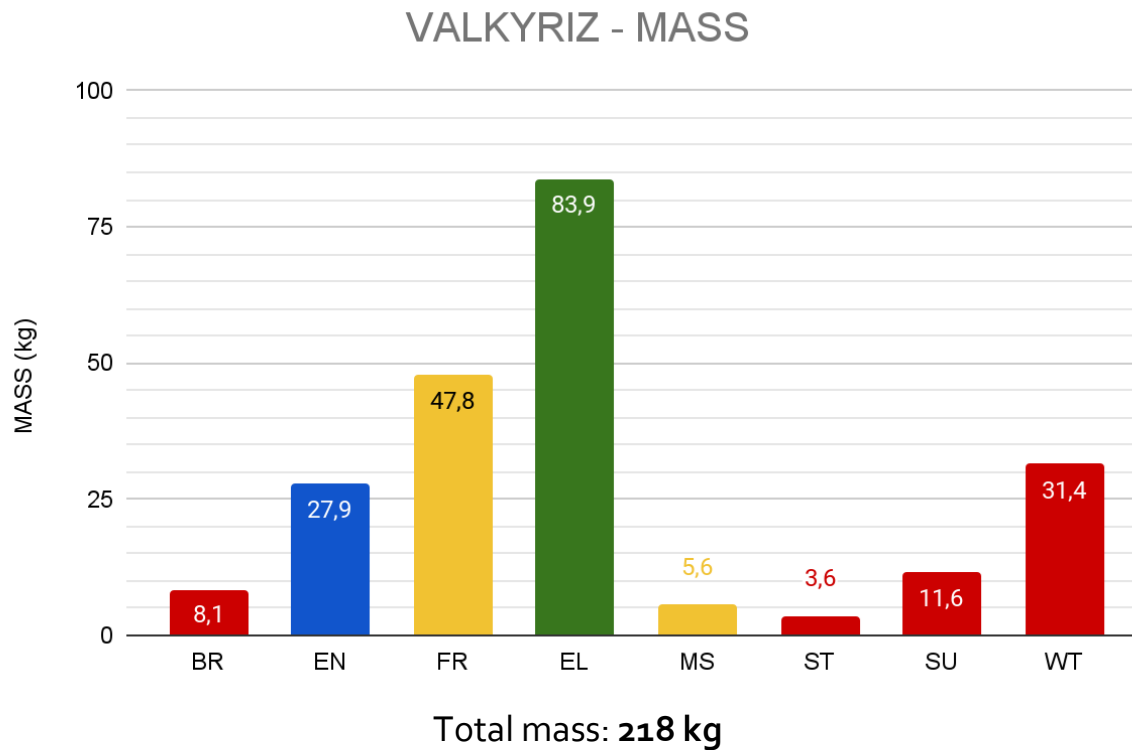
# Powertrain



# Overview

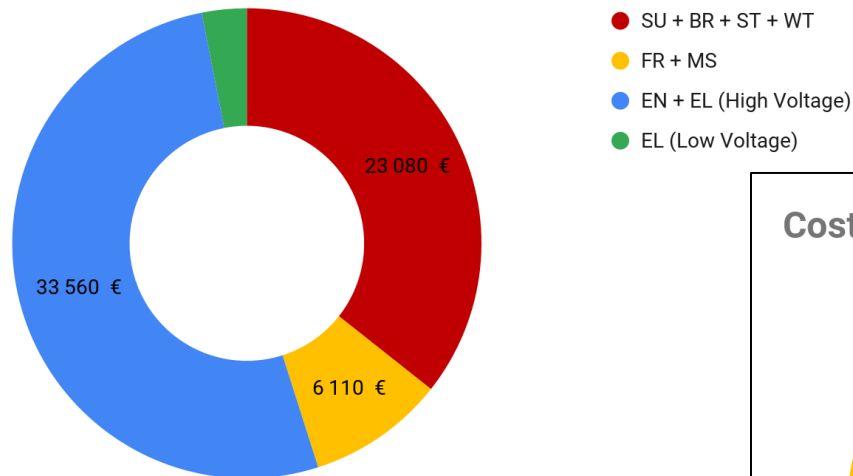


# Mass schedule

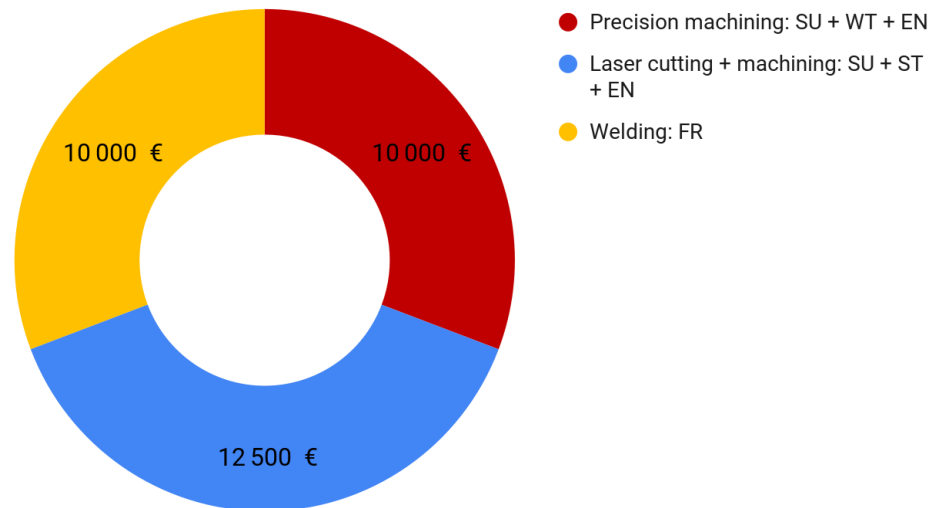


# Cost schedule

## Cost Schedule: bought parts



## Cost Schedule: made parts



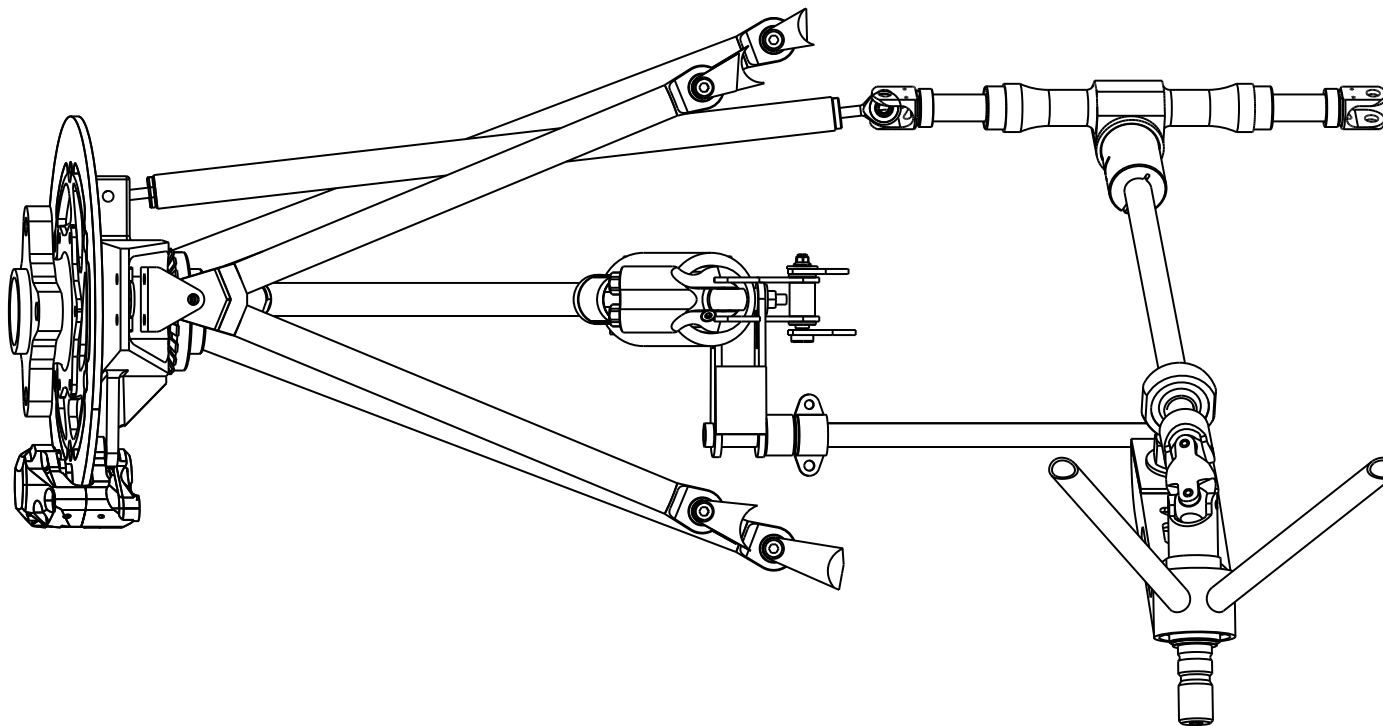
Total cost: **97250 € all taxes incl.**



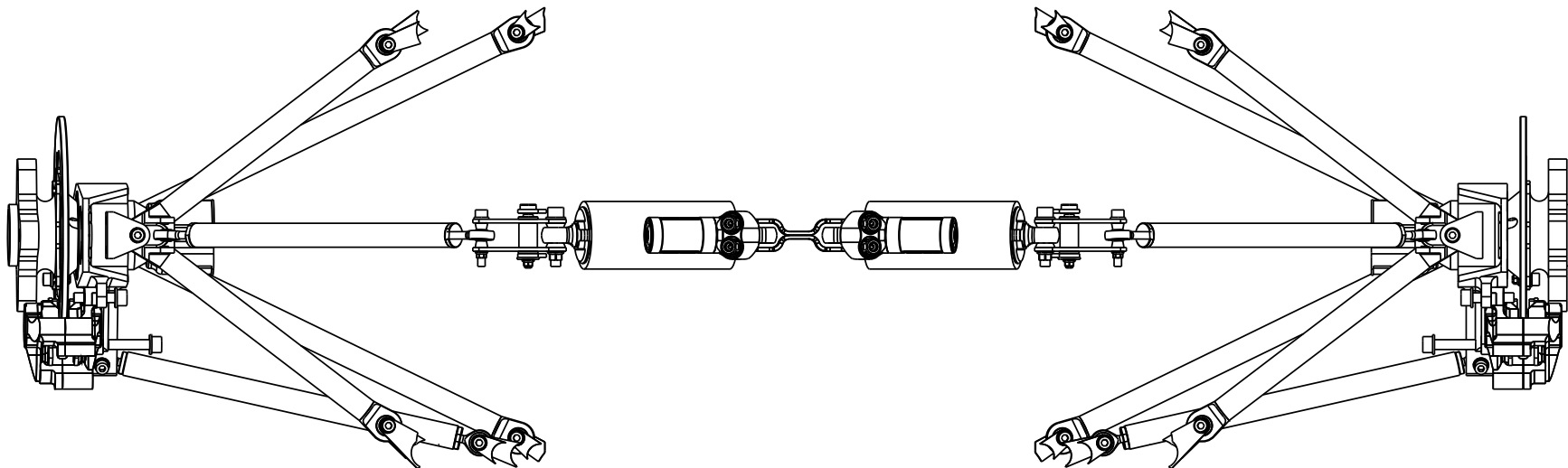


# Appendices

# Front suspension: Top View

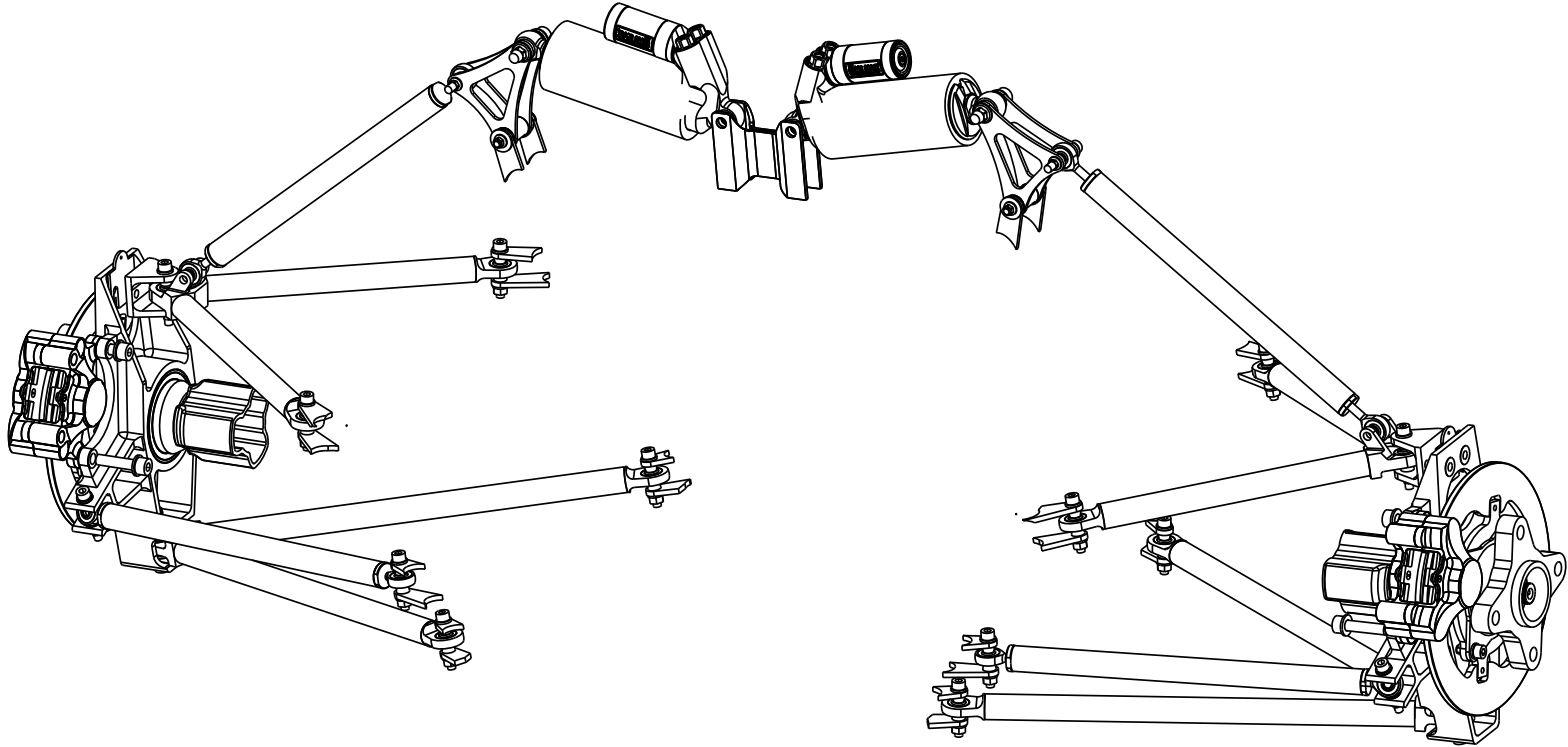


# Rear suspension: Top View

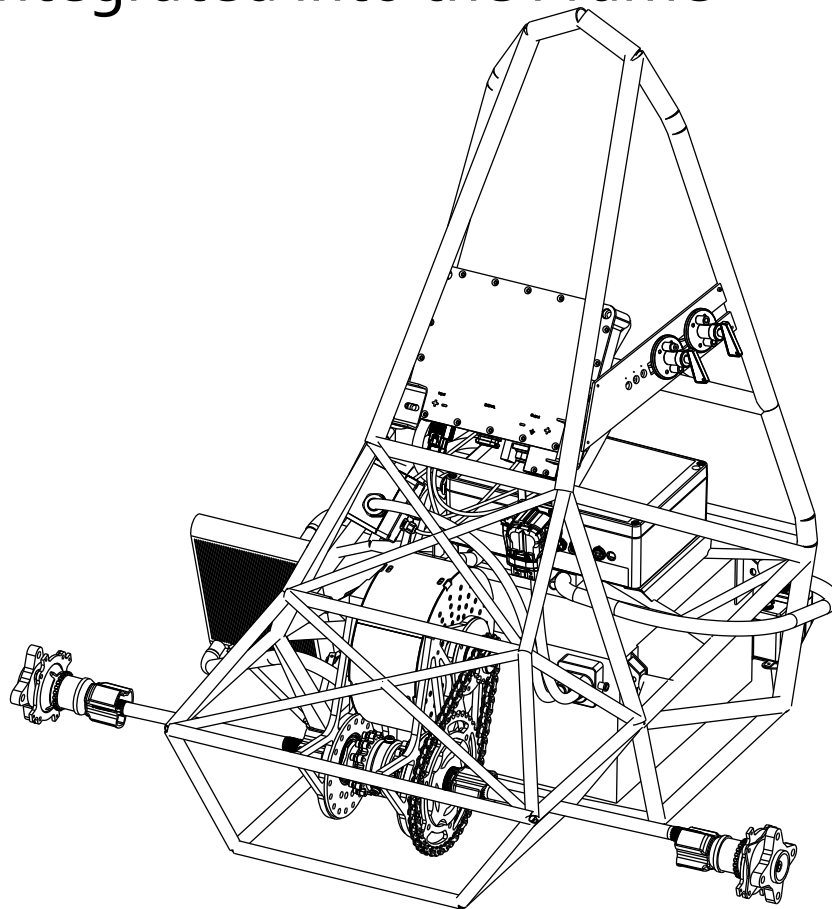




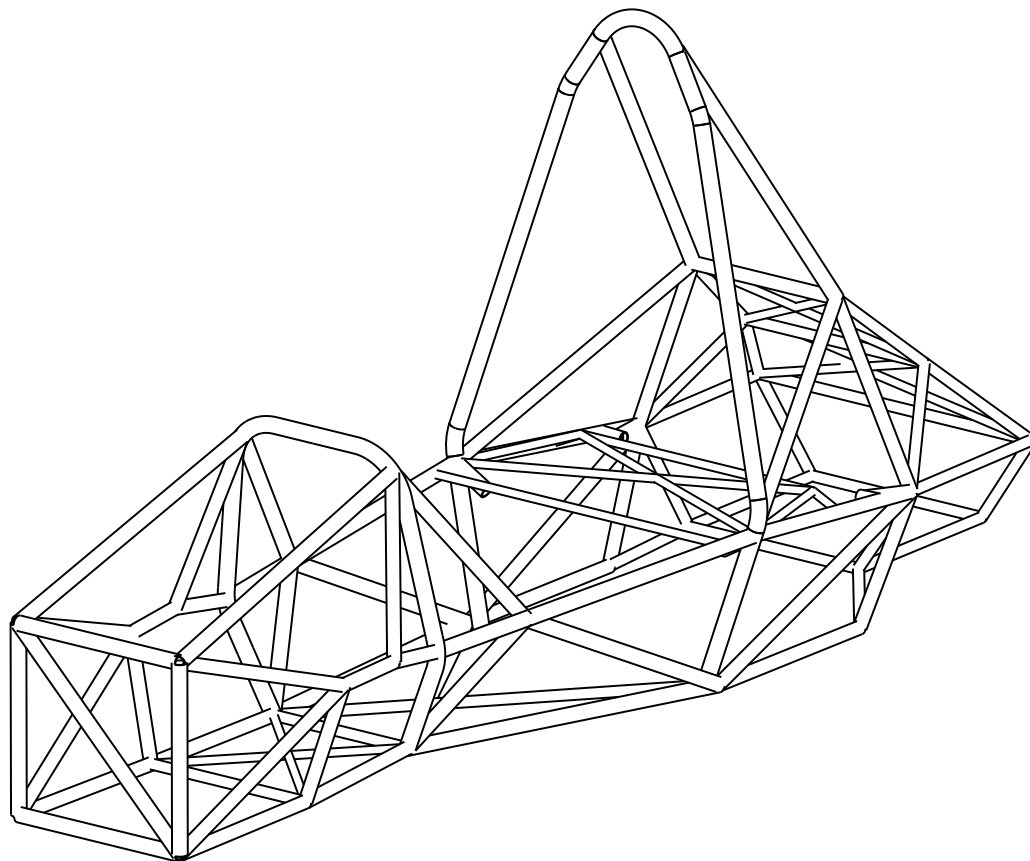
# Rear suspension system



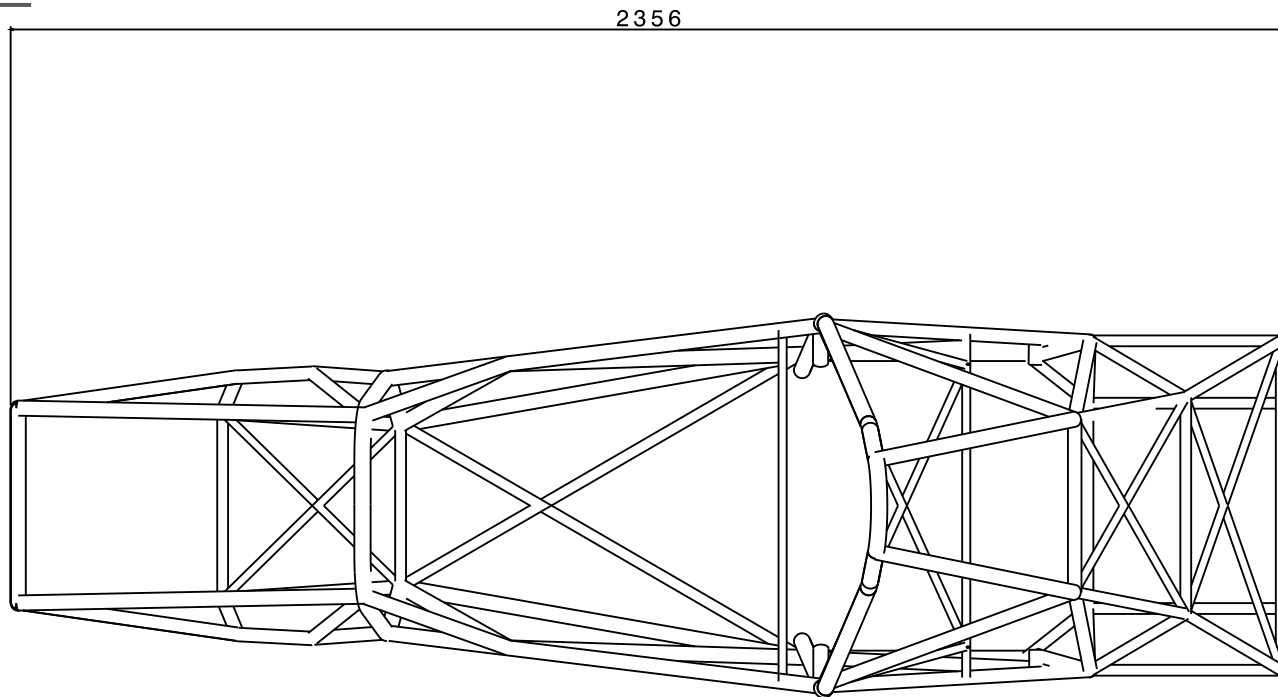
# Powertrain integrated into the Frame



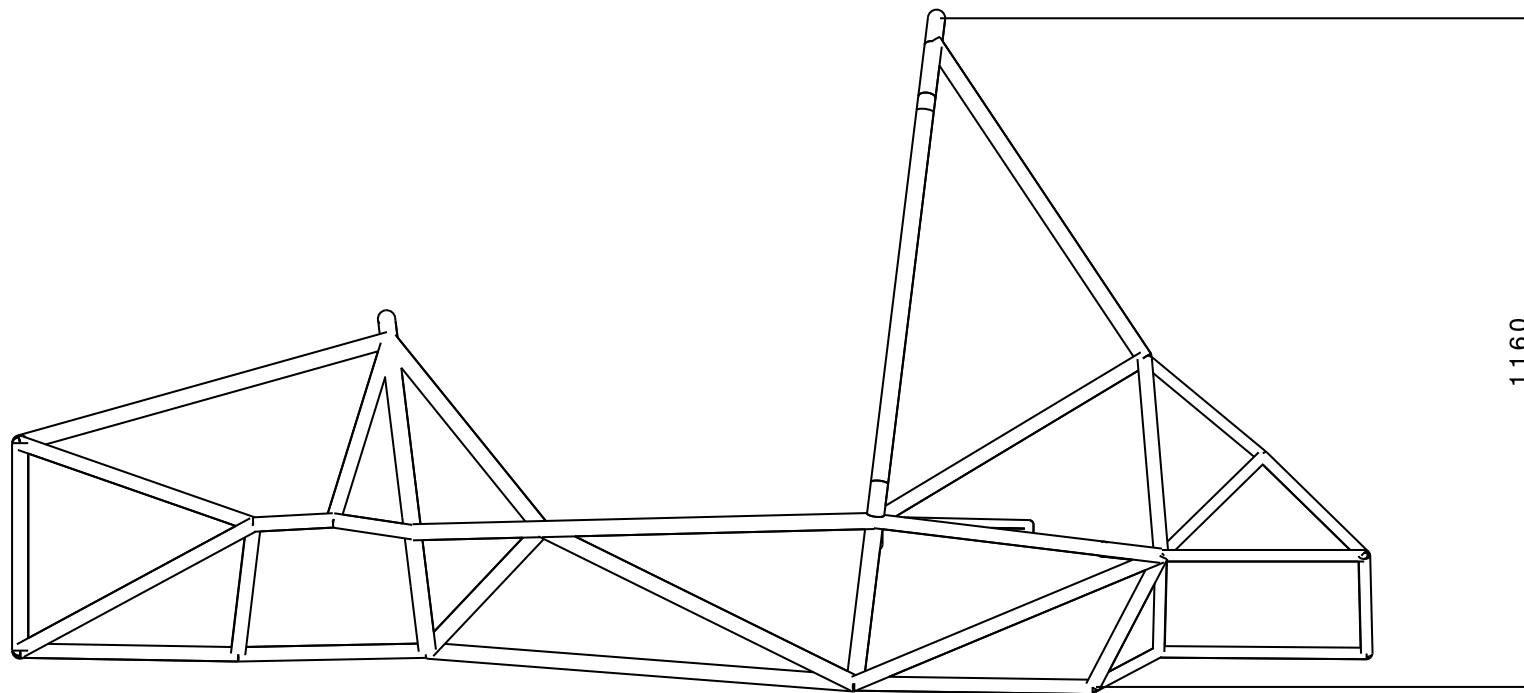
# Frame



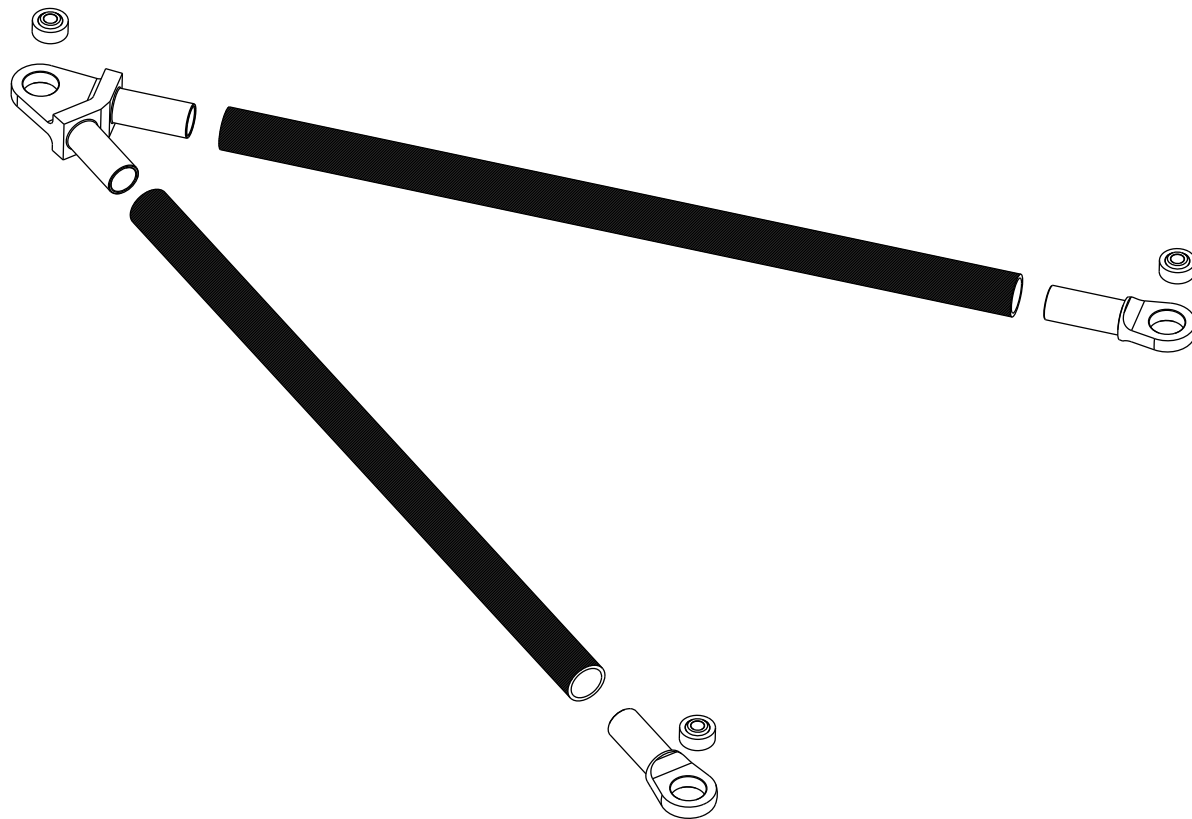
# Frame: Top View



# Frame: Side View



# A-Arms



# Wheel Assembly

