

From a steal-tube to a flying „crane-jib“!

the idea

the enthusiasm

the reality

the problem

the solution

the aeroplane!

edy schuetz

the idea

An aeroplane, where flying a simple reality and the feels like in the beginning of flying.



Feel the nature..... Fly breezy!

the idea

Not every car driver with a lot of driving experience is a car maker! (like me in 1991) ... but ...



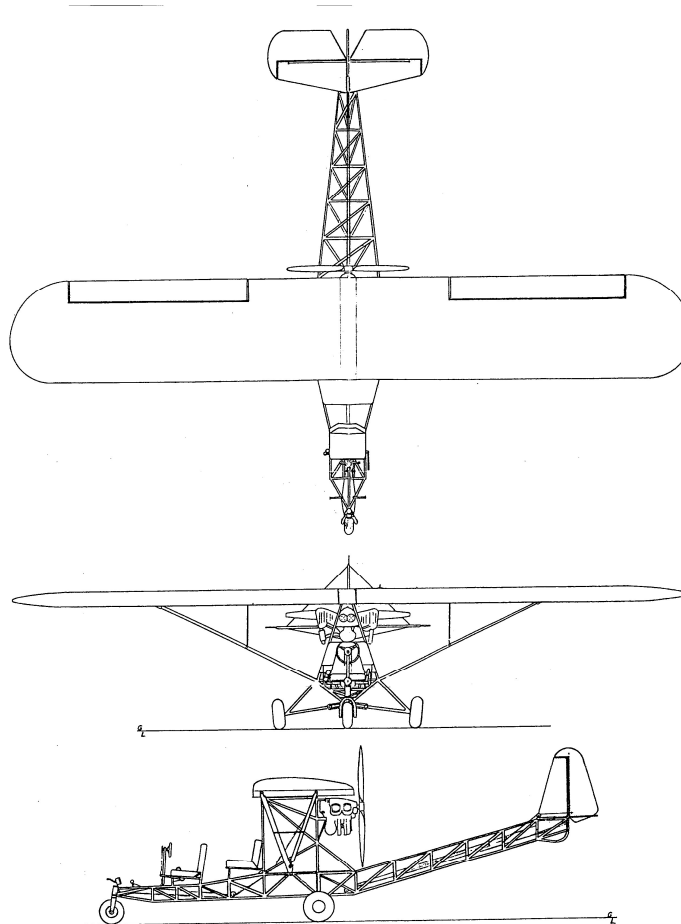
the idea

Remembering 1976, a swiss aeroplane that was real special!



the enthusiasm

After a lot of research, i discovered the kit in USA.



the reality

3D modelling was the basic for the hard work.



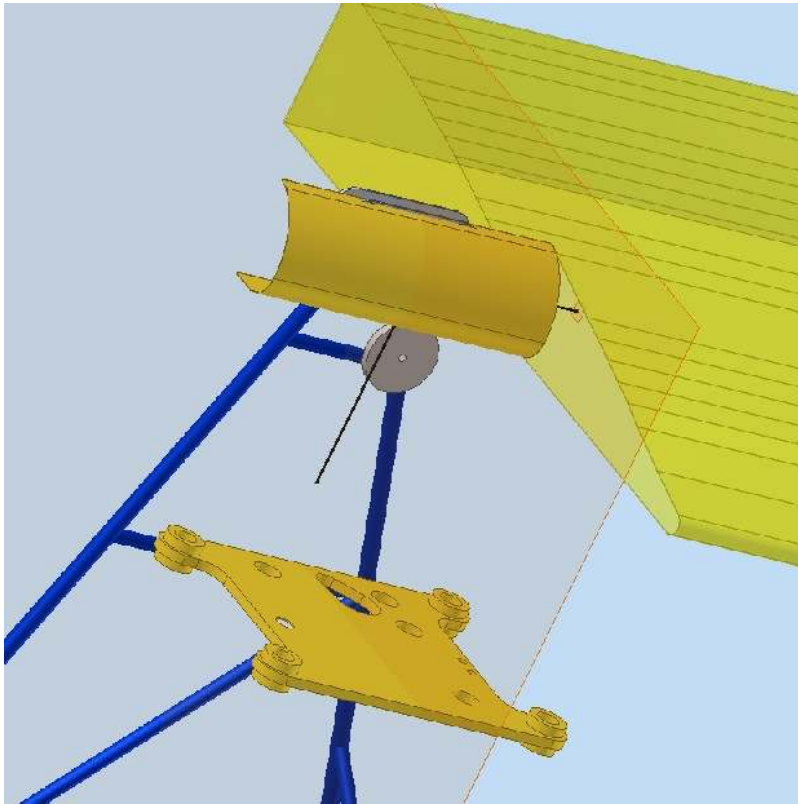
the reality

From the tube to the frame!



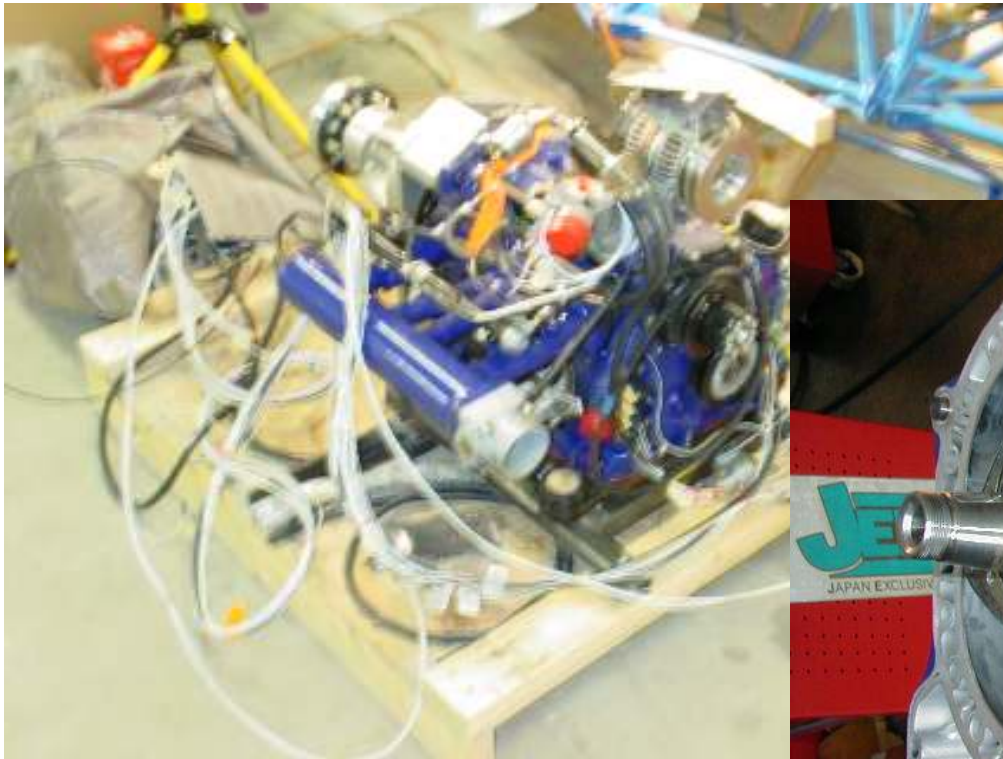
the reality

Not only welding is a hot job!



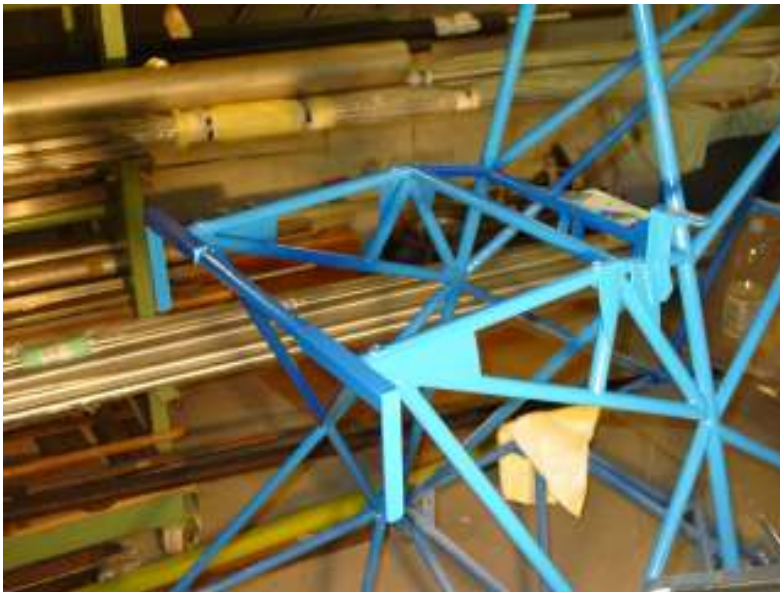
the problem

Rotary engine: Mazda Wankel 13B, 180 HP



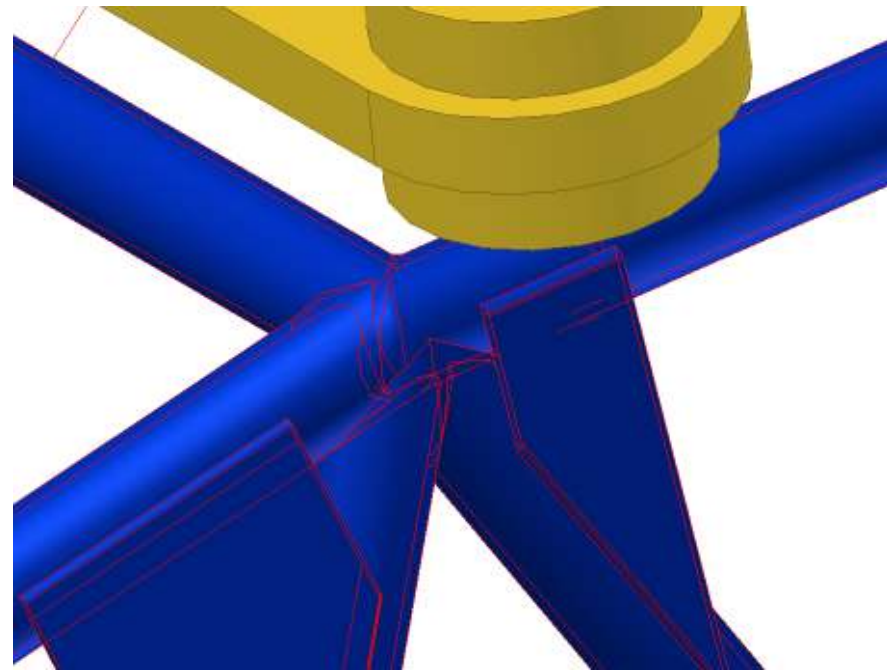
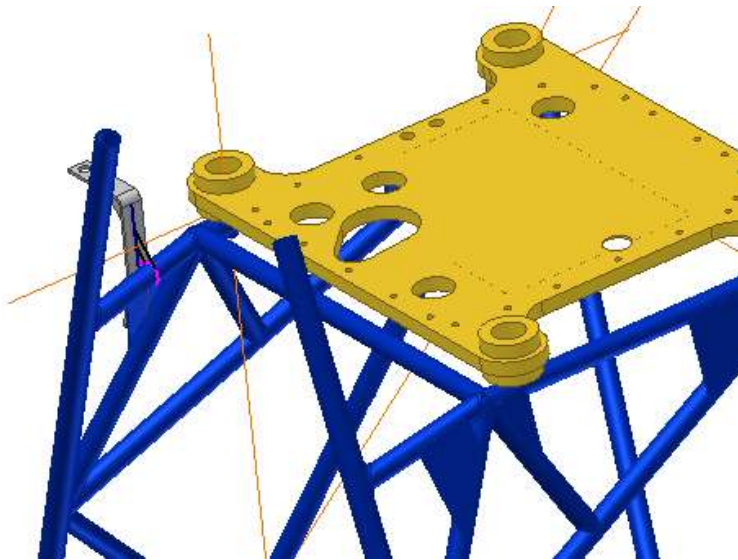
the problem

Calculation of the strength of the engine-mounting
($F_g = 1400\text{N}$, former 950N)



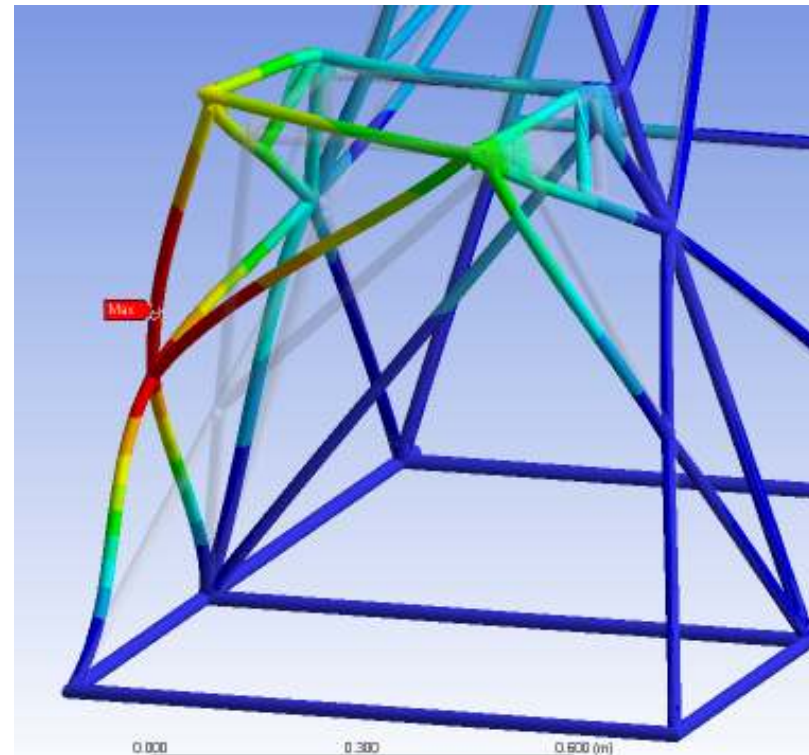
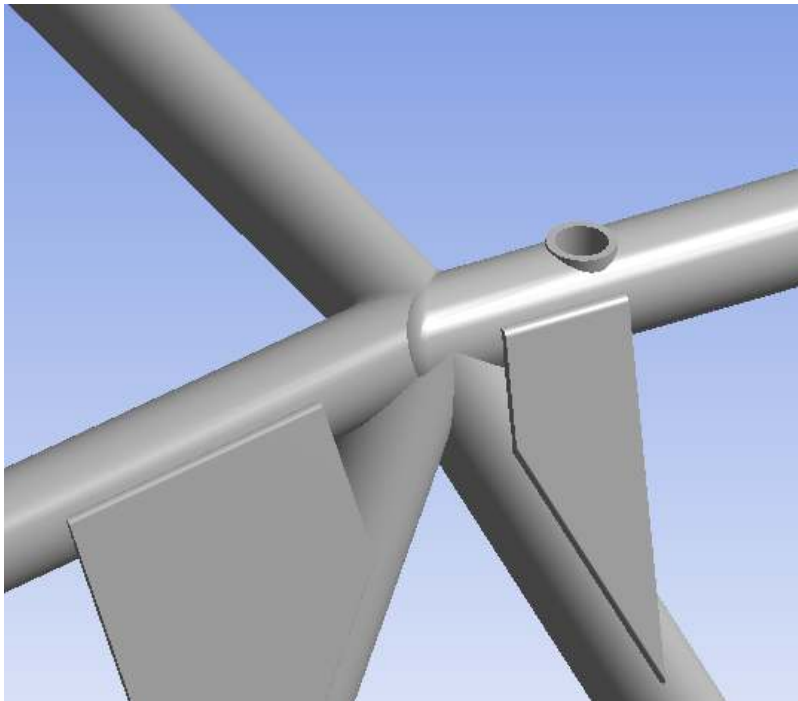
the problem

The 3D model – the reality in FEM-tool „design space“.



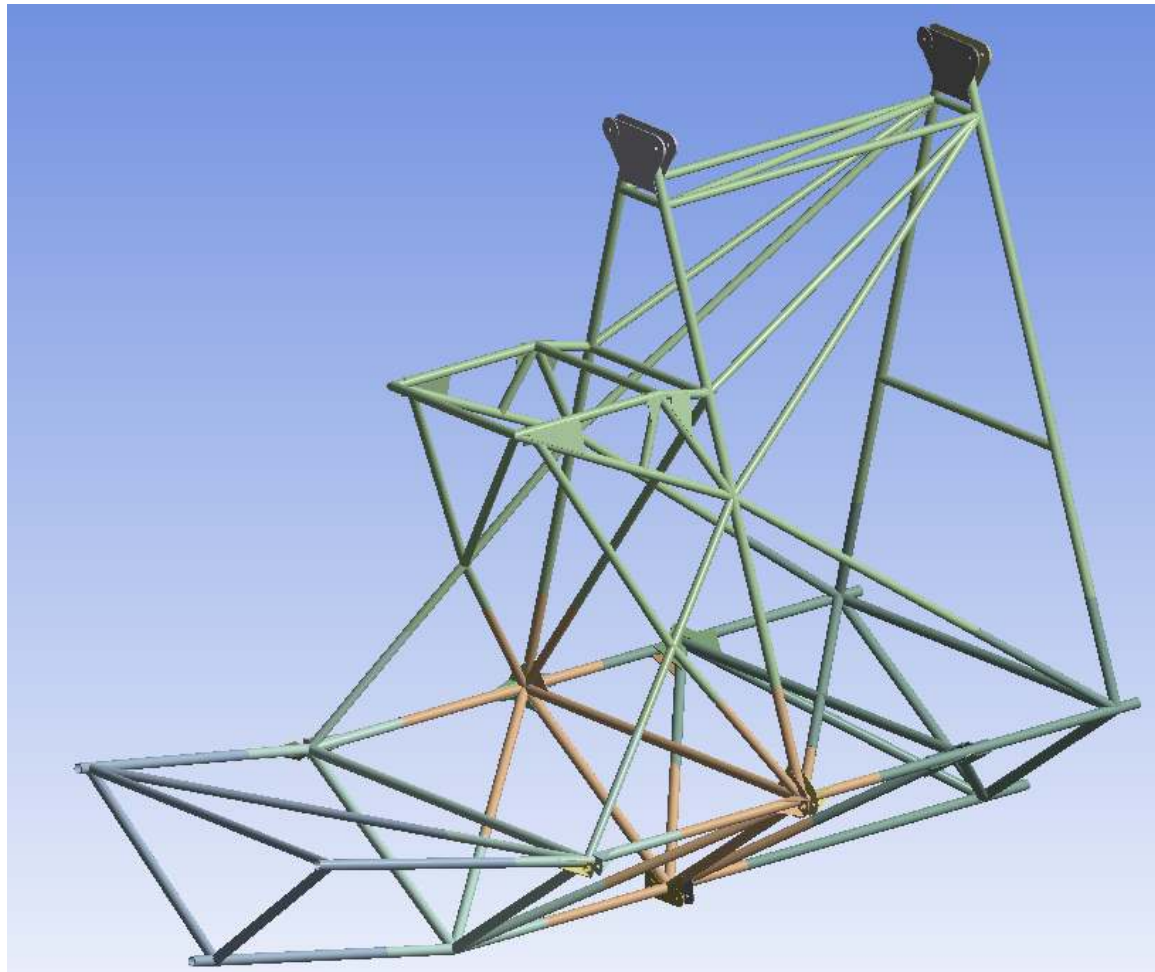
the solution

The perfect tube-structure of the engine-mounting.



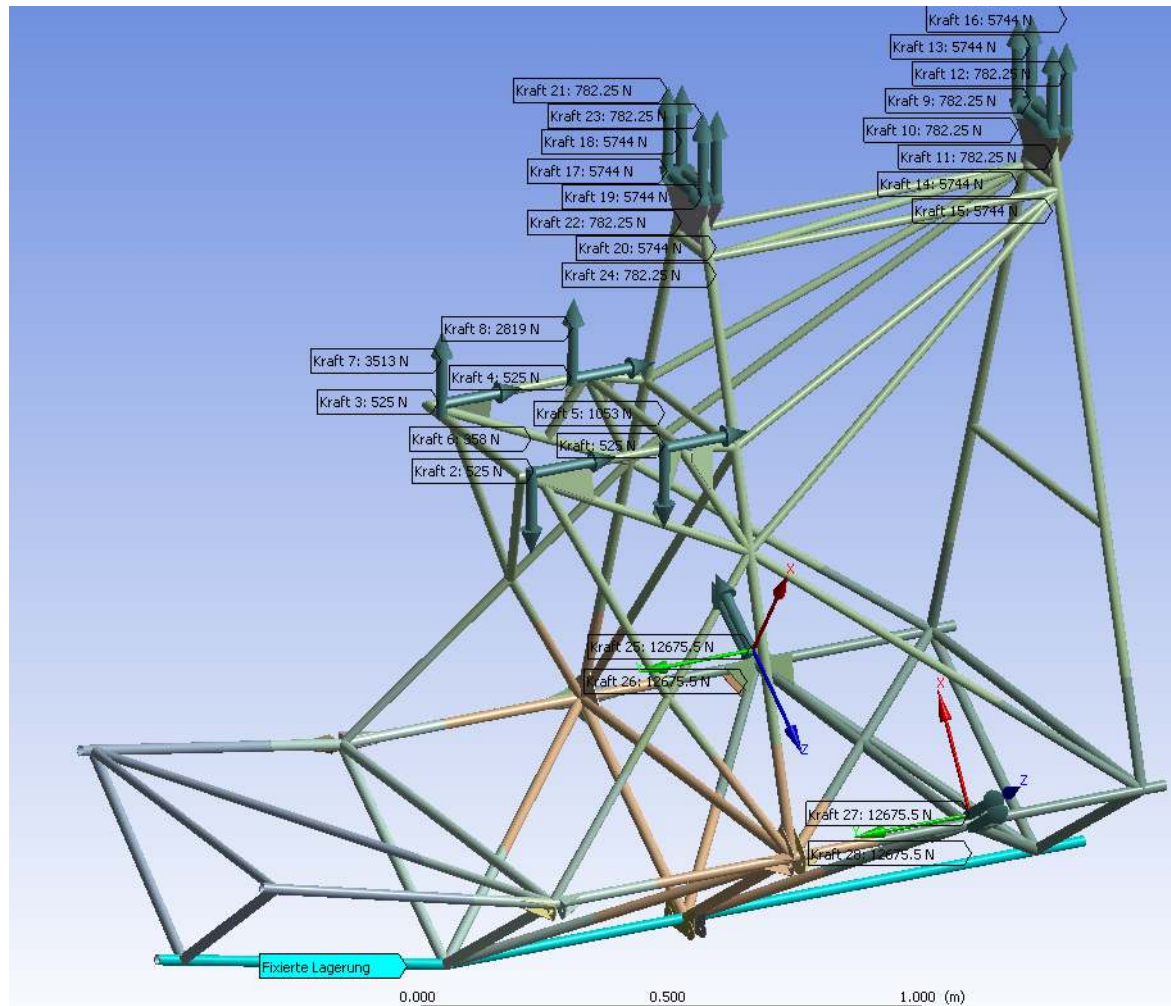
the solution

The model of the fuselage, 3D CAD. (MTOW 1750 lb !)



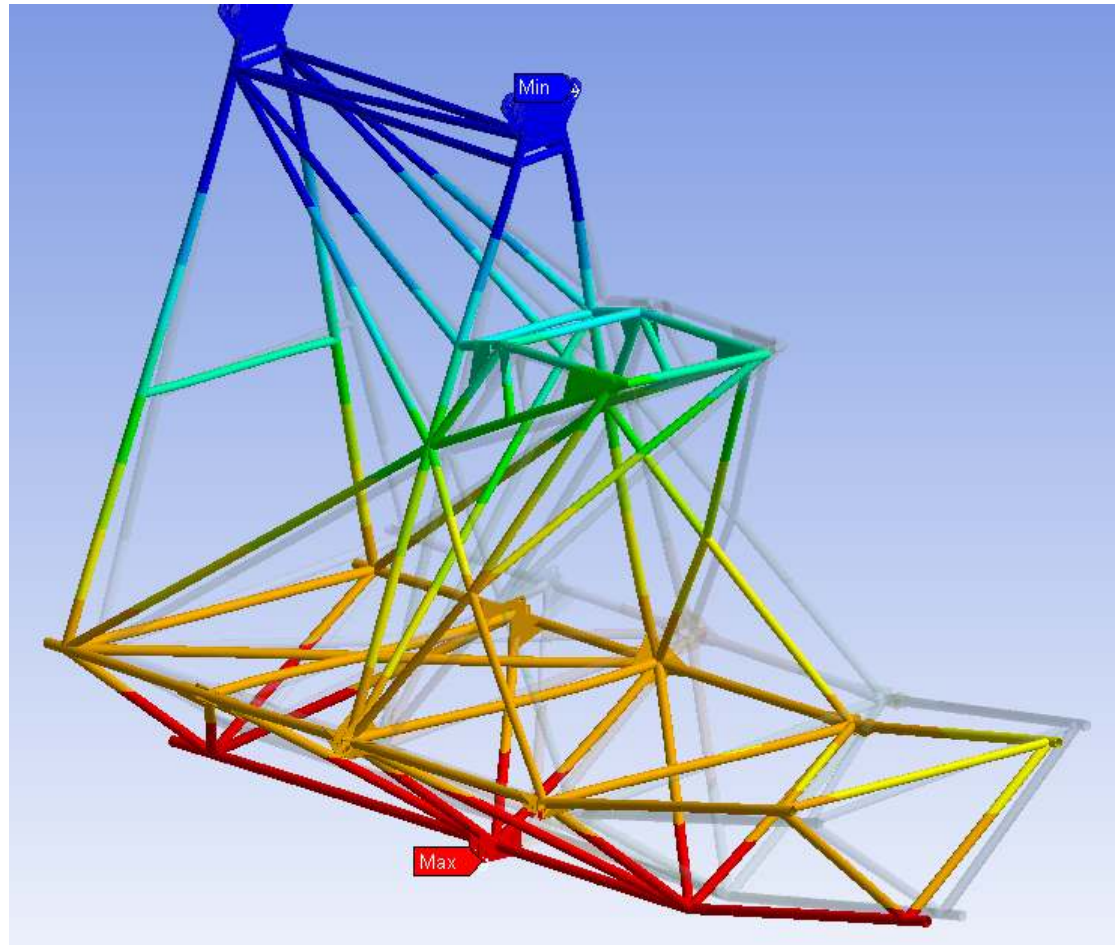
the solution

The general conditions.



the solution

The deformation.



the aeroplane HB-YLX

On ground with a bird watching.



the aeroplane HB-YLX

Ready to go!



the aeroplane HB-YLX

5 meter from the ground in the air!



the aeroplane HB-YLX

First flight october 2006 near Zuerich, Switzerland!

