The Haarlemoneade is a dream made into a rocket - to make a rocket that will have the best results and in the same time send a message about sustainability and teamwork. In mid-air the rocket will spread seeds of hope (and lemons), and hover safely to the ground as one piece.

As Haarlem2 group, we designed our rocket to have the best aerodynamic shape to avoid drag or friction and to reach the highest level. Therefore the rocket has a slender and smooth shape. The parachute is synchronised to be deployed when the rocket will start falling, combined with a mechanism to ensure it release.

Parallel to the profile fins, the ball connector is more effective and stable at low speeds. fins placed correctly are better than 4, or more to minimize profile drag. They also have a windproof coat!

Parabola shaped nose has the lowest drag coefficient at subsonic speeds. The Nose of the rocket is the most heavy part of the rocket. It is also attached with a string to the main body to make sure it won’t get lost.

Haarlemoneade was designed to have optimal parameters.

Octagonal 60 cm parachute has reinforced connections to the strings to guarantee resistance during the deployment procedure. A central hole is provided to reduce the twisting and the oscillations under strong wind.