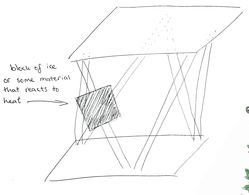
Autonomic Plant Table System

ENG-A1002 - ARTS-ENG Project
20.5.2019
GROUP 5

Anttila Elli	**ENG/KJR**
Luoto Anni	**ENG/ENY**
Mattheiszen Matias	**ENG/ENY**
Vaahtera Reeta	**ENG/ENY**
Sihvola Mikko	**ENG/KJR**
Vile Aarni	**ENG/RYM**

Six actuators, principles of Stewart-Gough platform, adaptation to environment and sustainable development - these and a lot more have been our inspiration and basic guidelines creating this autonomic plant table system. The structure changes its position according to environment creating as suitable growth environment as possible for the plants on top.

In the beginning we were asked to connect two platforms and the next week we had to figure out how to change the distance between two objects. These assignments led us to our first draft.



The first idea was to replace one of the spherical hinges with a block of ice. However the problem with this solution was that the ice block couldn't reach its original form after melted. Subsequently we decided to use a hydraulic cylinder that contains a heat responsive wax that expands when heated into 20 degrees and contracts when getting colder.

Autonomic Plant Table System

ENG-A1002 - ARTS-ENG Project
20.5.2019
GROUP 5

Anttila Elli	**ENG/KJR**
Luoto Anni	**ENG/ENY**
Mattheiszen Matias	**ENG/ENY**
Vaahtera Reeta	**ENG/ENY**
Sihvola Mikko	**ENG/KJR**
Vile Aarni	**ENG/RYM**