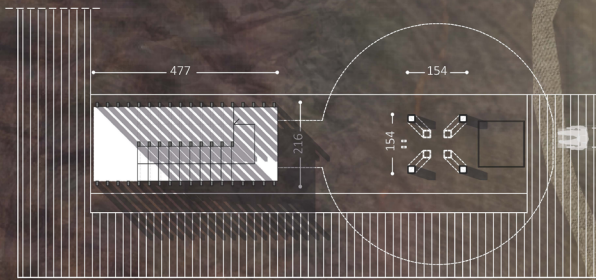
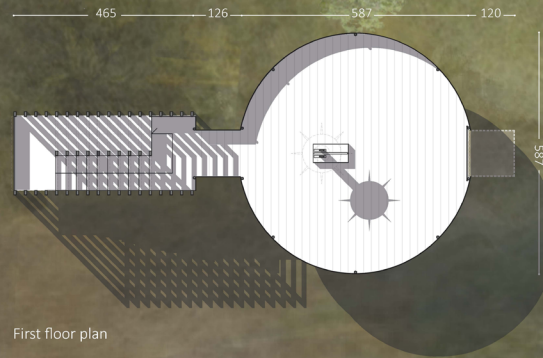


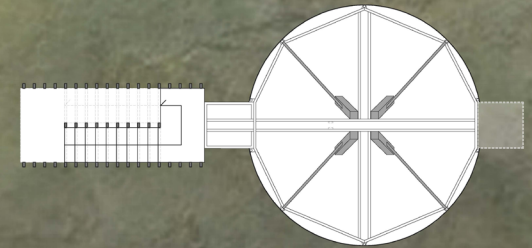
The Balance Lift Tower is a circular platform with a diameter of about 6 meters and 28 sqm area, to accommodate 10 people + 2 disabled people in wheelchairs. The first floor stand at a height of 5 meters from the ground and its round shape offers a 360° view on the park. Visitors can reach the panoramic level both using the staircase, or the lift cabin going up and down by a system of balances and hydraulic pressure. The tower become a protection and break point for the visitor; as a dwelling for rain under the round floor and as a sitting area on the round floor where benches are provided. Materials are wood and metal; the elements of the tower are made out of standard and modular pieces and materials, to be easily reproduce and replaced for a simple maintenance.



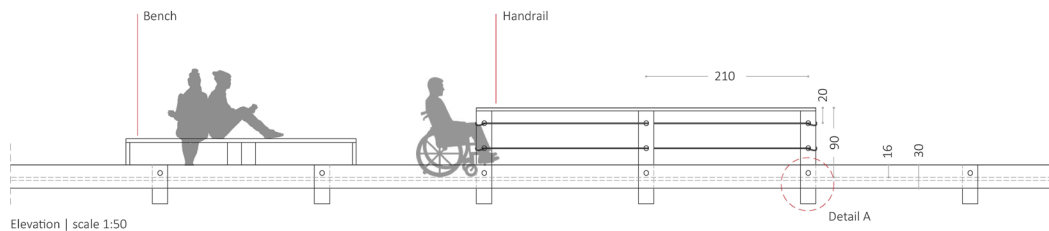
Ground floor plan



First floor plan

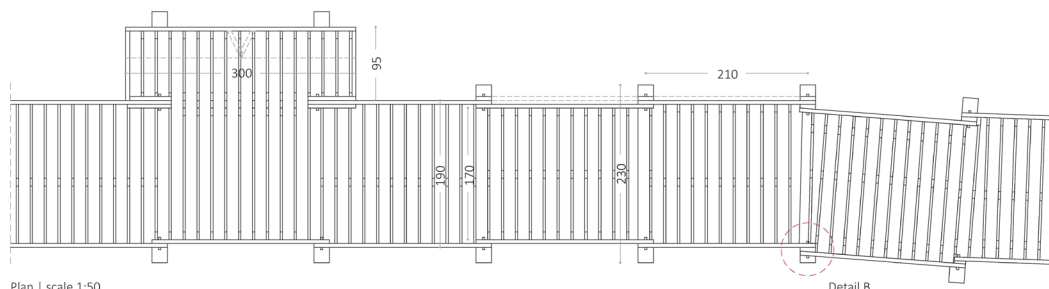


Structure plan



Elevation | scale 1:50

Detail A



Plan | scale 1:50

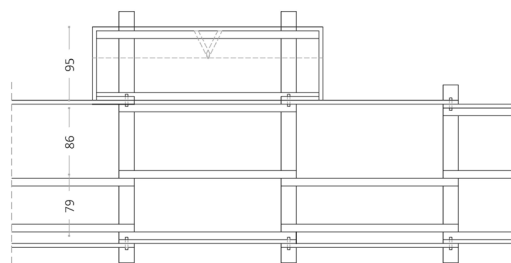
Detail B

### The footbridge

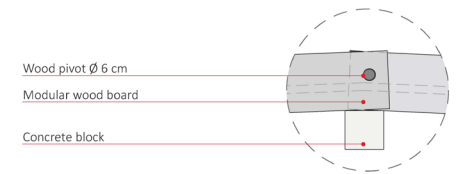
It is conceived as a composition of modular timber block, built off-site and assembled on site according to the unevenness of the ground. The blocks are designed with extremely simple technology: two blocks type with different dimensions compose a chain of block. Each block is fixed to the other with a wooden join of 3 cm diameter, easy to reproduce and to take out for maintenance of the block.

The join system pivot in vertical and horizontal direction supporting the ground morphology.

All the requests about dimensions have been respected.

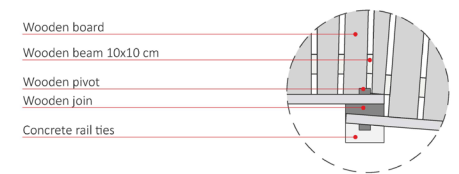


Structure | scale 1:50



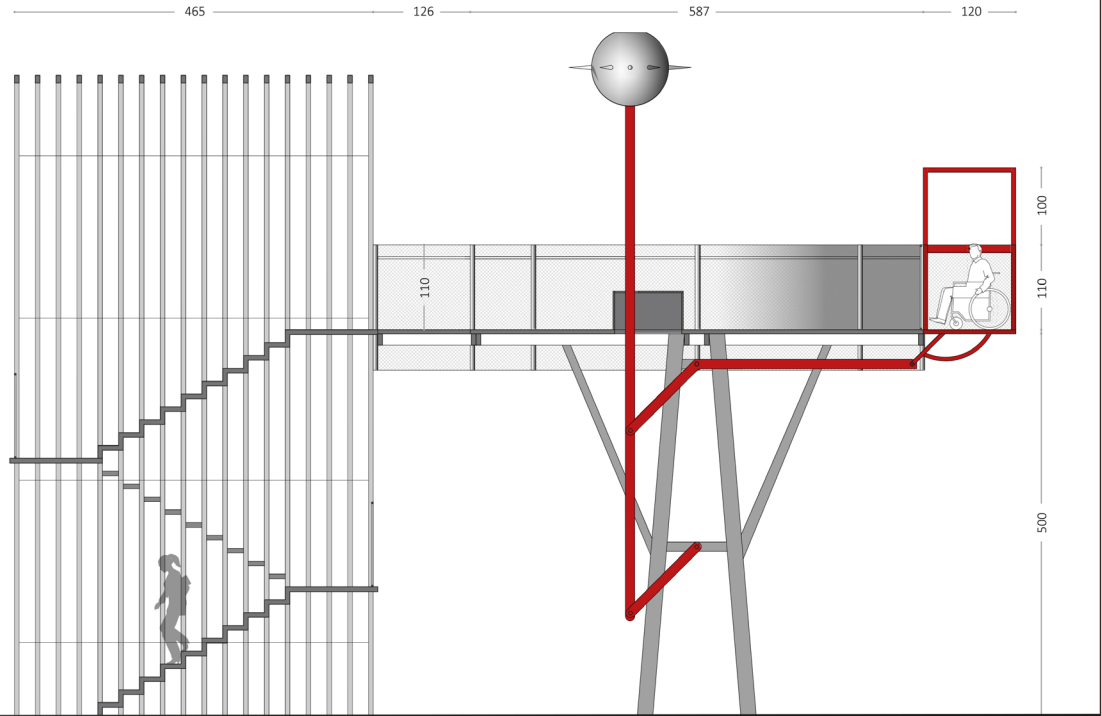
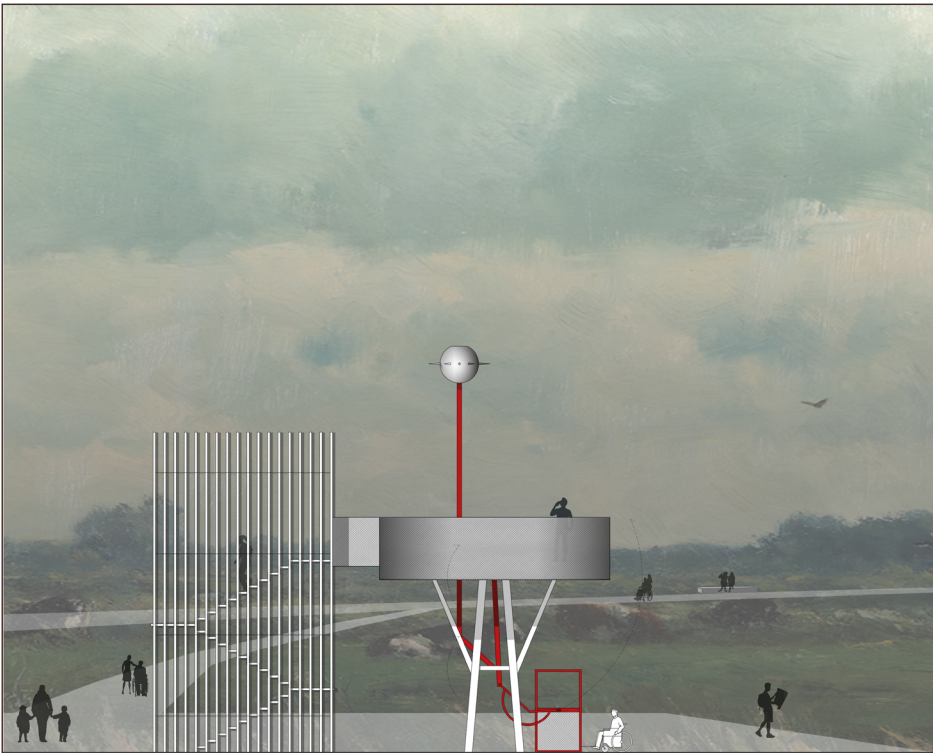
Detail A

Join of two modular block on a irregular path 1:20



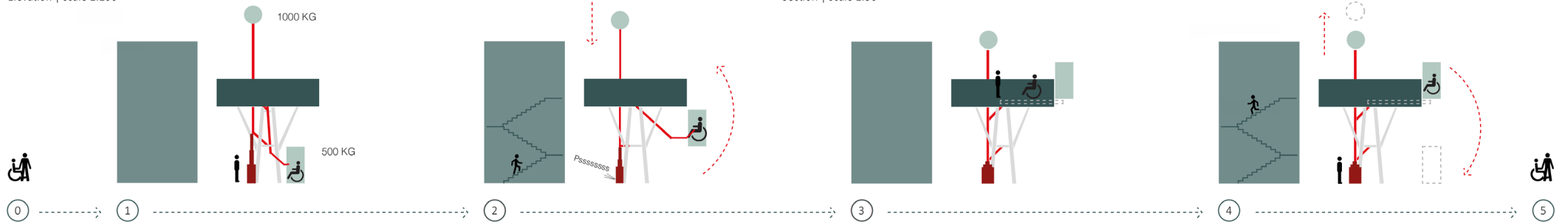
Detail B

Join of two modular block on a irregular path 1:20



Elevation | scale 1:100

Section | scale 1:50



The project consists of three elements each with specific function:

1 - The walkway is made up of wooden elements that can be joined together responding to different layouts, by wood pins that allow the horizontal and vertical articulation of the walkway to overcome the rough shape of the ground, without modifying the existing.

2 - The stair, to access to the 5 meters high tower, is made of a modular wooden grid structure. It has the dual function of load-bearing element of the steps and protection of visitors. The wooden frame let the perception of the context and the surrounding nature.

3 - The tower is mainly composed of a wooden structure for the platform and of metal connecting rods that moves the cabin. The operating scheme, using counterweights, was inspired by the project of a letter scales designed by Sergio Carpani. The counterweight on the top of the tower is designed as a strong, ironic landmark.

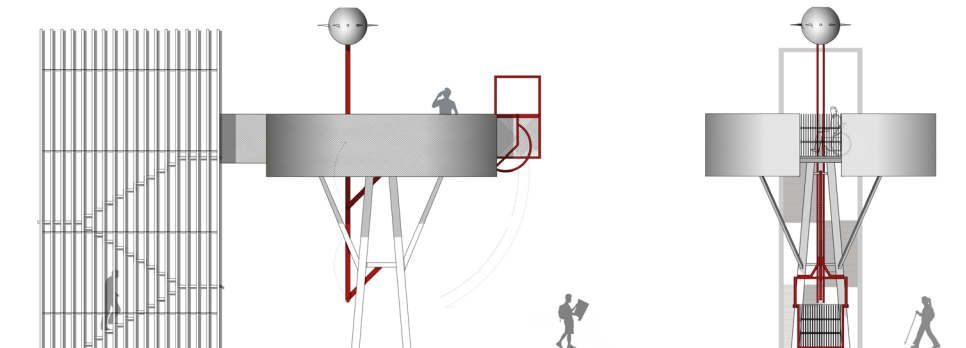
The up and down lift system works as described below:

- The platform in the rest phase always remains at the top level of the tower thanks to the greater weight placed in the sphere of the parallelogram.
- By activating a simple hydraulic jack by hand, the counterweight is lifted up and the cabin reach the ground, where the disabled person has the possibility to climb and be lifted up safely.
- The counterweight softly pushes the cabin to the upper level of the tower.
- The hydraulic jack will have the function of regulator and shock absorber according to the loads involved during the descending.



Project reference

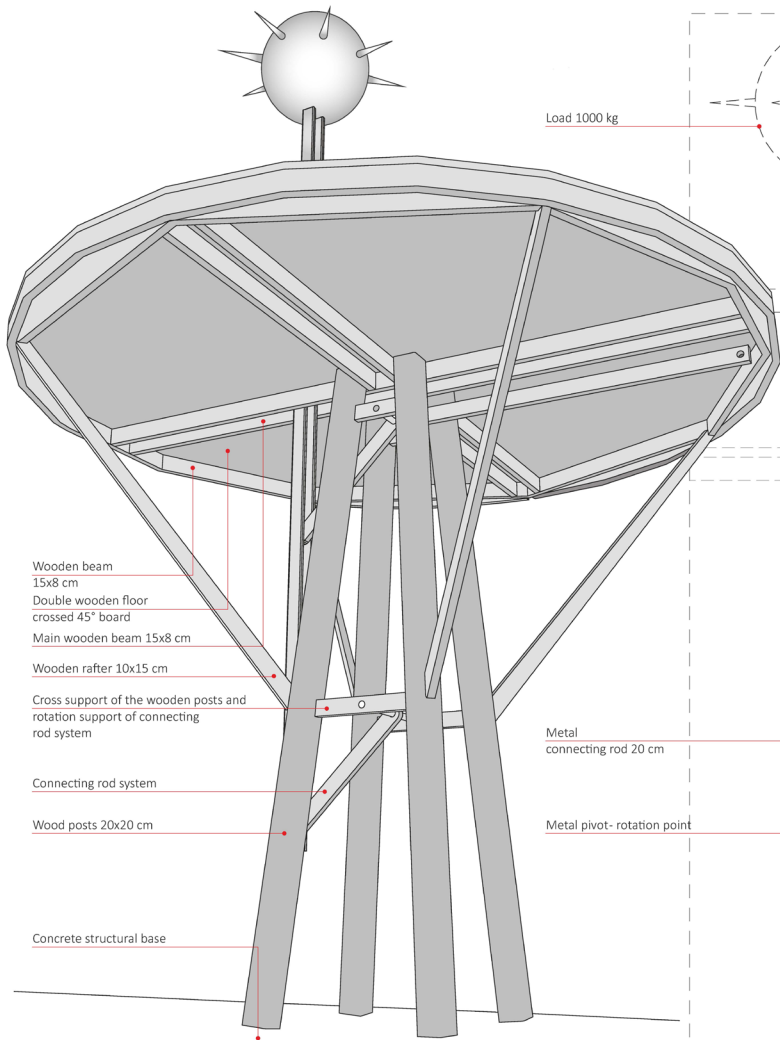
Courtesy of Sergio Carpani designer  
Pesallettere  
Year 1985



Elevation | scale 1:100

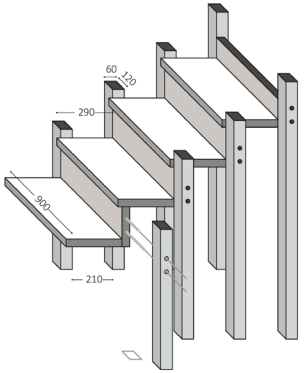
Elevation | scale 1:100





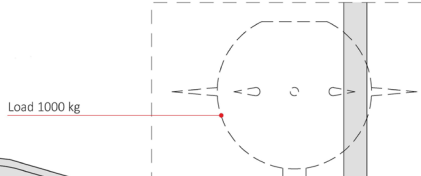
- Wooden beam 15x8 cm
- Double wooden floor crossed 45° board
- Main wooden beam 15x8 cm
- Wooden rafter 10x15 cm
- Cross support of the wooden posts and rotation support of connecting rod system
- Connecting rod system
- Wood posts 20x20 cm
- Concrete structural base

Tower structure 1:20



The tower access stair is made of a vertical wooden joist structure, braced by a series of steel tie-rods, which have a dual function, both as a load-bearing element and as a protection for visitors going up to the tower. The risers have a structural function, by tying with lateral metal screws they bind to the main structure by dumping the weight on the ground.

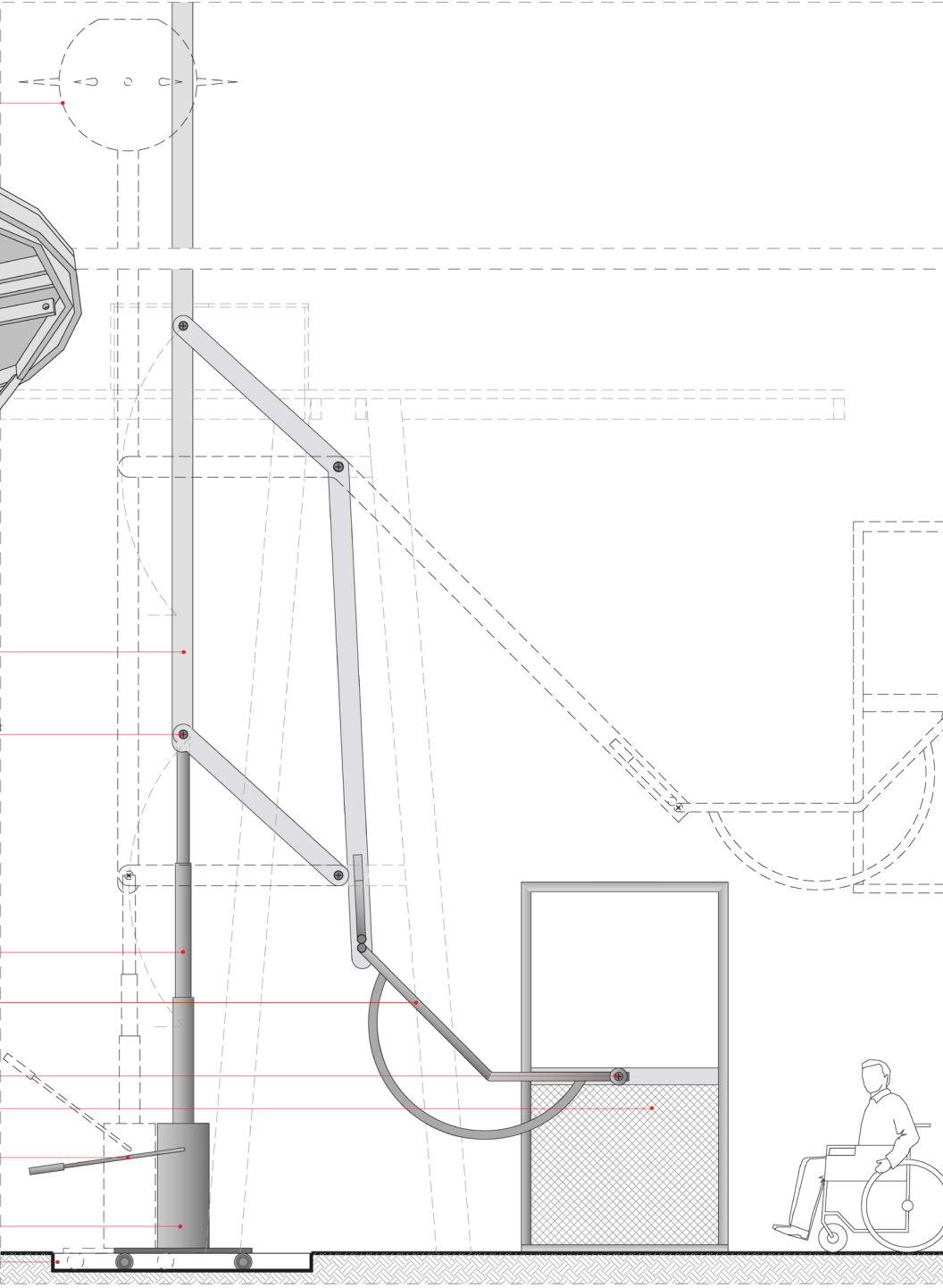
Stairs detail | scale 1:20



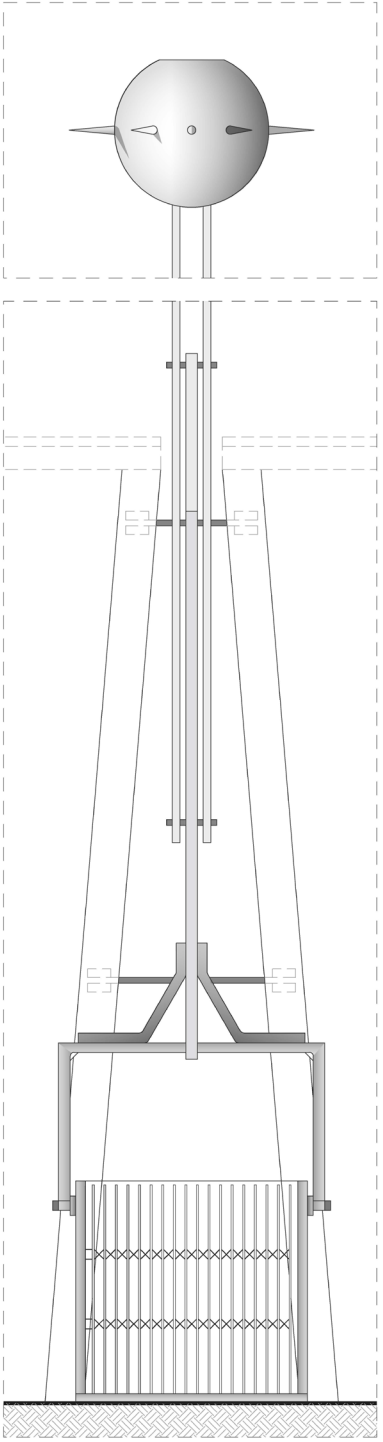
Load 1000 kg

- Metal connecting rod 20 cm
- Metal pivot- rotation point

- Telescopic pistons
- Welded tubular metal structure of the lift cabin
- Rotation point of the lift cabin with rollover block system
- Lift cabin with metal gates and grid load 500 kg
- Handle to push piston up and button to release pressure of the hydraulic jack
- Hydraulic jack
- Rail to allow the hydraulic jack to scroll



Lift and connecting rod system | Side | scale 1:20



Lift and connecting rod system | Front | scale 1:20

