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Realisation of a freestanding, climbable Jacob's ladder as a feature for EXPO 2012 in Yeosu, South Korea or for EXPO 2015 in Milan, Italy

Dear Ladies and Gentlemen,

by the time of the millennium I made a workshop drawing of a Jacob's ladder. Structural engineers and steel construction companies confirmed the feasibility of this project.

First of all I would like to mention that I am a professional technical drawer. For ten years I had been working for several companies in Kleve, Bielefeld and Berlin.

The idea to design and build a freestanding, climbable Jacob's ladder rose in me thirty years ago. Technicians, civil engineers and structural engineers as well as well known artists always supported me and accompanied my project.

The following quotation derives from a letter of references by Claus van Bebber.

The Jacob's ladder, which we do not only encounter as a ladder but also as a stairway, as steps, a ramp, a pole, a mast or tree is an ancient symbol for the connection between the earthly and the unearthly; between heaven and earth. The Jacob's ladder is known to us from the Holy Bible (1 Moses, 28).

*But we also find this symbol **worldwide**, throughout all time and cultures. Already the Egyptian pyramids and those of the Inka are a stamp of a Jacob's ladder. The ladder is a frequent subject in all genres of fine arts.*

The Jacob's ladder has a mythological character. It stirs up people's imagination as well as forgotten aspects of the collective subconscious heritage of mankind.

An extraordinary construction like the one I propose shouldn't only be used in an economical way in the first place. Much more this kind of a Jacob's ladder could be a socio-cultural "lighthouse-project" which would represent peoples' ideals, traditions and visions.

The aim should be to emphasize the connecting elements that are a basis for the realisation of this Jacob's ladder.

The basic construction is made up of a double I-beam construction, which in principal consists of three components: A supporting structure, a connecting structure and the ladder-construction.

The supporting structure forms the lower part of this Jacob's ladder and is designed in a way that it could be built above a street or a river. It could also tower up out of the sea or a lake. The floor space of the supporting structure measures 20 by 50 meters and it is 30 meters high. The roof of the supporting structure forms the lower part of the ladder and is inclined by an angle of 30 degrees. It is 60 meters long and is suited as a stand with a stage 20 by 10 meters in front of it. Spectators could walk up on both sides, left and right, with the stand in the middle. The supporting structure provides about 4000 cubic meters of interior space which could serve as a hotel.

The back part of the roof of the supporting structure provides a connection structure as used in bridge building. It carries the upper part of the ladder construction which rises up 100 meters into the air. It is shaped like a tapering staircase at an angle of 45 degrees. At its top end there is a platform where you will have a unique look far over the landscape.

The last 20 meters are designed like a real ladder and can be mounted by very brave people, saved by climbing ropes.

In my opinion a Jacob's ladder of this kind should be at least 100 meters high because this height is the minimum to create the impression of an ENDLESS view.

According to this, my workshop drawing is the smallest variant of such kind of a Jacob's ladder. It is a mere statics design. It also served as basis for the wooden model (scale 1:100) as shown on the enclosed paste-up. It would be no problem to build it much bigger.

My design proposal is up to now the hugest variant of such a freestanding, climbable Jacob's ladder ever developed worldwide. No matter if you watch it from the ground or if you have a look downwards from the top, it will always be an unforgettable impression and people from all over the world will come to make this experience!!!

Enclosed herewith I added letters of reference by well known artists, structural engineers and civil engineers. The most important letters for me are those by Franz Josef van der Grinten, Claus van Bebber and Karl-Heinz Edler.

I hope that this proposal will arouse your interest.

It would be a great pleasure to me if you could dispatch this paper to decision makers in the fields of politics and economy.

With kind regards

Manfred Knupp

Jacob's ladder over Spoykanal in Kleve