

## EGAL CENTER

This station is designed on integrating multi-disciplinary fields of human knowledge to create a novel structure of thought for a liberally equipped future amidst the major globalisation trend as tools to generate alternative solutions (TSD) (technology). To attain this aim the project resonates in, through language on sustainable architecture, art and science, technological innovation and development.

### 1. Sustainable Architecture and Art.

Concepts taken for consideration for site selection are related to specific context when analyzing features of urban environment and construction, spatial distribution of public, engagement and their specific characteristics, in terms of thought. The analysis is based on specific, local and global context through data assessment after reviewing land conditions, infra on local floor and floor, under-ground water distribution and other on-site. These factors and the proposed power station specific characteristics have conducted for the selection of site indicated as SITE 03 on comparison documents. The biggest for the proposed building is a result of a study (MADRAT Arab Zones) published in the magazine of 2009 and reviewed in the magazine (Arab Zones) published in the magazine of 2009. Therefore, a sustainable design has been adopted with the participation of local environment, but the environment within and by a treatment, public terrace space and roof. This strategy will benefit through control of temperature, protect as it will allow for water, ventilation and provision of shaded public spaces under night illumination. Finally, will not represent an obstacle for birds and other animals occupying along the site although may represent underground water constrain however this will be a factor for mitigation as land distribution are present due to earlier works on site. Therefore, the ecological services will be spatially organized in the following manner:

a) Climate: Ground level will be protected by a 1.2m green-tinted heat glass, subdivided into two zones: 1.1. A Technical zone, formed by a system of tubular structural elements, where the building will displacement system is installed and this is maintained as gravitational tube.

b) Ground floor will be formed by a 1.2m green-tinted heat glass, subdivided into two zones: 1.1. A Technical zone, formed by a system of tubular structural elements, where the building will displacement system is installed and this is maintained as gravitational tube.

1.1. A Technical zone, formed by a system of tubular structural elements, where the building will displacement system is installed and this is maintained as gravitational tube. 1.2. A Public Access Zone, where the building will displacement system is installed and this is maintained as gravitational tube. The building will displacement system is installed and this is maintained as gravitational tube.

### 2. Gravitational Field (The art of technological innovation)

Finally, the new gravitational field is applied in this context to design the entire system originated by singular gravitational tubes assembled at a specific space or room. Consequently, the proposed power station will be formed by two gravitational tubes. Because the tube structure, provides the lower gravitational tube is used as this is the best structural system for housing the gravitational field and it is designed so to produce force by displacement, up and down, of a homogeneous mass used along a vertical axis. The mass-housing will be equipped under free basic states of mechanics and physics state or laws.

1.1. A Technical zone, formed by a system of tubular structural elements, where the building will displacement system is installed and this is maintained as gravitational tube.

1.2. A Public Access Zone, where the building will displacement system is installed and this is maintained as gravitational tube.

1.3. A Public Welfare Space, where the building will displacement system is installed and this is maintained as gravitational tube.

1.4. A Public Outdoor Terrace, where the building will displacement system is installed and this is maintained as gravitational tube.

1.5. A Void with Gravitational Tube, where the building will displacement system is installed and this is maintained as gravitational tube.

1.6. A Gravitational Tube, where the building will displacement system is installed and this is maintained as gravitational tube.

1.7. A Gravitational Tube, where the building will displacement system is installed and this is maintained as gravitational tube.

1.8. A Gravitational Tube, where the building will displacement system is installed and this is maintained as gravitational tube.

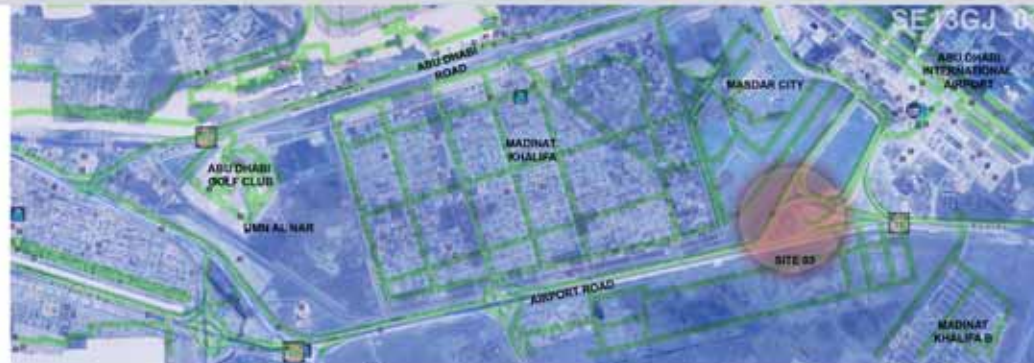
1.9. A Gravitational Tube, where the building will displacement system is installed and this is maintained as gravitational tube.

1.10. A Gravitational Tube, where the building will displacement system is installed and this is maintained as gravitational tube.

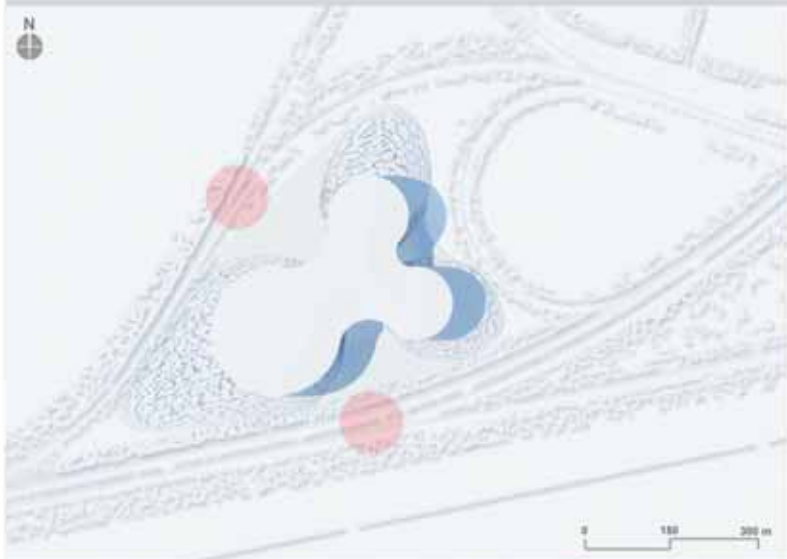
1.11. A Gravitational Tube, where the building will displacement system is installed and this is maintained as gravitational tube.



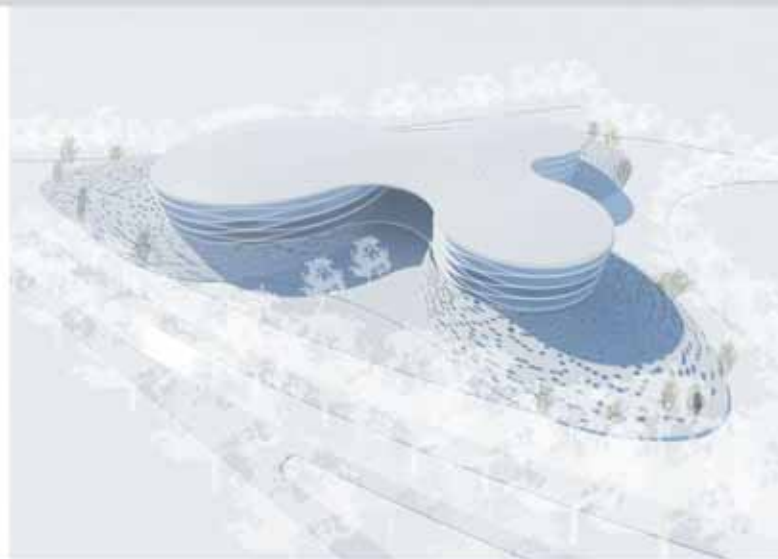
UNITED ARAB EMIRATES (MAIN CITIES)



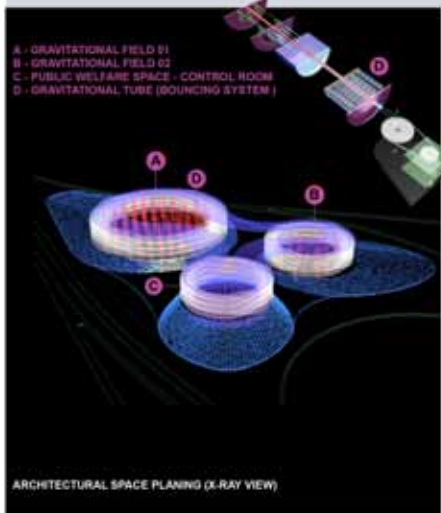
ABU DHABI (PARTIAL PLAN) - SITE LOCATION



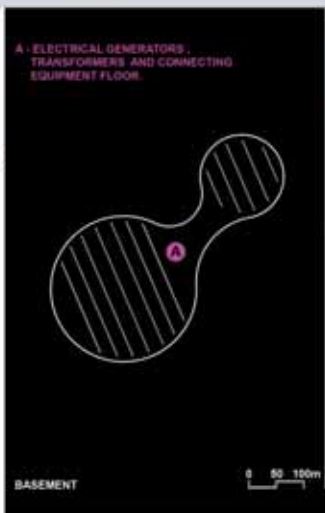
PROPOSED PLAN (EGAL CENTER - GRAVITATIONAL POWER STATION)



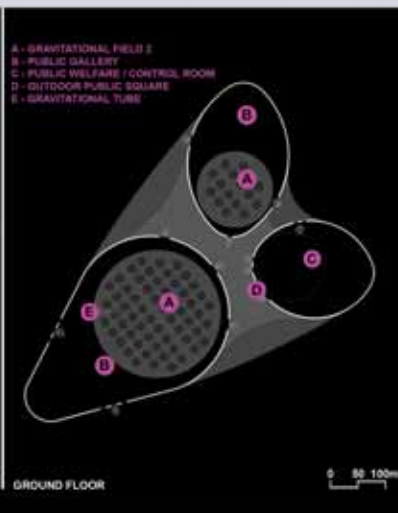
PROPOSED LANDSCAPE INTEGRATION



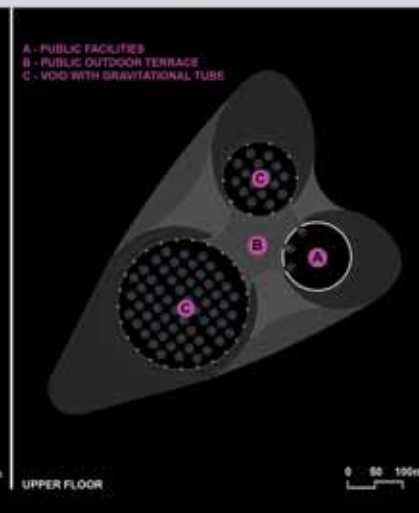
ARCHITECTURAL SPACE PLANNING (X-RAY VIEW)



BASEMENT



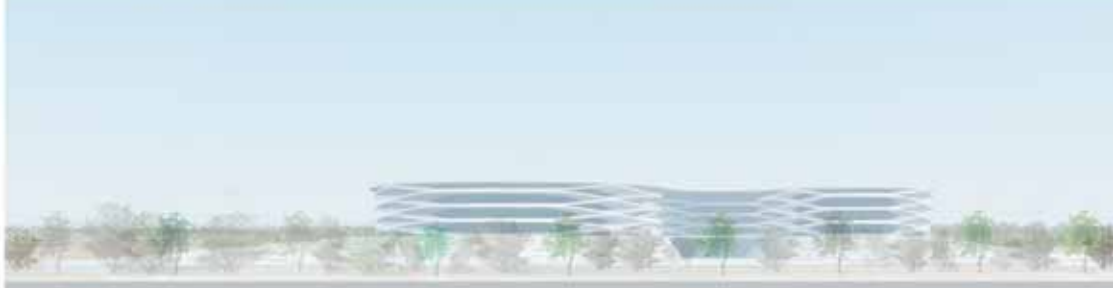
GROUND FLOOR



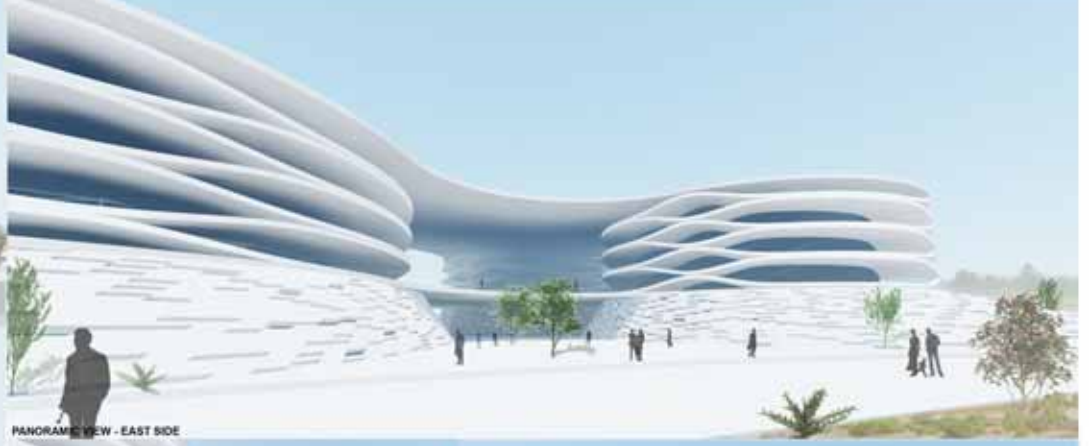
UPPER FLOOR



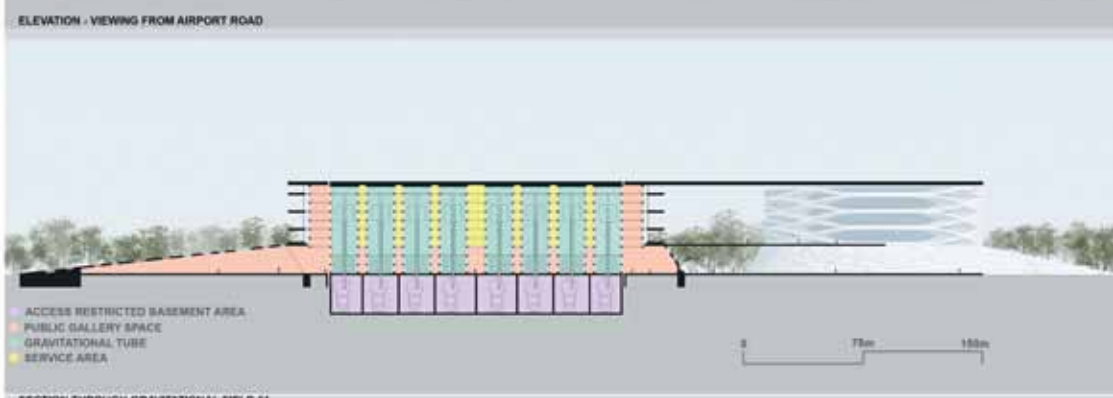
PANORAMIC VIEW - WEST SIDE PUBLIC SQUARE



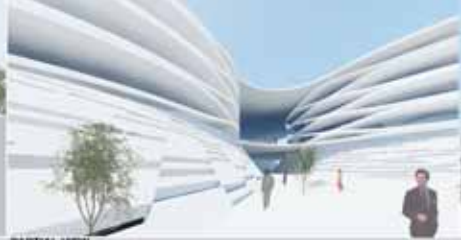
ELEVATION - VIEWING FROM AIRPORT ROAD



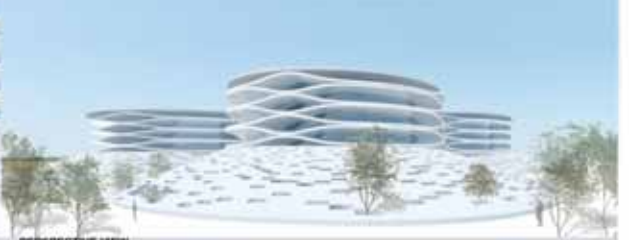
PANORAMIC VIEW - EAST SIDE



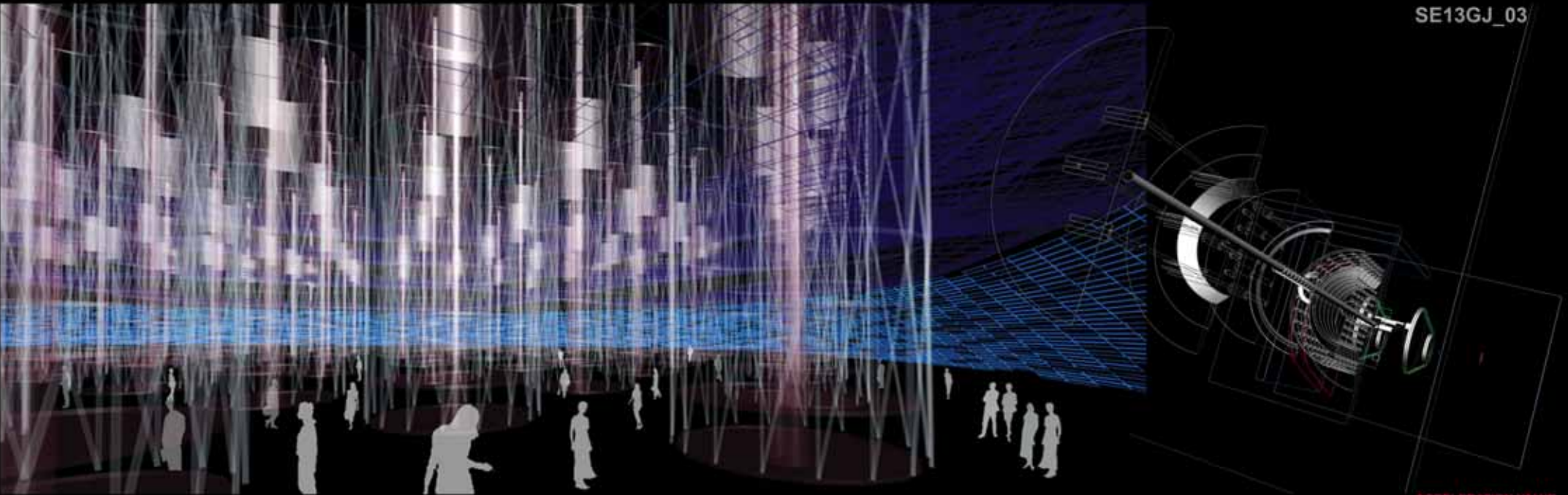
SECTION THROUGH GRAVITATIONAL FIELD 01



PARTIAL VIEW



PERSPECTIVE VIEW



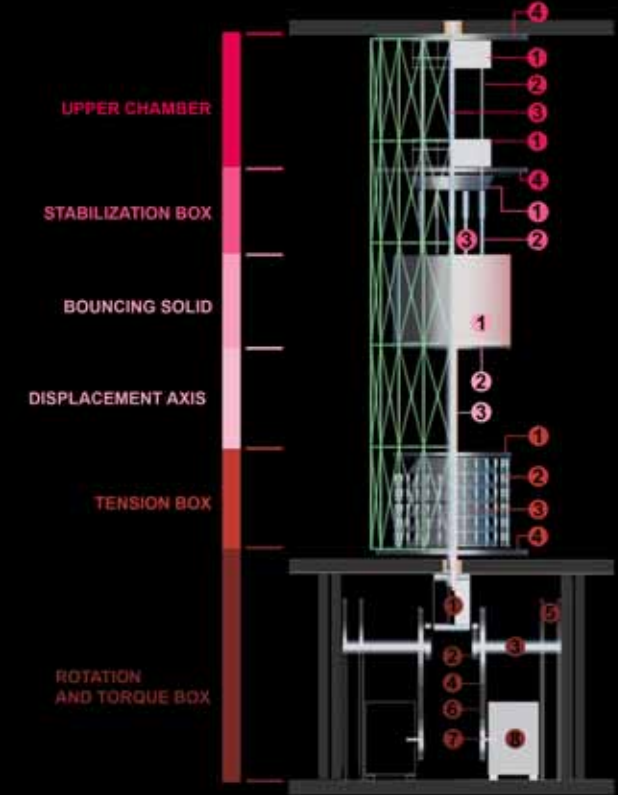
Interior View of Gravitational Field Public Art Gallery

ACCELERATION VALVE

- A - HOLDING/RELEASING VALVE
- B - SPRING COIL
- C - SECURITY BAR



$F1 = F2 \quad (F1 + F2 + \dots + F(n)) = 0$

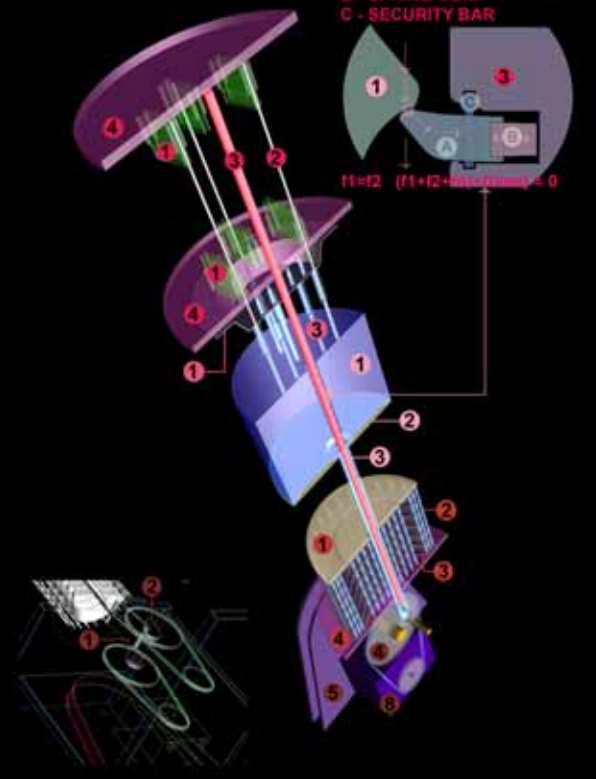
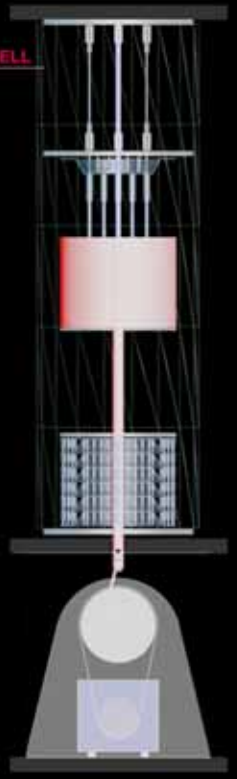


- 1 - ON/OFF EQUIPMENT ON SPIRAL HAIR SPRING BOX. (SECURITY BOX)
  - 2 - HOLDING TORUS CHAIN CONNECTED TO THE WEIGHT AND SPIRAL HAIR BOX
  - 3 - VERTICAL DISPLACEMENT BAR
  - 4 - STRUCTURAL PLATE
- 
- 1 - CYLINDER BOX WITH TENSION SPRING COIL
  - 2 - EXPANDING CAPSULE TO HOUSE HOLDING CHAIN
  - 3 - TENSION SPRING COIL
- 
- 1 - BOUNCING (UP AND DOWN) WEIGHT SYSTEM
  - 2 - ACOUSTIC IMPACTING DISC
  - 3 - VERTICAL GEAR BAR
- 
- 1 - ACOUSTIC IMPACTING DISC
  - 2 - COMPRESSION SPRING COIL SYSTEM
  - 3 - MULTIPLE CYLINDER COMPRESSION SPRING COIL BOX
  - 4 - STRUCTURAL PLATE
- 
- 1 - ARTICULATION LEVER ARM
  - 2 - ROTATION TORQUE
  - 3 - HORIZONTAL ROTATION BAR
  - 4 - MAIN WHEEL
  - 5 - LATERAL SUPPORTING STRUCTURE
  - 6 - MAIN CONNECTING ROLLER CHAIN
  - 7 - GENERATOR TURBINE
  - 8 - ELECTRICAL GENERATOR

STRUCTURAL SHELL

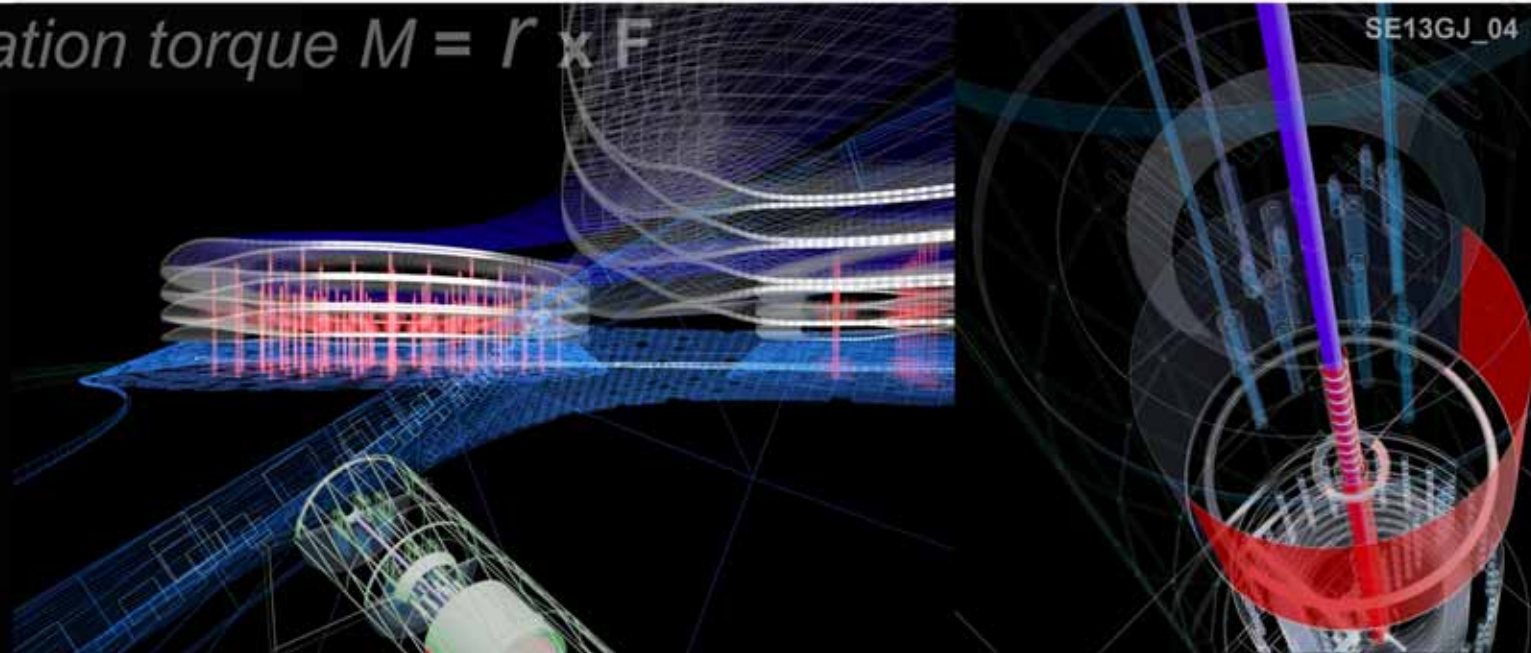
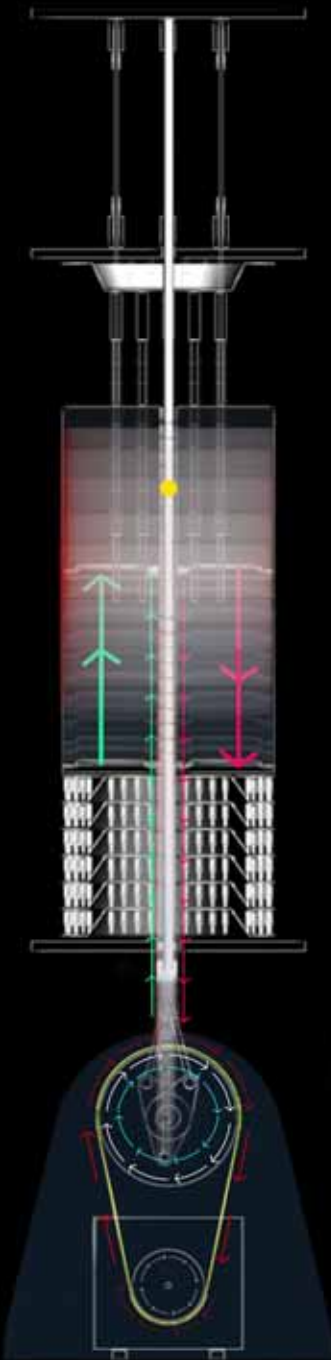


PLAN

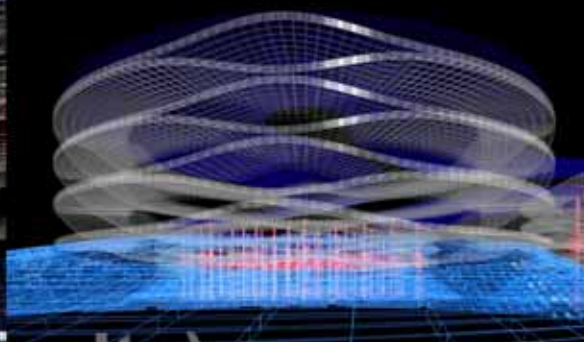
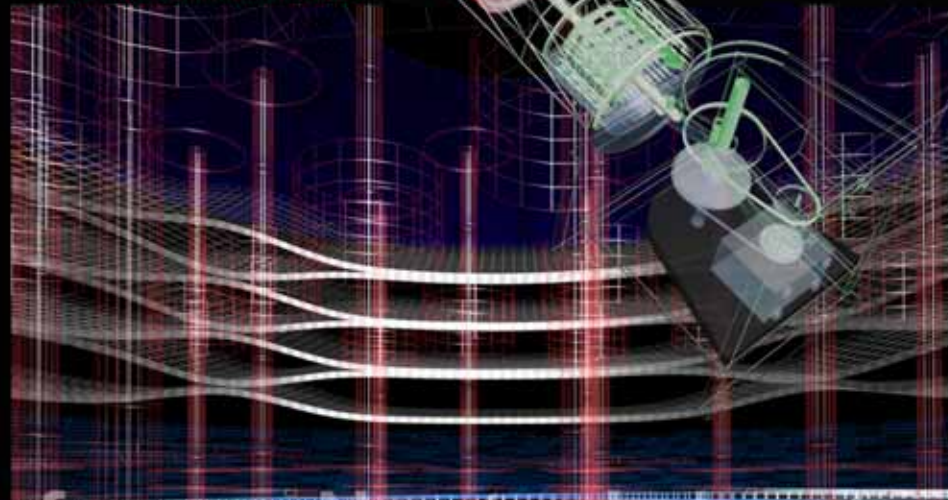


Gravitational Tubing Machine (Description of Parts and Components) not scaled

rotation torque  $M = r \times F$



X-RAY VIEW OF GRAVITATIONAL FIELD



- ↓ 1.  $f = m \cdot a$  Newton's law (gravity)
- ↑ 2.  $f = k \cdot x$  Hooke's law (elasticity)
- 3.  $f_1 = f_2$ ,  $f_1 + f_2 = 0$  Newton's law (static condition)