
AVIS
GLOBAL ENERGY
CONSTRUCTION BUDGET


SPAIN

Turks and Caicos Islands

Cayman Islands

Jamaica

Puerto Rico


Montserrat

Dominica

St Lucia

AVIS has been offered 85km x 48km land for the construction of a green nano high-tech industrial smarth city for up to 10 million peoples

Aruba

Curaçao

The AVIS Team will consider for entering into the construction with the authorization from the Central Bank of repatriate €500bln off-balance capital

Grenada

# COLOMBIA


BRAZIL

# GLOBAL BUDGED FOR CONSTRUCTIONS UNDER DEVELOPMENT FOR 65 COUNTRIES

| Corporation Project Name | Location | Project short | 2005-2023 Status | Project Budget |
|---|---|---|---|---|
| AVIS Capital Limited (ACAP) | London | Group Treasurer Capital Manager | Fully paid and under production | 26.000.000.000 € |
| AVIS Global Green Energy Fund Limited | London | Group Treasurer Capital Manager | HSBC Capital deposit 2017 until 2027 plus 3.5% interest rate | 22.000.000.000 € |
| AVIS Fintech PLC | London<br>Canada | Group IT Developer, Owner of the AVISPay Core Banking. Owner of the AVIS Marketplace metaverse software and IT Infrastructure | Operative in Part | 500.000.000 € |
| AVIS Congress Hotel PLC | London | London Management Tower, London Crown Hotel, Spain Congress Hotel, Divers Real Estates | Under development | 1.000.000.000 € |
| AVIS Vortex PLC | London | 2000 Waste Millings VORTEX | Under development | 300.000.000 € |
| AVIS NucTron PLC | London | Next Generation Atom Reactors, Russian Team | Under development | 50.000.000 € |
| AVIS Atom Thread PLC | London | Graphene Production | Under development | 2.050.000.000 € |
| AVIS Simmtronics Tech Corporation | USA | A-Pad Hologram Computer | Under development | 45.000.000 € |
| AVIS Magnetic Technologies PLC | London | Heavy Water Reactor Ring Prototyping & Production | Under development | 10.000.000 € |
| AVIS Logistic LTD | London | AVIS. Global Franchise, general world acquisition logistic | Operative in full | 500.000.000 € |
| AVIS Project for the 3D printing robots | Australia | AVIS. Global Franchise, equipment manufacturing | Operative in full | 100.000.000 € |
| AVIS Hotels PLC AVIS for high-tech paradise leaving a university city for 500.000 people and 3D printing prototyping of futuristic technologies | UK | Several GB High-tech Industrial Projects in different locations in the UK | Under development | 25.000.000.000 € |
| AVIS NoAge PLC | London | Biodrux NoAge Production and 4000 Cancer treatment Products & Patents | Under development | 6.000.000.000 € |
| Canada Construction | Canada | Construction of the Colombia high-tech green city with the 2x20.000.000 waste facilities Harbour and 3D printed high-tech paradise green city for 5.000.000 people | Completed and in development of extension infrastructure in Canada | 85.000.000.000 € |
| Brazil high-tech paradise and university city for 20 Million people and 3D printing prototyping of futuristic technologies | Brazil | Construction of the Brazil high-tech green city with the 5x20.000.000 waste facilities Harbour and 3D printed high-tech paradise green city for 20.000.000 people | In the development of extension Infrastructure in Brazil | 300.000.000.000 € |
| Rwanda, high-tech paradise and university city for 10 Million people and 3D printing prototyping of futuristic technologies | Africa | Construction of the Colombia high-tech green city with the 2x20.000.000 waste facilities Harbour and 3D printed high-tech paradise green city for 10.000.000 people | Completed and in development of extension infrastructure in Africa | 85.000.000.000 € |
| AVIS Securities | Colombia | Creation of internal trading platform for the AVIS Group derivative trading | Completed and in development of extension infrastructure in Colombia, Spain, London | 230.000.000 € |
| HJK ArtMedia Industry | London | The first graphene fashion 3D printed project with 47.000 styles | Under development | 10.000.000.000 € |
| AFRA 100 Facility Construction | Africa Continent | 100 Construction Development Contracts in the African territorials contracted with the Africa Central Bank | Ready for start of construction and paid by digital currency | 250.000.000.000 € |
| 130 Green Facilities Construction Project | Globally | 120 Construction Development Contracts with governments between 2005 until 2023 | Ready for start of construction | 350.000.000.000 € |
| AVIS Shipping | Grupo Meridial | 10 Floating Waste2NanoPowder facilities, The University Prototyping Vessel. The Experimental eVessel | Under development | 10.000.000.000 € |
| AVIS eCar Industry | Germany | AVIS Reverse-Tesla Engine & 3DGraphene eCars production and distribution | M&A negotiating's with several international German Car manufacturer | 5.000.000.000 € |
| AVIS Construction | Spain | M&A of Grupo Meridial | Under development | 80.000.000.000 € |
| AVIS TV | Spain | M&A of several small and middle-sized media centres | Under Development | 500.000.000 € |
| AVIS Cartagena, Spain high-tech paradise and university city for 5 Million people and 3D printing prototyping of futuristic technologies | Spain | Construction of the Spain high-tech green city with the 3x20.000.000 waste facilities Harbour and 3D printed high-tech paradise green city for 5.000.000 people | Under Development | 180.000.000.000 € |
| AVIS Colombia high tech paradise and university city for 20 Million people and 3D printing prototyping of futuristic technologies | Colombia | Construction of the Colombia high-tech green city with the 5x20.000.000 waste facilities Harbour and 3D printed high-tech paradise green city for 20.000.000 people | Under Development | 500.000.000.000 € |
| Project Value developed between 2005 up to 2023, contracted and valid for completion | All required capitals have been reserved or fully paid in. Part are off balance franchise payments effected between 2018 to 2023 | | Total EUR Capital Value | 898.036.000.000 € |
| AVIS Bank LTD development | Africa, USA, CH, UK | June 2021 agreements with LOI are accepted by the board and shareholders | Under development | 1.000.000.000 € |
| AVIS Franchise develops a number of projects that are not valued | World | 2005 - 2023 onwards | Ongoing developments | 500.000.000.000 € |
| Budget value required during 15 years | | | | 3.338.321.000.000 € |
| Reserves | | | | 10.000.000.000.000 € |

**BUDGET REQUIREMENTS** cash for construction we need about €3.500.000.000.000 between 2024 up to 2040

**RESERVES** cash €10.000.000.000.000

**INCOMING OF THE PROJECT** Waste management, nanopowder handling, energy production, food production and industrial equipment sales €100.000.000.000 each year

**WORKING SPACE CREATION** 10.000.000 jobs

**STOCK EXCHANGE BLOCKCHAIN** 1.000.000 corporations' participation (High- and Green-tech)

# 20.000.000 MT GARBAGE RECYCLING FACILITY

## TO NANO POWDER FOR THE 3D PRINTING INDUSTRY

### HIGH-TECH & GRAPHENE INDUSTRY

### GREEN CITY INFRASTRUCTURE

# *PROJECT FOR THE COLOMBIA DEVELOPMENT FOR INTERNATIONAL REFERENCE*

*The technology for processing household and industrial waste*
*and converting into powder for the 3D printing industry*
*high-tech laboratories & production industrial park*
*Green Paradise City*

## CONTENT PROJECT

## 1. DESCRIPTION OF THE PROJECT

### PHASE 1

Adapting existing 100,000m2 Industrial Facilities for the manufacture of High-tech electronic products, Graphene research and industrial production and VORTEX Nano Powder mills 3D printing in graphene and titanium.
University installation together with https://www.hanyang.ac.kr/web/eng/home/Research
And production of 3 different types of generators for the generation of free electricity.
3D printer valuation test department with TITOMIC and prototyping production center including robot printer test center.
General generation of green energy technology research Centre units.
Adapting the existing topographic infrastructure for the discharge of garbage import of up to 20,0000.000 metric tons.
and Installing 250, *15 MT-Vortex mill units for the waste conversion into 3D Nano Powder.
and Installing 100, 3D Printer processing units for Industrial Products.

### PHASE 2

5 Units 10.0 Ha ''State of the Art'' – high-tech tropical glass greenhouse and the Installation in cooperation with a Combined Heat and cooling Power station.
and 2500 Mt organic fish production unit and a zero-energy input building for packing vegetables and fish.
and 2GW electro generators technology – Hydrogen Magnetic Dynamo.
and Start Tax-Free Zone, Corporate Register.
and Start a Large Shipp Register.
and Start Bank Quantum Server Centre.

***Waste Conversion Capacity: >20.000.000 metric tons (phase I plus phase II)***

### PHASE 3

3D Paradise City Construction for 500.000 to 1.000.000 people

## 1. THE DEVELOPER

| | |
|---|---|
| The Corporation | AVIS Global Energy Limited |
| Address | 102 Parc Lane, SW25QN London, UK |
| Share capital GBP | 5.000.000.000,00 |
| Subsidiary | AVIS Capital (ACAP)<br>UAE- Abu Dhabi, OFFICE NO B31,<br>Marina Royal Compound,<br>United Arab Emirates; |
| Subsidiary | AVIS VORTEX PLC<br>Polígono Industrial Oeste C\ Venezuela, Parcela 10-11<br>30820 Alcantarilla – Murcia, Spain |
| Subsidiary | Avis Atom Threads PLC<br>Polígono Industrial Oeste C\ Venezuela, Parcela 10-11<br>30820 Alcantarilla – Murcia, Spain |
| Location in Colombia | COLOMBIA<br>New Harbor installation |
| Tel | +44 2392 16 2001 |
| Tel | +1 903 669 1660 |
| Skype | avisglobal |
| Skype | avisglobal2 |
| Email | info@avisbank.com |
| Web | https://avis.capital |

## 2. DESCRIPTION OF THE INITIAL START-UP INFRASTRUCTURE

Renting & leasing or purchase of the existing municipal glass building for the initial management of the development at 23000 Northwest Lake Drive

Personal requirements: 25 in administration sourced from the local market
40 Engineers and scientist sourced form AVIS Members and local universities

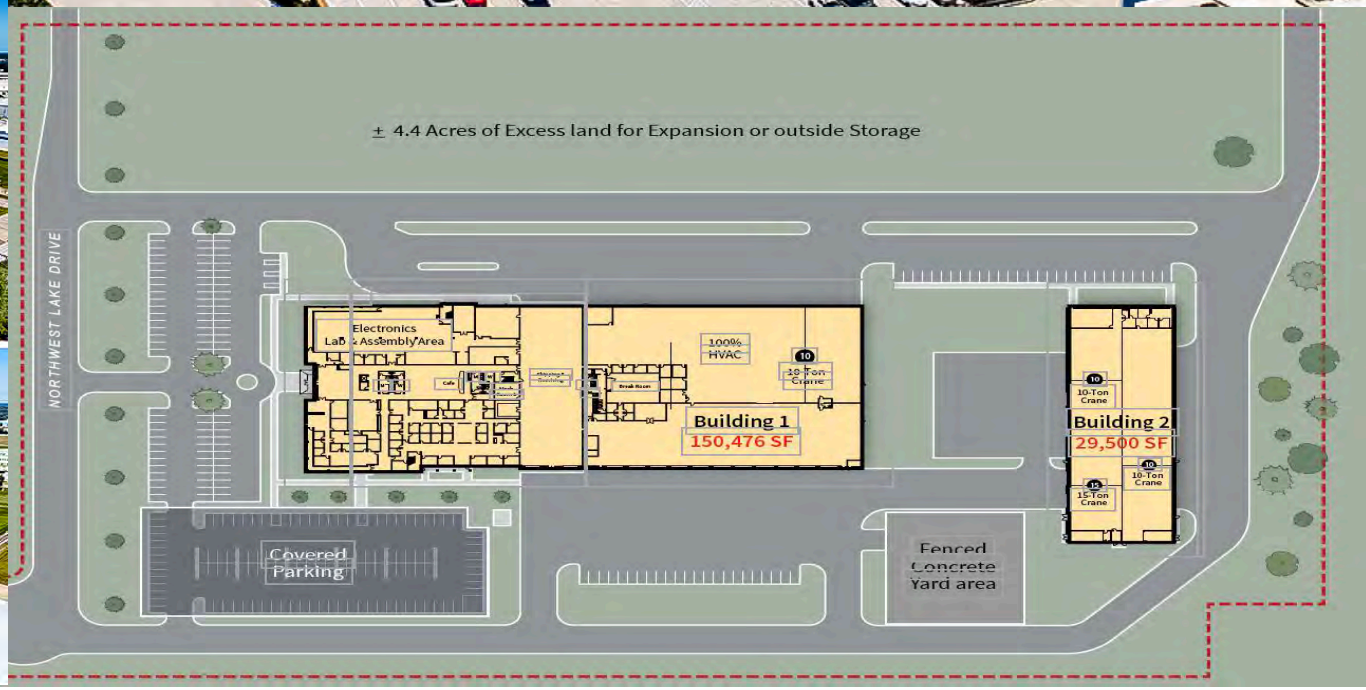
The US franchise team will negotiate all requirements for the initial start-up of the project

The principal inventors and engineers will arrive with their infrastructure for the prototyping of the technologies required for the industrial development

The AVIS Construction department will arrive with about 100 team members for start of development

## 3. ACQUISITION AND/OR RENTING OF
EXITING INDUSTRIAL BUILDINGS

The AVIS Team will rent and/or purchase at least 100.000 m2 exiting buildings for the adapting into production facilities for prototyping of VORTEX Mills and Generators and Graphene

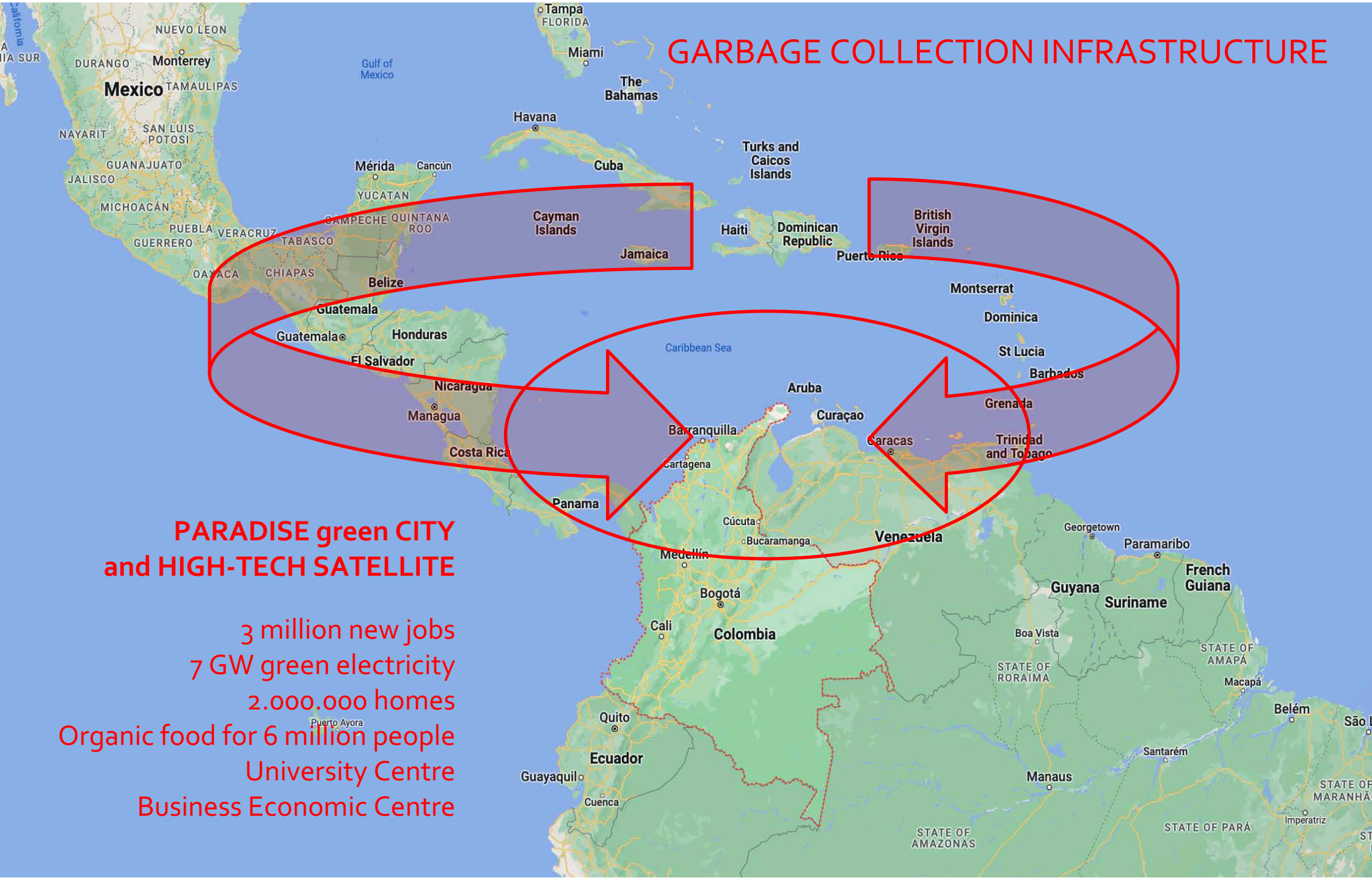


## 4. ACQUISITION OF APARTMENT BUILDING INFRASTRUCTURE

The AVIS Team will acquire apartments and buildings/hotels for the ongoing development. At least 500 apartments are required to leave space for the different teams, participating in the project

## 5. 3D PRINTING OF PARADISE APARTMENT BUILDINGS AND INFRASTRUCTURE WITH NO TRAFIC AND NO ELECTRIC GRID FOR +500.000 PEOPLES

## 6. LOCATION HOST TRANSPORT ROUTING LOGISTICS (TO BE SELECTED AT THE HOST LOCATION WITH CHARACTERISTIC AS INDICATED BELOW)




Turks and Caicos Islands
Cayman Islands
Jamaica
Puerto Rico
AVIS GLOBAL ENERGY
GLOBAL GROUP
Montserrat
Dominica
St Lucia
AVIS has been offered 85km x 48km land for the construction of a green nano high tech industrial smarth city for up to 10 million peoples
Aruba
Curaçao
The AVIS Team will consider for entering into the construction with the authorization from the Central Bank of repatriate €500bln off-balance capital
Grenada
Panama
Trinidad and Tobago
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat / Copernicus
Google Earth
9°12'47.42" N 60°37'31.13" W elev -2 m eye alt 2056.62 km

## 7. LOCACTION INFRASTRUCTURE

| | |
|---|---|
| GEOGRAPHICAL LOCATION | Latitude: 12°02'49.11" N / Longitude: -71°44'08.65" W |
| Address | Colombia Caribe |
| Surface area "A" approximately | 20000HA |
| Distance to the embarkation/disembarkation pier | Minimum meters as possible |
| Wharf face | +600 m |
| Occupancy rate | Provided for by law, article 173 and following of the Revised Text of the Law of State Ports, and maximum applicable bonuses |
| Activity Fee | Minimum foreseen according to Law, article 183 and following of the Revised Text of the State Ports Law |
| Surface area container handling approximately | 200,000 m2 |
| Maximum container delivery each day | 1500 |
| Each container | 26,50 mt to 30,00 mt |
| Per year | 20,000,000 mt |
| 40Fuss Containers per year | 540.000 |
| Container carrier frequency | +2 each week each 15.000 containers |
| **IMPORT SOURCE** | |
| **INPUT MATERIAL** | Colombia, Venezuela, USA & Mexico & Cabiric Countries and international |
| Municipal waste | 3.000.000 mt |
| Industrial waste | 3.000.000 mt |
| Toxic waste | 1.000.000 mt |
| Organic waste | 3.000.000 mt |
| Construction Waste | 3.000.000 mt |
| Electro Waste | 2.000.000 mt |
| **EXPORT** | |
| Nano Powder | 15.000.000 |
| 3D printed industrial and consumer goods | MT TBA |
| Organic food | 90.000.000 kg |
| High Sea fish | 2500 MT |
| Electric Power | 2GW hours |


De Umakaha
Cabo de La Vela
Piyohureka
San José
Inosu
Manaure
Juts
Garbage of 100Million peoples
delivered in containers
equcal to 80Million MT
equal to
$4.000.000.000 gatefee
Puerto Estrella
Chamohu
Parque Nacional Natural Macuira
Nazareth
Porchina
Siapana
cao
90
Moyojoy
Cuatrobocas
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat / Copernicus
Paraguaipoa

12°02’49.11” N & 71°44’08.65” W

## 8. Colombia LOCATION GENERAL GROUND PLAN FOR REFERENCE ONLY

The construction location and the layout of the plant uses land at the cost side towards Caribe of Colombia
The topographic nature of the large plot invites the construction of a futuristic green tech city for millions of people

**GREEN SMART CITY**
Underground traffic center & car park for +500.000 peoples
Car park logistic in the underground

1) Graphene – Carbon GLASS DOME VORTEX Waste milling plant
91,000 square meters

2) Direct access from the port docks to the waste plant with suspended monorail train

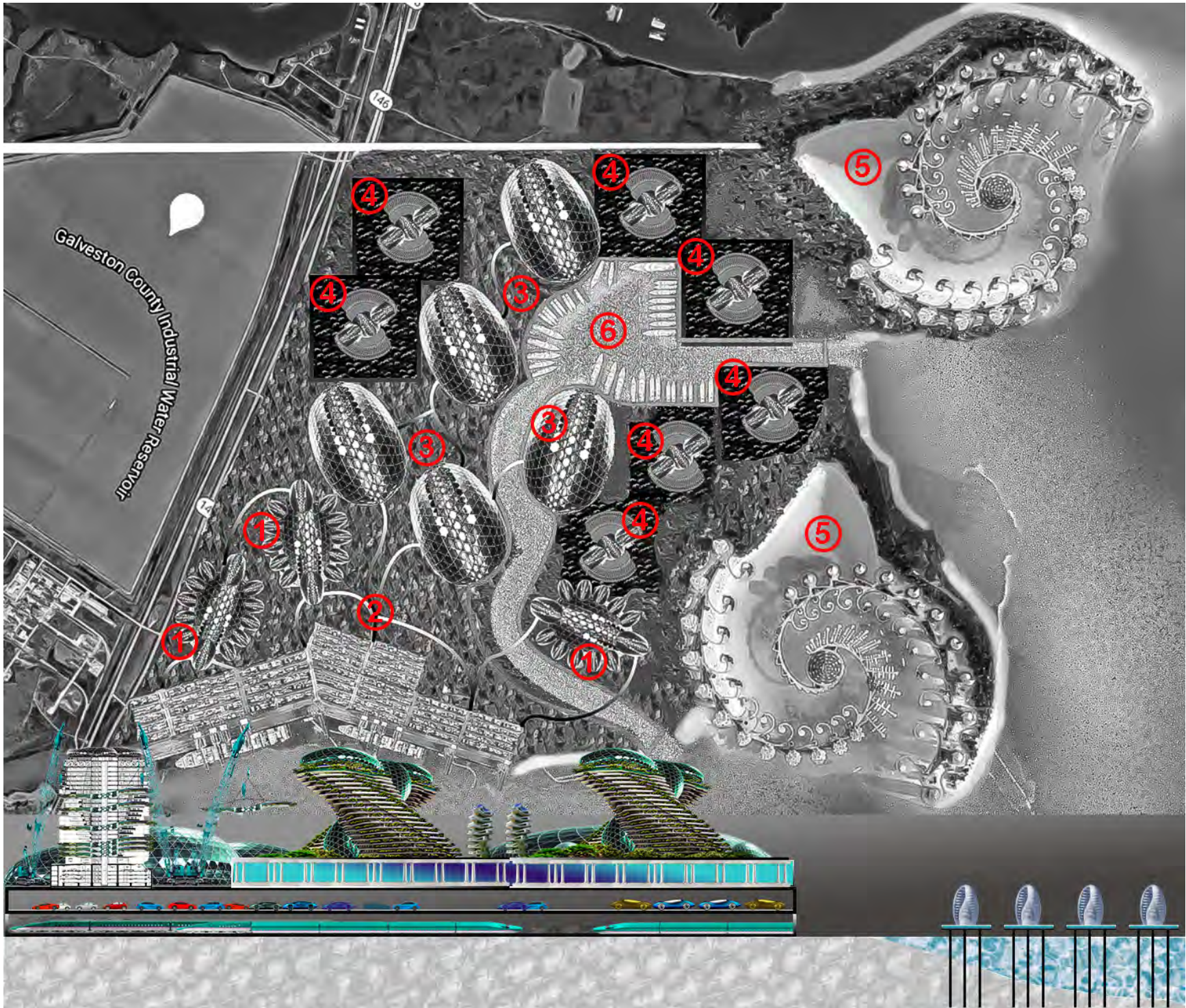
3) 63,000 square meters 3D-printed Graphene-Carbon GLASS greenhouses for vegetables, always-fresh fruit, and alternative meat-vegetable plants

4) "AVIS Tower" Several +30-storey escrow buildings built with 3D printer system Carbon Graphene composite
+200 flats for 1000 engineers and/other staff of the the High-Tech City - Waste Plant

Offices satellites, laboratories and services for +5000 jobs

5) Paradis City Waterfront "TORTUGA"

6) Yacht moorings for 6 to 200m yachts



## 9. DISPATCH LOGISTIC OF CONTAINER SHIPS AND HANDELING 1500 CONTAINER / DAY

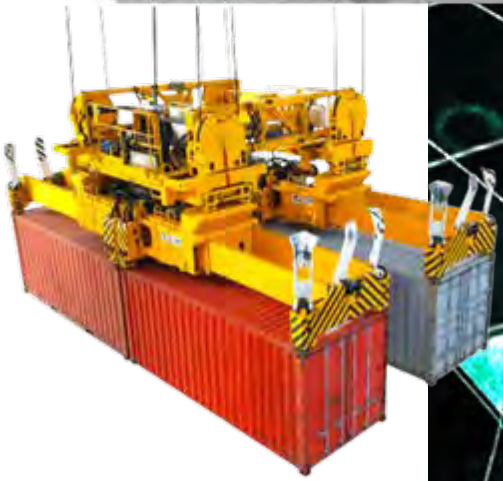

10 Megamax Liebherr container cranes 65 t twin and 100 t tandem outreach 30-40m, hosting speed, 50 – 125 m/min, Trolley speed 180 m/min,
travel speed 100 – 140 m/min

## 10. DESCRIPTION OF CONTAINER INTERIMS STORAGUE AND CHARGING WITH EXPORT GOODS

The interims deposit handling 15.000 containers.

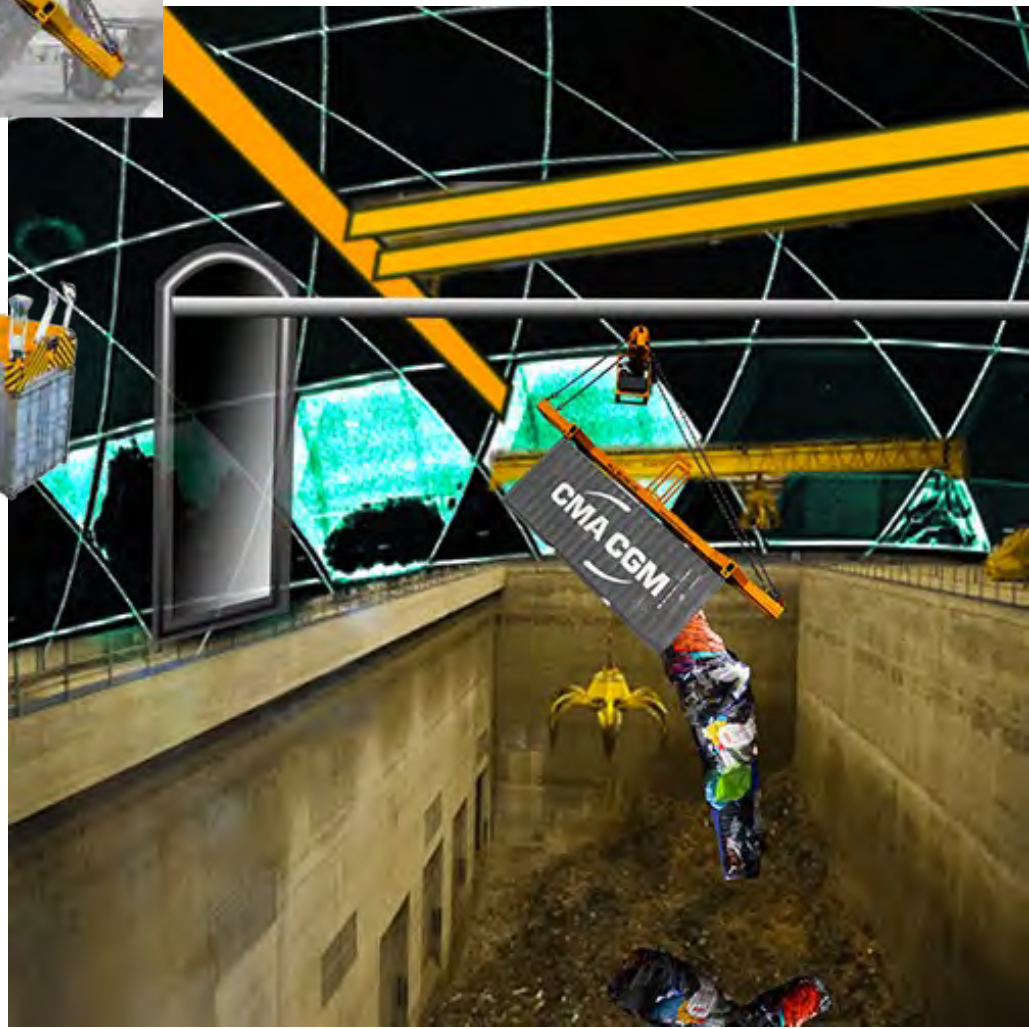
After dispatching will be loaded with Nano Powder or other products of the facility for export and trade

## 11. DESCRIPTION OF THE SUSPENDED TRAIN TRANSPORT FROM VESSEL TO FACILITY DISCHARGE AND BACKLOADING TO CARGO VESSEL

The automatic container transport and unloading system to the processing dome handles up to 15.000 metric tons every day / 30 containers every hour.

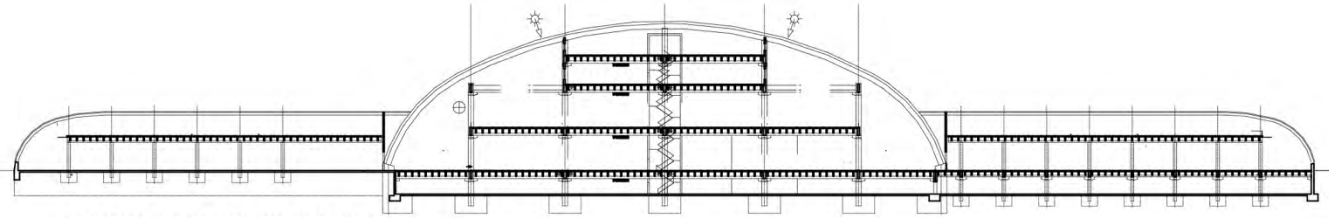
The hermetic sealed Glass dome maintain negative air pressure for **ZERRO** outdoor



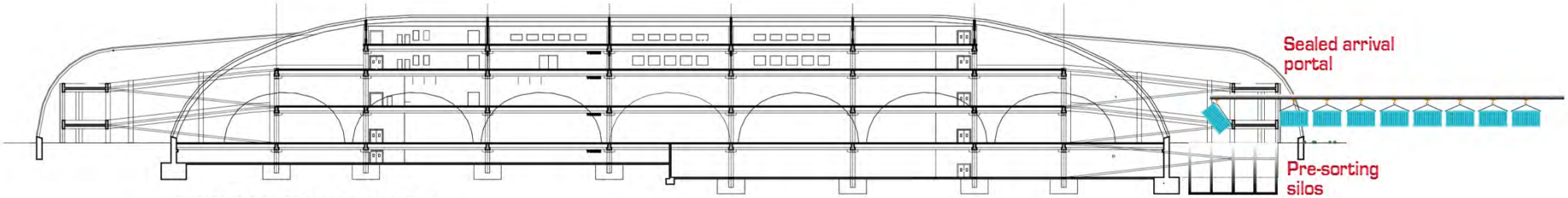

Constantly negative air pressure guarantees **NO** outdoor

# VIP PRESIÓN DE AIRE NEGATIVA

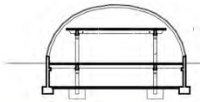

06



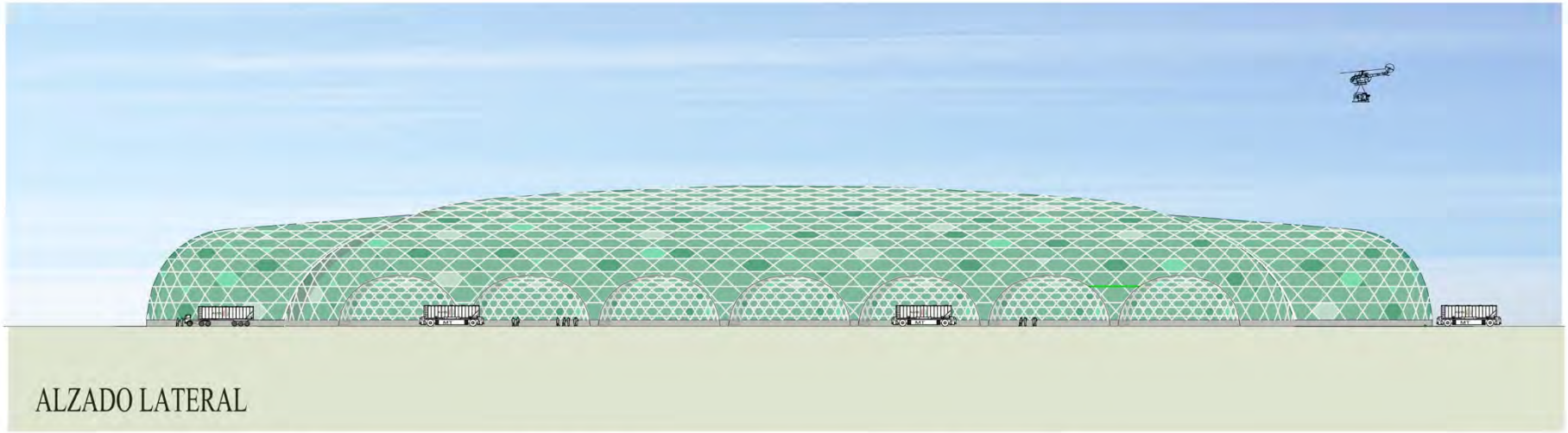
SECCIóN TRANSVERSAL




SECCIóN LONGITUDINAL



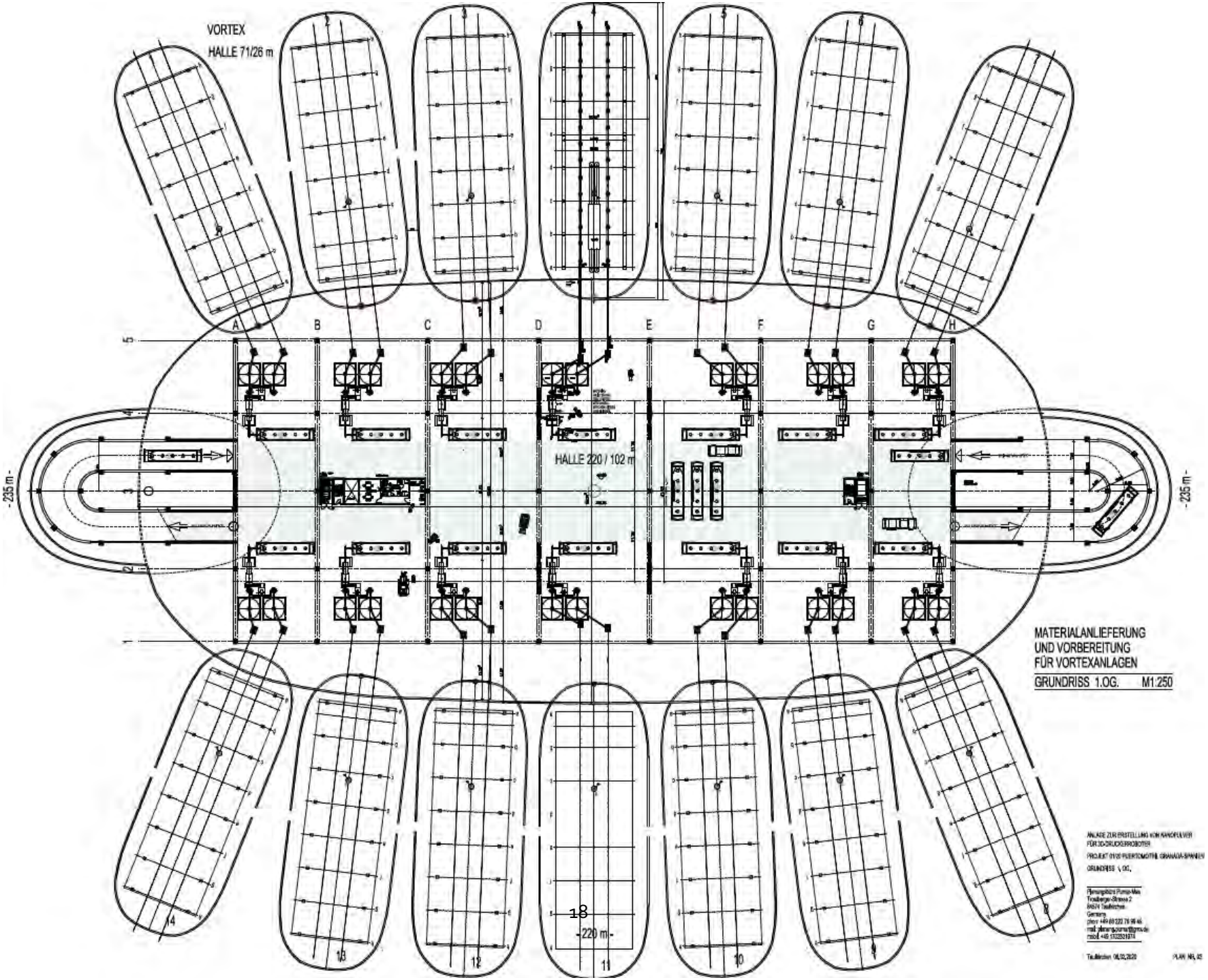
SECCIóN NAVE LATERAL



ALZADO LATERAL

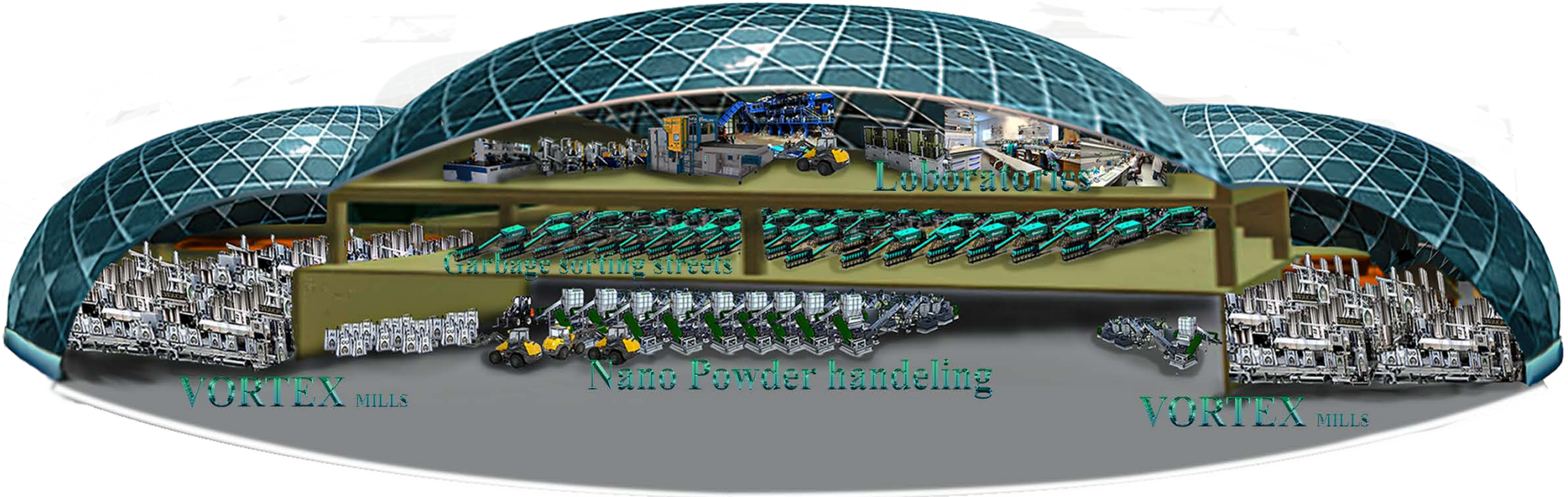
AVIS GLOBAL ENERGY PUERTOMOTRIL Mo-01/2020 PLANTA PARA LA PRODUCCIòN DE NANOPOLVO SECCIONES Y ALZADO

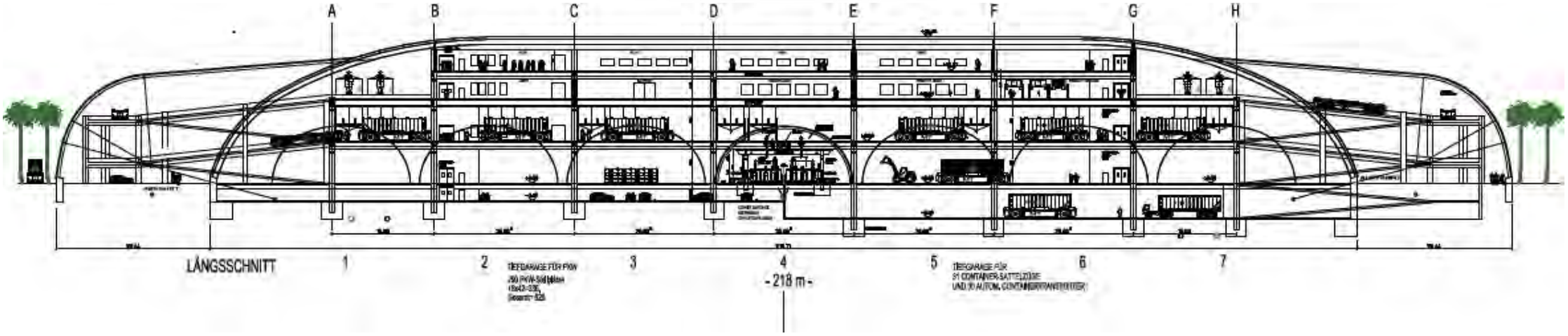
## 13. WASTE MANAGEMENT FACILITY GROUND PLAN



## 14. DEPARTMENT DESIGNATION

| | |
|---|---|
| *Main Building* | |
| *BLP* | 220x243m (around 5 Ha) |
| *GBA* | 53.460 sq.m. |
| *Floors GBA* | |
| underground floor | 102.424 sq.m. |
| 0 floor | 21.900 sq.m. high 3.30 m |
| 1-st floor | 21.900 sq.m. high 8.06 m |
| 2-nd floor | 21.900 sq.m. high 8.06 m |
| 3-d floor | 6.100 sq.m. high 5.45 m |
| 14 high secured and sealed Nano Powder | 4.788 sq.m. high 4.50 m |
| Processing *arms* | 1.846 sq.m. high 12 m each one |
| | 25.844 sq.m. totally |

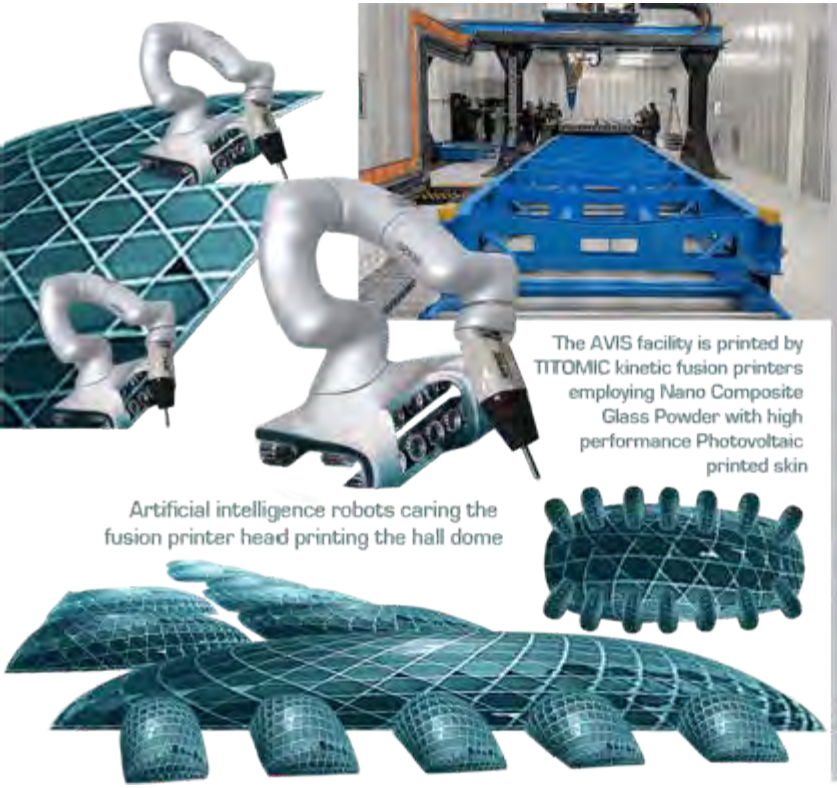


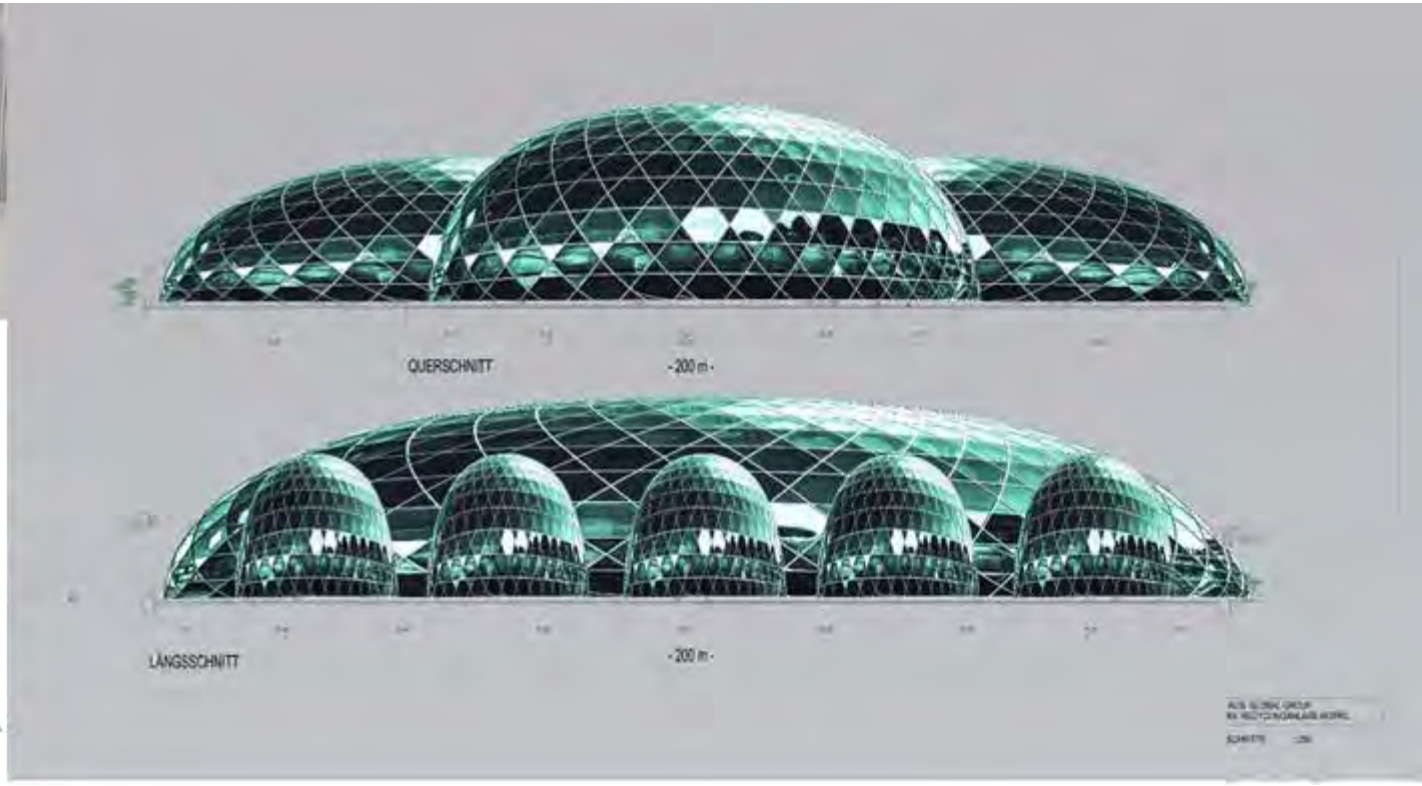



## 15. 3D PRINTED GLASS CARBON DOME CONSTRUCTION

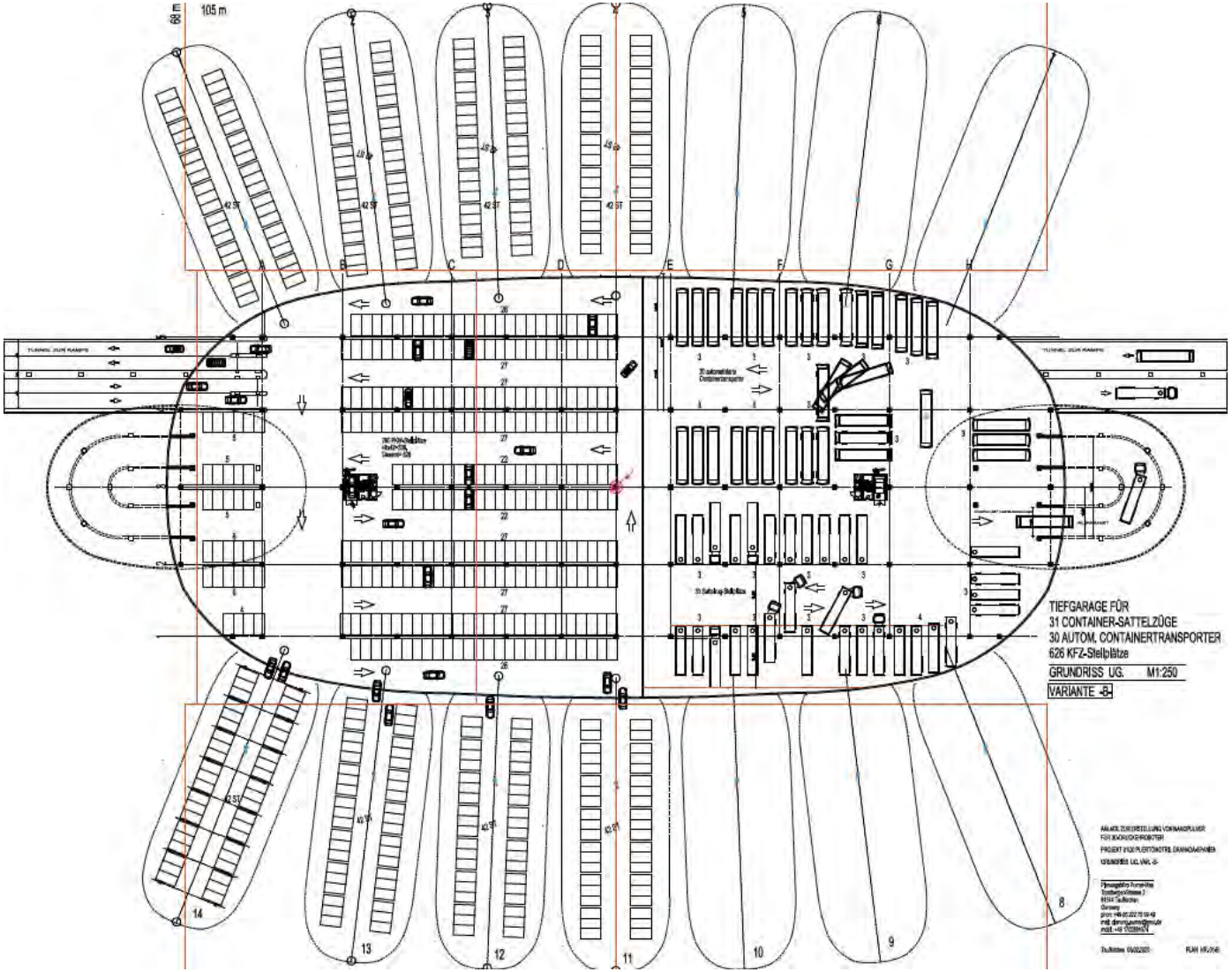
The solar skin description and its power description

3D Printed dome Ceiling: 3D printed composite glass // Roof glass cover: photovoltaic cover printed on 3D // Ventilation windows: no, hermetic closed / Area:± 91,000.50m² including service area // Technology: artificial intelligence robots that carry the head Fusion Printer Printing 3D // Material quality: AVIS installation is printed by TITOMIC kinetic fusion printers using powder nano composite glass with high photovoltaic skin performance // Ceiling - transparent solar panels for conversion into electrical energy // Material glass, metal, glass-plastic, plastic stretch film 3D printed production // Bearing structures - reinforced concrete with protection against aggressive fluids.



## 16. FLOORPLAN





Underground floor *parking for cars and heavy electric vehicles and*

*The underground floor plan is shown in drawing 01,1.OG, 08.02.*

| | |
|---|---|
| Car parking *Dimensions* | Transformer stations, HMD generators, turbine Compressor, water supply, Radiation control system |
| *High* | 86.23x72.46m in axes 1-5 rows AE |
| *Numbers of parking* | 2.90 |
| Parking for heavy electric vehicles. *Dimensions* | 300 m |
| *High* | 86.23x72.46m in axes 1-5 rows E-N, |
| *Numbers of parking* | 6.0 m |
| Ends of the floor in rows A and H | 61 |

inclined flyovers for check-in / out of electric vehicles and motor vehicles to the underground floor (parking) and to 1, 2 and 3 bove-ground floors

## 17. BASEMENT

All POWDERS managed in hermetic closed shipping pipes from VORTEX to packing line and to TITOMIC & other printers

**a.** Radiation and dosimetry control, disinfection barrier at the site of the entrance enterprise

**b.** Weighting on a truck scale

**c.** Unloading at the receiving site of the sorting unit with the help of a mechanical unpacker

**d.** Unloaded trucks - for re-weighing (for containers)

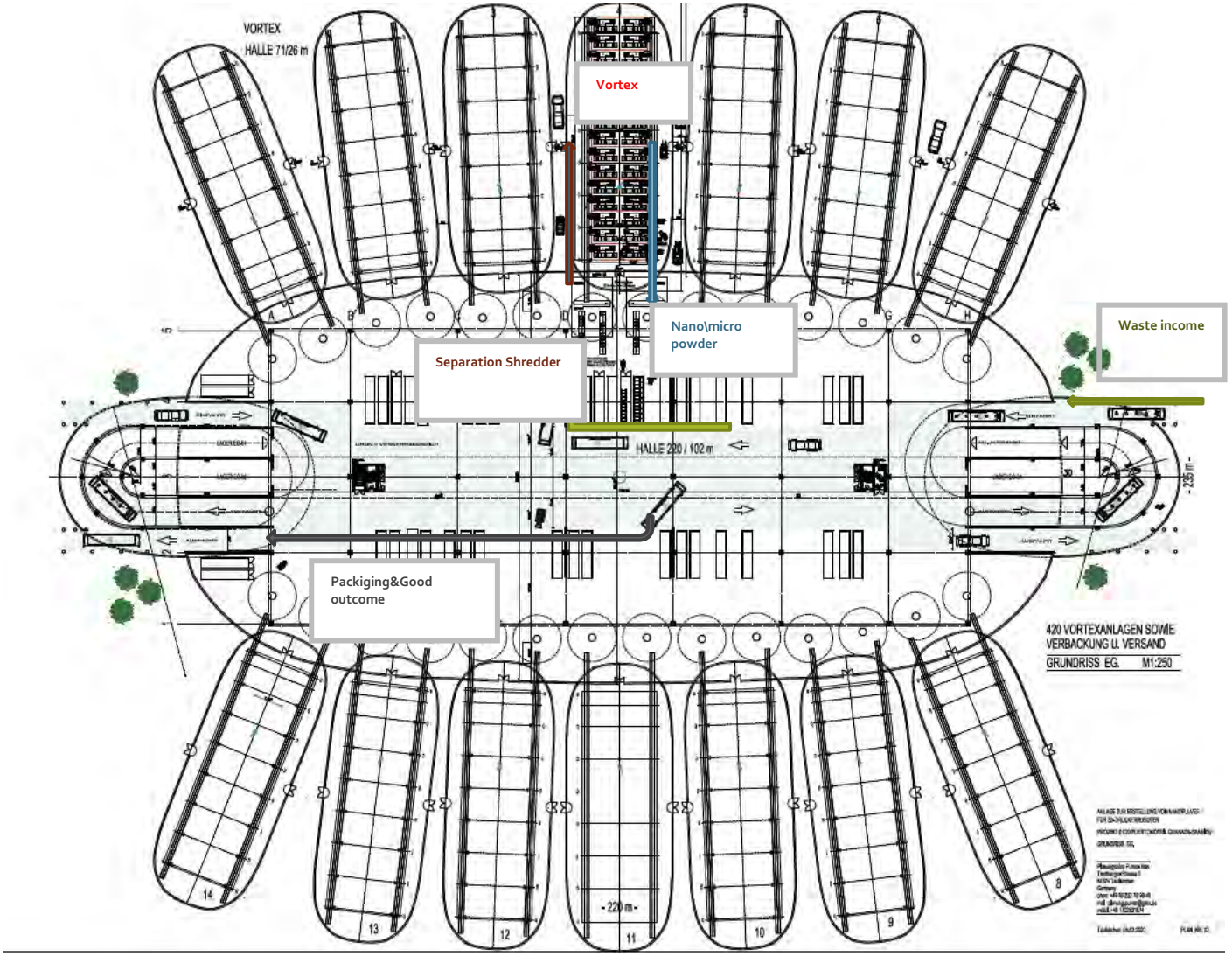
**e.** Selection by a lifting device (manipulator-separator) bulky waste not subject to further processing (parts machines, refrigerators, household appliances) that are loaded into storage bins with sorting

**f.** Oversized wood waste moved to chopper, and then to production

**g.** Undergoes UV disinfection and is fed by conveyors to sorting line

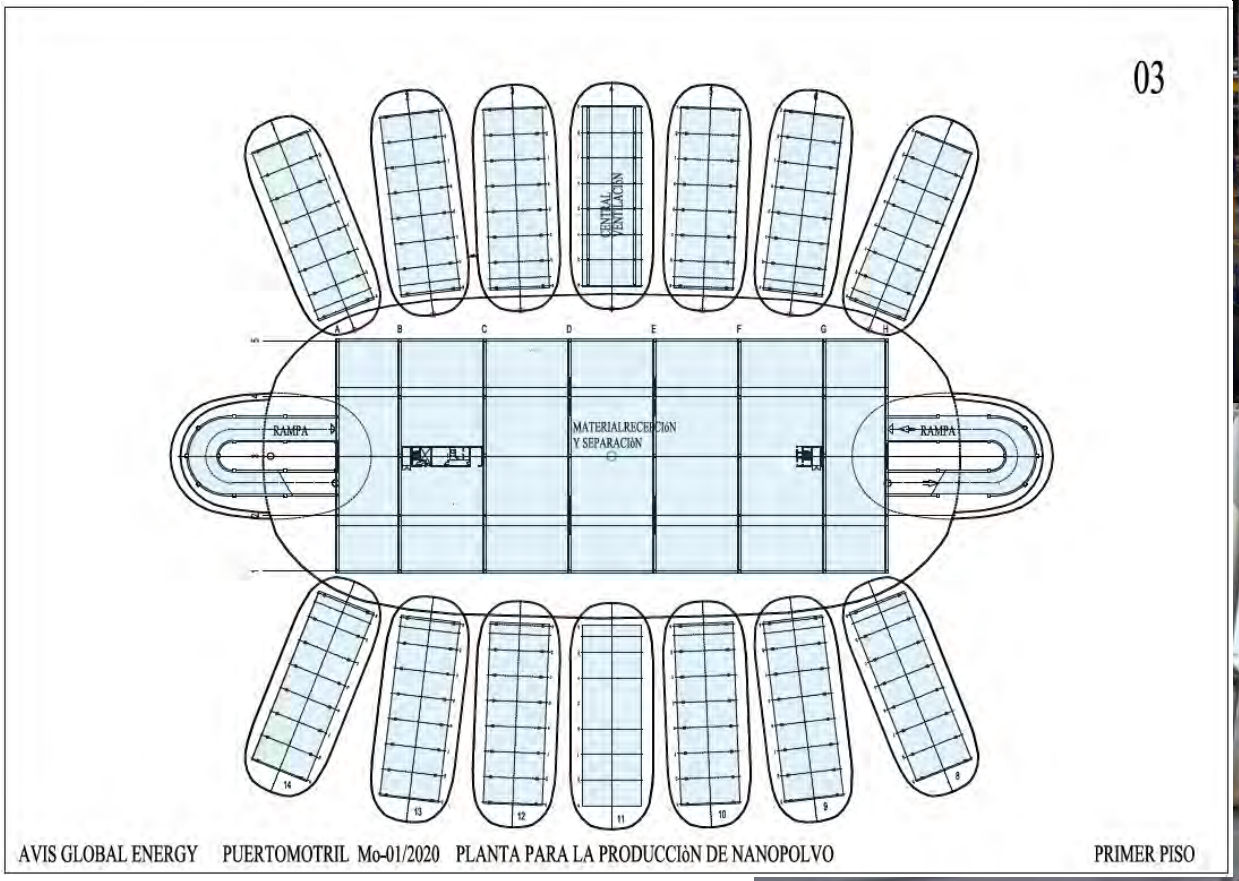
**h.** Sorted and shredded waste goes to storage bins and to the Vortex production facility

**!** All POWDERS delivered in hermetic closed shipping pipes from VORTEX to packing line and to 3D printers



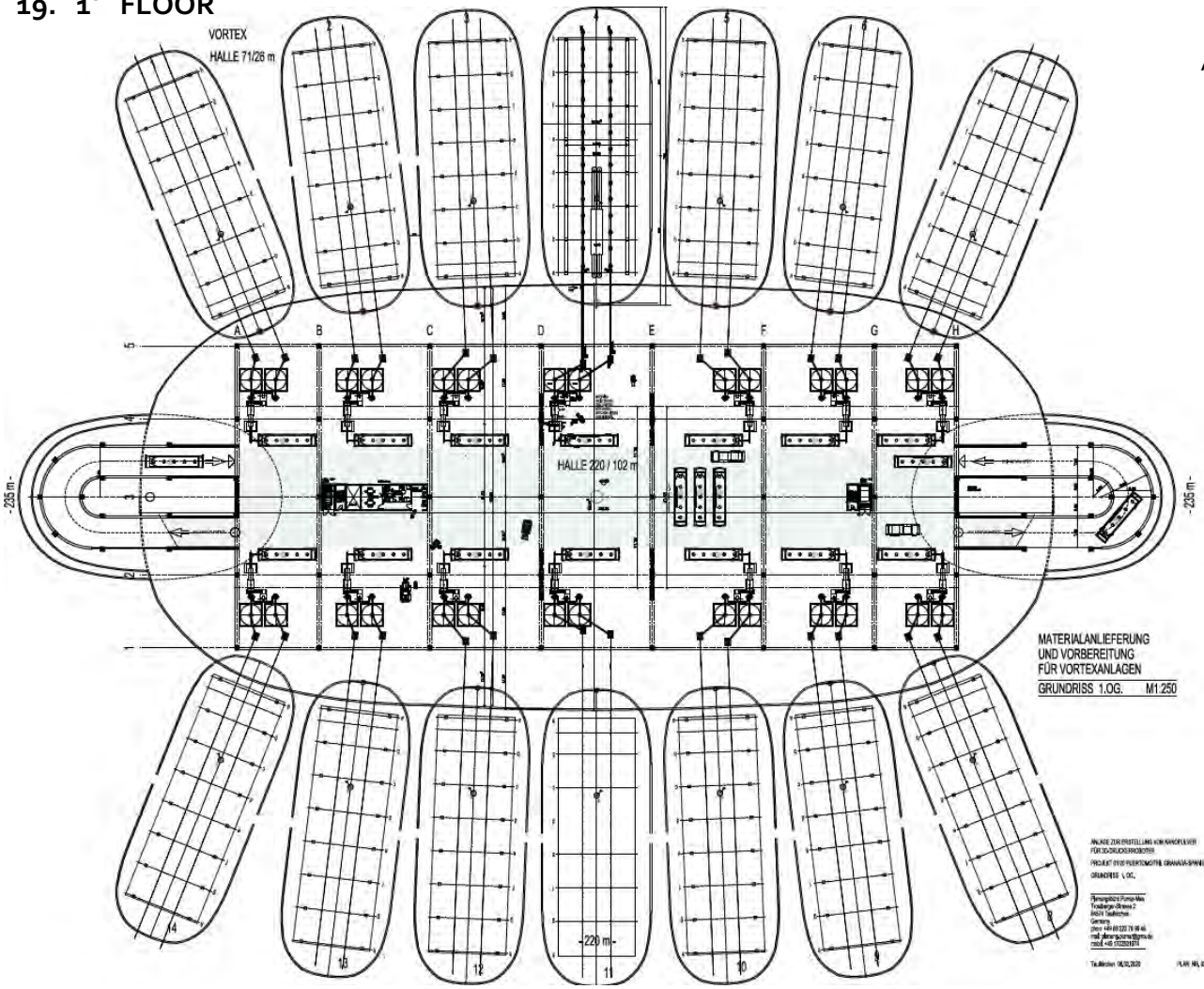
## 18. GROUND FLOOR

Product handling department




Vortex POWDER production
Packing lines
loading of goods NANO/MICRO powders
Trucks and containers delivery

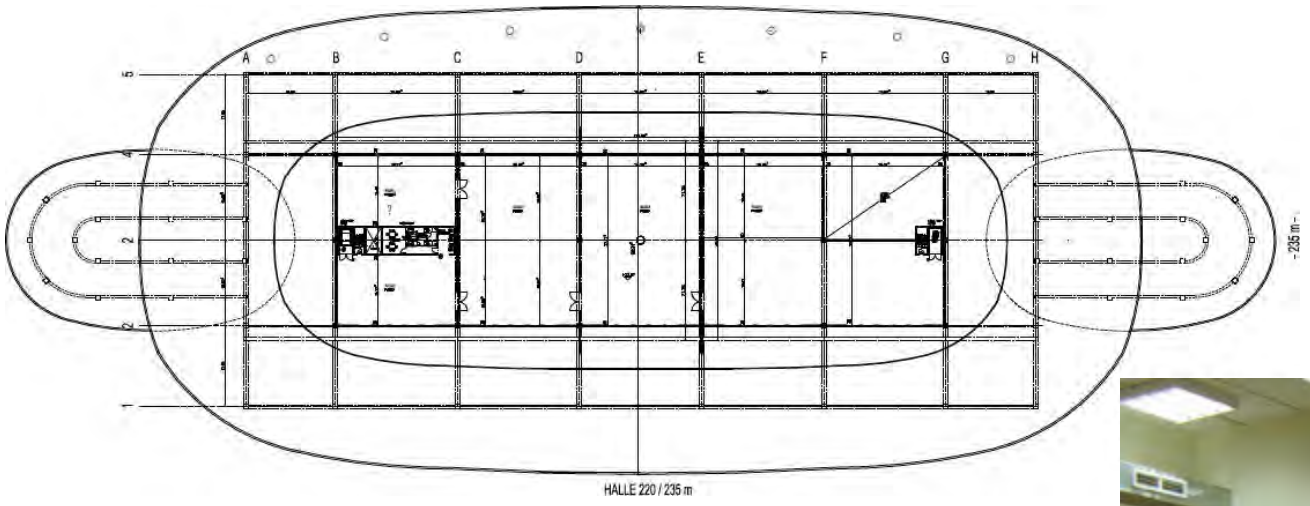
## 19. 1ST FLOOR




Arrival of waste in containers, trucks, trains ....


Receiving department, Uploading, Radiation control system
Weighting on scale system, Presorting,
Shredding, Fine sorting, VORTEX feeding

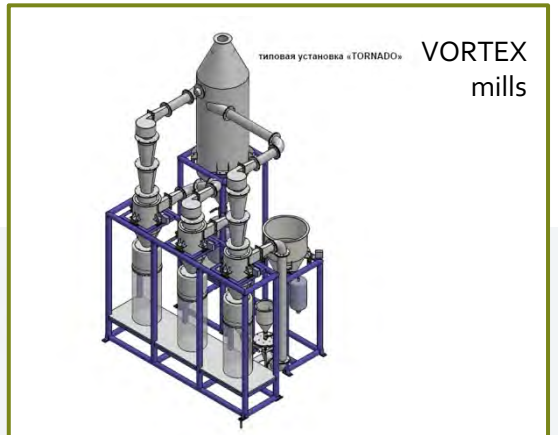
## 20. 2ND AND 3RD FLOOR



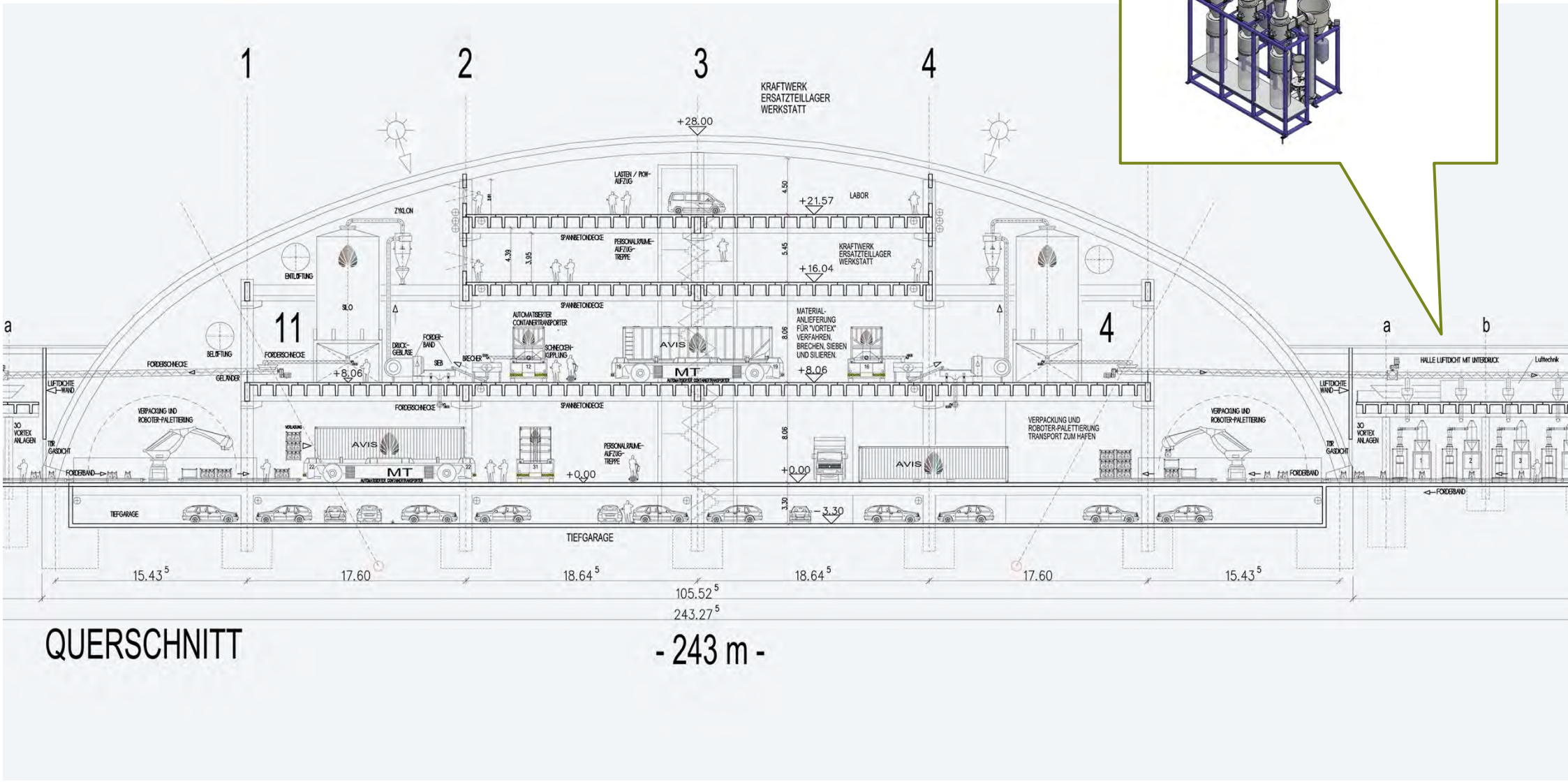

Social Infrastructure
Fine separation of powders
IT and management center for facility logistic
Spare part warehouse
Technical service
Car service
Repairing compartments
Laboratories

## 21. BUILDING DEPARTMENTS

The waste receiving logistic and pre-sorting




VORTEX mills



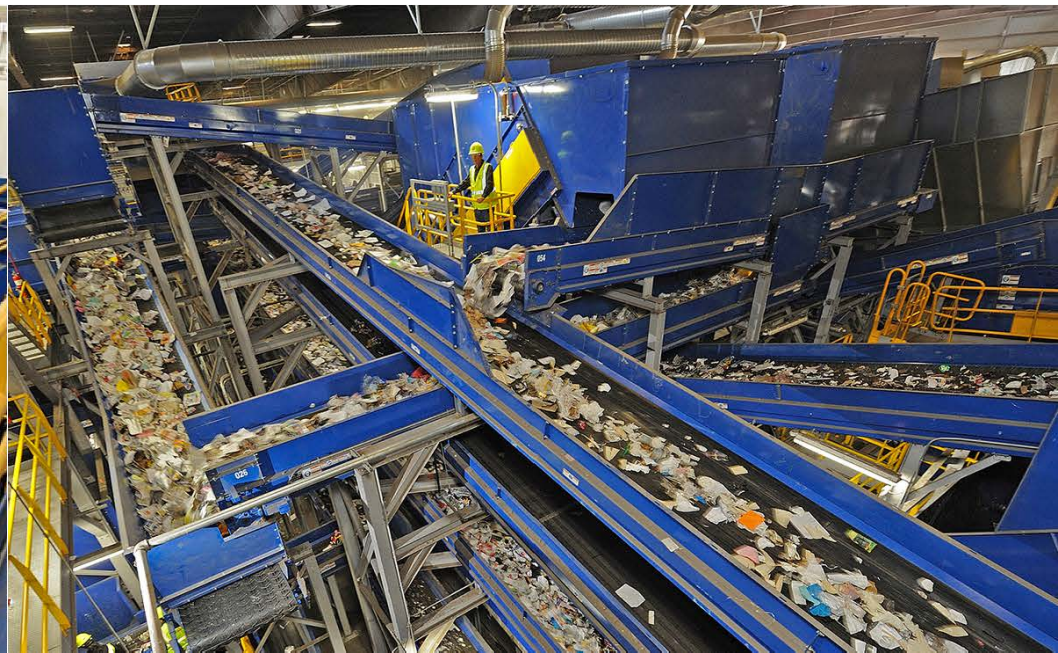

QUERSCHNITT

- 243 m -

## 22. WASTE DELIVERY DEPARTMENT AND PREPARATORY WORK

Dry waste comes mainly from the ships of the port of AVIS in 40-foot sea containers. The waste delivered is sorted according to the classification defined in USA/ EU Directive No. 2000/532 / EC. The waste is distributed by type and packed in rolls covered with plastic film.

| | |
|---|---|
| *Containers delivery* | Directly to the production premises, on the 2nd |
| *Type of delivery from uploaded transport* | floor Cableway, air-railway from coming ships |
| *inside the workshop* | Rubber conveyor belt with brackets |
| *Unloading* | Mechanical robotic unloaders, universal unpacker with roller shutters |
| *Numbers of conveyors* | 9 |
| *Type of waste for one conveyor* | Metal, glass, paper, plastic, electronic, electrical waste, construction, toxic, household |
| *Numbers of unloaders and shredders* | 18 each |
| *Numbers of sorting lines (Automatic material sorting system) ** | 36 |
| *Numbers of separators *** | 9 |
| *Environment control system**** | Laser lidar control system |

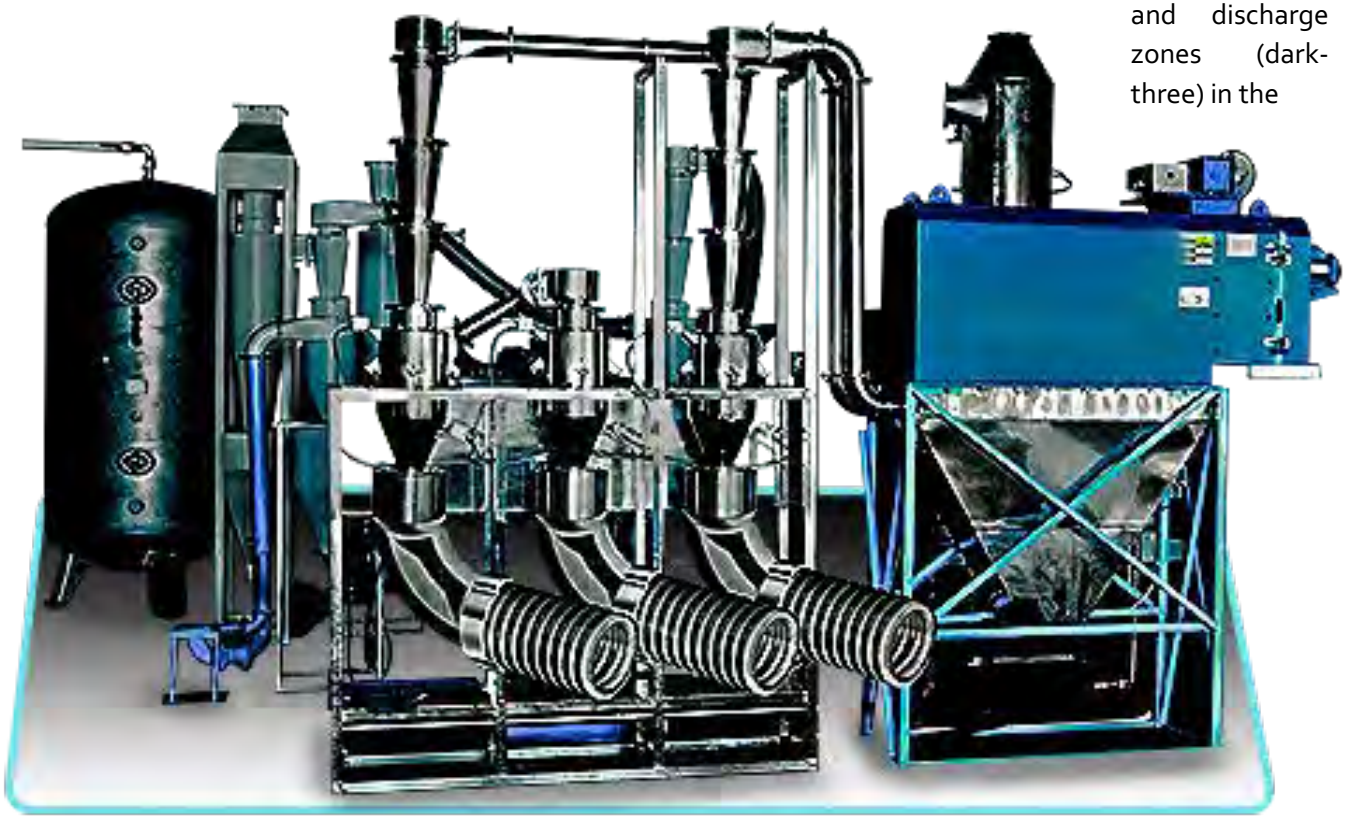
## 23. VORTEX MILLING TECHNOLOGY

### Functionality

The equipment is based on the resonance vortex grinding technology, which allows the grinding of any material, from wheat grain to diamonds. The phenomenon of crushing materials of any hardness is possible due to the occurring of pressure gradient zones in the vortex mill that amount up to hundreds of thousands of Bars, where the generation of multi-stage resonance, and the impact of particles occur.

Photo of the vortices (four) and discharge zones (dark-three) in the

The resonant vortex "TORNADO" installation is a gas-dynamic mill in which the technology of cascaded adiabatic resonance impact grinding is implemented, impact velocities of which are close to a breakdown threshold. When the material is injected into such area of pressure differential, a rupture of the material's structure and clusters occurs. Such mechanism can be compared to the mechanism of material's sample destruction, which is done in order to determine its strength characteristics at tensile test plants. That is, the grinding occurs not due to the friction or any other mechanic force, but by "air" and resonances, which provide a high and efficient performance, great flow rate of raw material as well as inexpensive exploitation (no rubbing parts) with low power consumption.



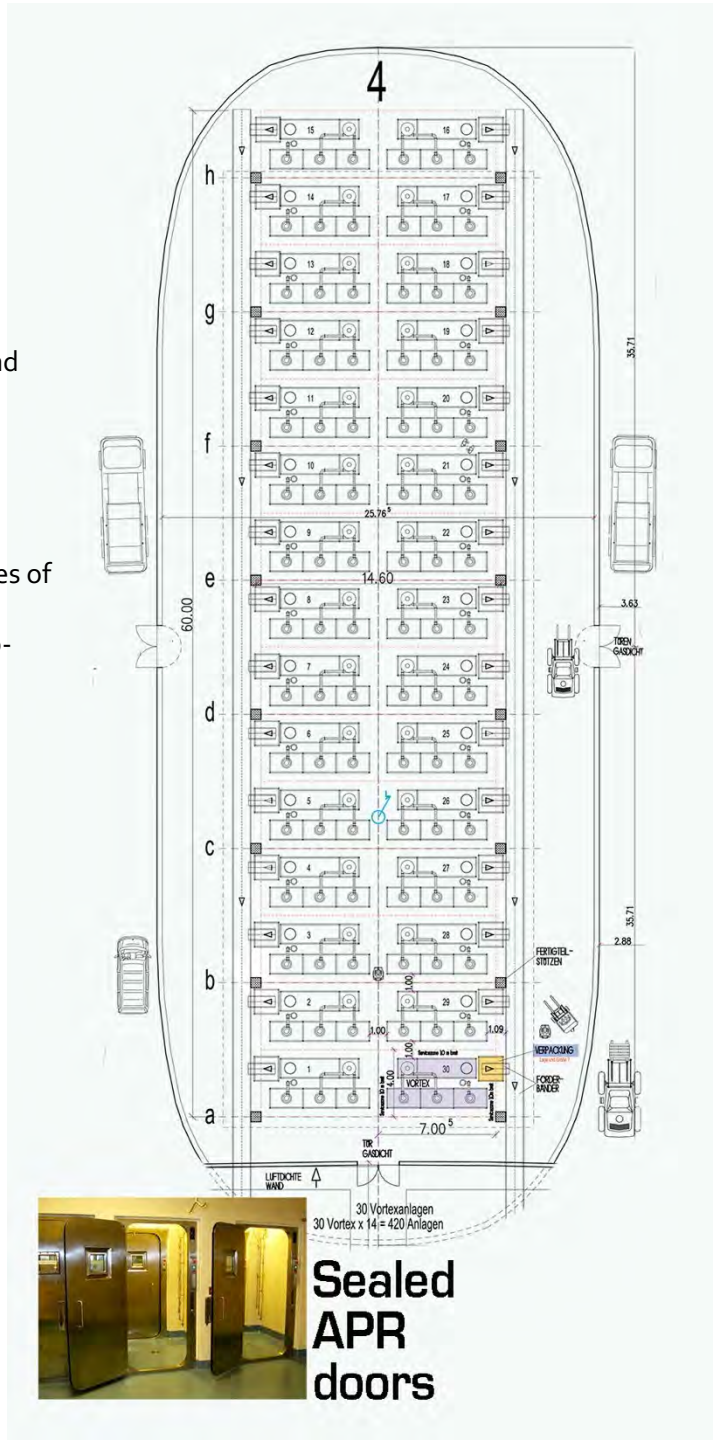
VORTEX technology accompanied by a change of the physical state, chemical properties and composition of the grinded material. Ultrafine grinding is accompanied by a change of defects of the crystalline structure, up to the complete amorphization substance. This creates an «aftereffect» due to the fact that the grinded material possesses
«excess» energy that was accumulated during the grinding process. These processes facilitate the functionalization of homogeneous and carbon structures, such as metal inoculation.

The technology of grinding rocks in the air-vortex flow of «Tornado» has been created specifically for the detection of crystals and aggregates, more efficient enrichment by the «dry method».

## 24. VORTEX PRODUCTION EQUIPMENT & CAPACITY

Production area of VORTEX* machines 02

| | |
|---|---|
| *Location Machines VORTEX* | lateral (arm) compartments of the building |
| *Numbers of arms* | 14<br>7 - on each side |
| *Dimensions of one arm* | 60x14m; 1.464 sq.m. working area |
| | 30 in each compartment, closed from the rest of the main and auxiliary workshops and premises |
| *Numbers of Machines* | 420 |
| *Pressure in Vortex premises* | 0,9 Bar, sealed doors |
| *Income material* | 10-20 mm |
| *Outcome material* | 10-0,001 mcm |
| *Preliminary separation of outcome* | cyclones and scrubbers in accordance with the types and sizes of powders. |
| *Classification of outcome* | 2-4 machines (Classifiers) for the precise separation of micro- and nano-powders |
| *Numbers of classifiers* | 100 |
| *Working body (carrier)* | compressed air, argon, nitrogen, carbon dioxide |
| *Consumption of Working body* | 10m3 per minute per machine |
| *Total Consumption of Working body* | 4200 m3 per minute |
| *Pressure* | 10 Bar |
| *Return the working body of the machine* | after cleaning - back to compressor |
| *Noise level* | dB 60-70 |
| *Power electro consumption* | 200W per machine |
| *Totally electro consumption* | 84 kW |
| *Environmental damage\ harmful emission* | ZERO |



## 25. 3D PRINTER PRODUCTION DEPARTMENT TITOMIC

The production area of TITOMIC 3D* printers is located on the third floor of the building and is shown in drawing 03-AVIS-1. OG-08.02.
There are 100 printers in the zone.
*Brief description of the principle of operation of TITOMIC:
Micro - and nano-powder comes to printers by means of tight pipes (product lines) and moves to a printer nozzle. The TITOMIC 3D printer is based on the CSIRO principle of the process of applying cold gas-dynamic spraying of particles of titanium or a titanium alloy or other substances based on the deposition of supersonic particles of metal powders to create large-scale parts and complex surface coatings.
When using a 3D printer, nitrogen is used with a pressure of 5.5 bar. In the process, nitrogen is heated (not burning) to + 6000C, which is then diverted out through the ventilation.
Nitrogen enters the printer from a gas storage tank with a capacity of 10,000 m3. A nitrogen generator is provided to fill the storage tank.
Finished products are removed from the frame and transferred to the finished goods warehouse located on this floor. From the warehouse of finished products are shipped to consumers.
In the production area of 3D printers, supply and exhaust ventilation are provided. The main technical characteristics of the TITOMIC 3D printer are given in table 4.

| No. | Name Unit. | Measurement | Quantity |
|---|---|---|---|
| 1 | *Pressure of Nitrogen* | Bar | 5,5 |
| 2 | *Consumption of nitrogen* | m3 per min. | 0,014 |
| 3 | *Pressure of air* | Bar | 6 |
| 4 | *Consumption of air* | m3 per min. | 0,27 |
| 5 | *Noise level* | dB | 64 |
| 6 | *Electro current* | A | 420 |
| 7 | *Electro voltage* | V | 220 |
| 8 | *Electro power* | KVA | 137 |
| 9 | *Totally electro power for 100 items* | MW | 15 |
| 10 | *Environmental damage\harmful emission* | | ZERO |

## 26. 3D PRINTING DEPARTMENT - (TITOMIC AND OTHERS)

To produce VORTEX mills

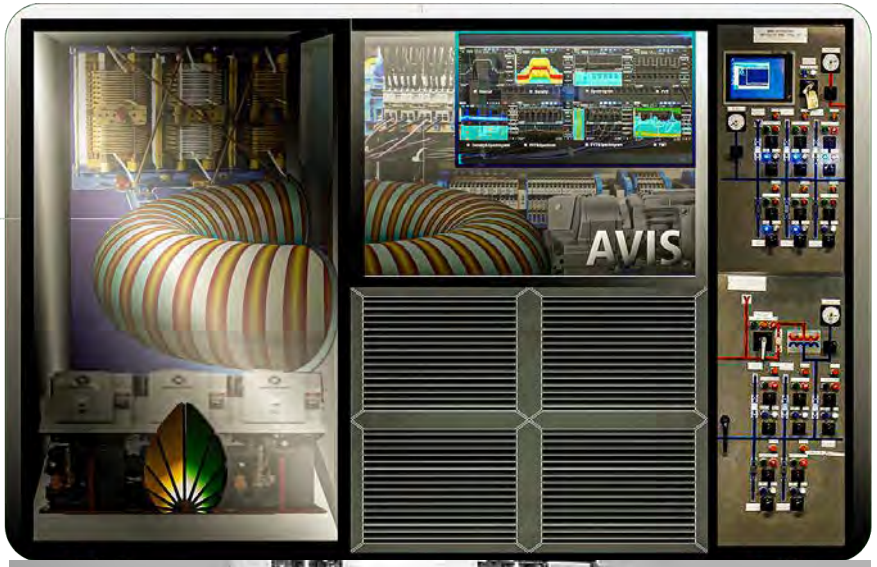
How it works-To additively manufacture metal parts, TITOMIC Kinetic Fusion® begins by accelerating metal particles to supersonic speeds by injecting them into a jet stream. The particles exit the spray nozzle, and upon colliding with the surface, they plastically deform, sticking to the surface and each other. The build-up of these particles rapidly develops into near-net-shape metal parts.

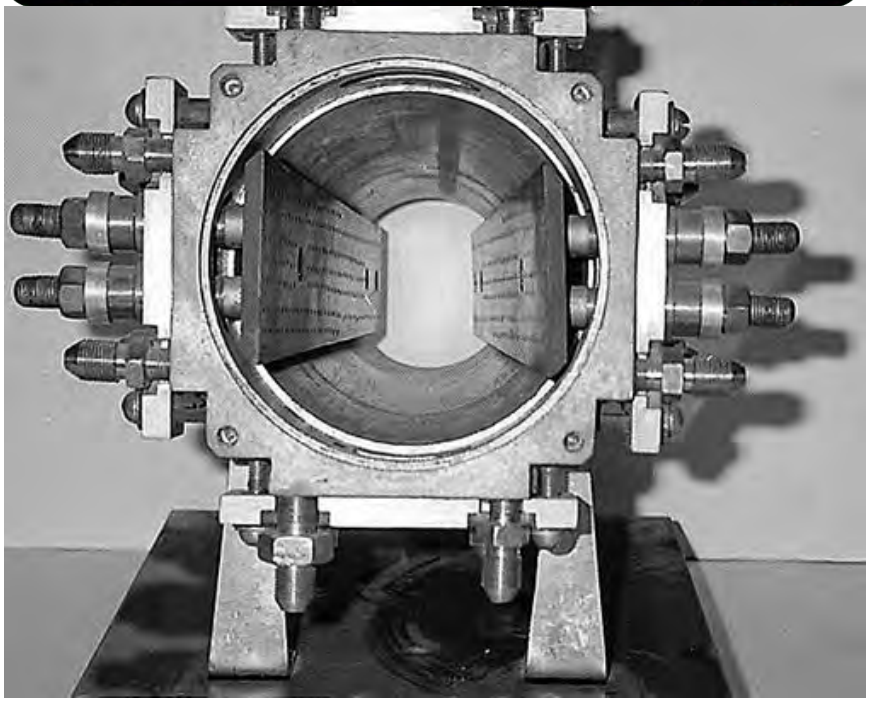
## 27. 3D PRINTER MIXED BATTERIES

## 28. TURBINE COMPRESSOR DEPARTMENT

All pipes from compressor maintained to VORTEX machines under pressure approx. 10 Bars
In 3D Printed high pressure 1,00 diameter pipelines for interim air storage, total 10.000 m3 to secure air flow

## 29. HMD POWER DEPARTMENT AND LOGISTIC



The technology description and output production

The active working weight of the prototype dynamo (torus + water) is about 900 kg. The diameter of the torus is approximately 2 meters. Thor - impact - durable optical polystyrene from two halves.

Single crystal barium titanate ($BaTiO_3$) is sprayed onto the inner channel of the torus.

Water was purified to a specific resistance of 18 M Ohm / cm.

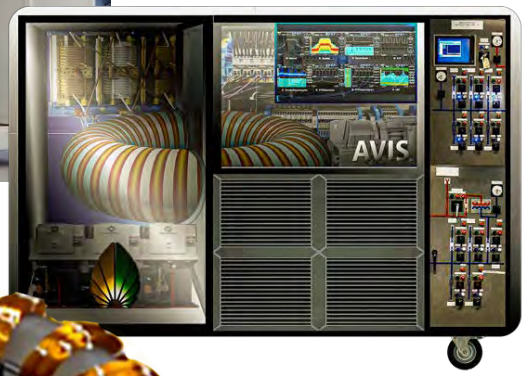
To start the dynamo, 2 capacitor banks with a capacity of 10 F each were used. The total capacity is 20 kilojoules.

The energy of the starter battery is to provide the initial movement of water (acceleration and excitation) - 20 kJ, voltage of 100,000 volts. Partially ionized water is ionized by a high-voltage discharge through 32 electrodes (2 kilograms of palladium). The electrodes are made of palladium tubes with a diameter of about 5 mm. Using these electrodes, the dynamo "ignites". 32 electrodes are mounted evenly in the torus of the generator.

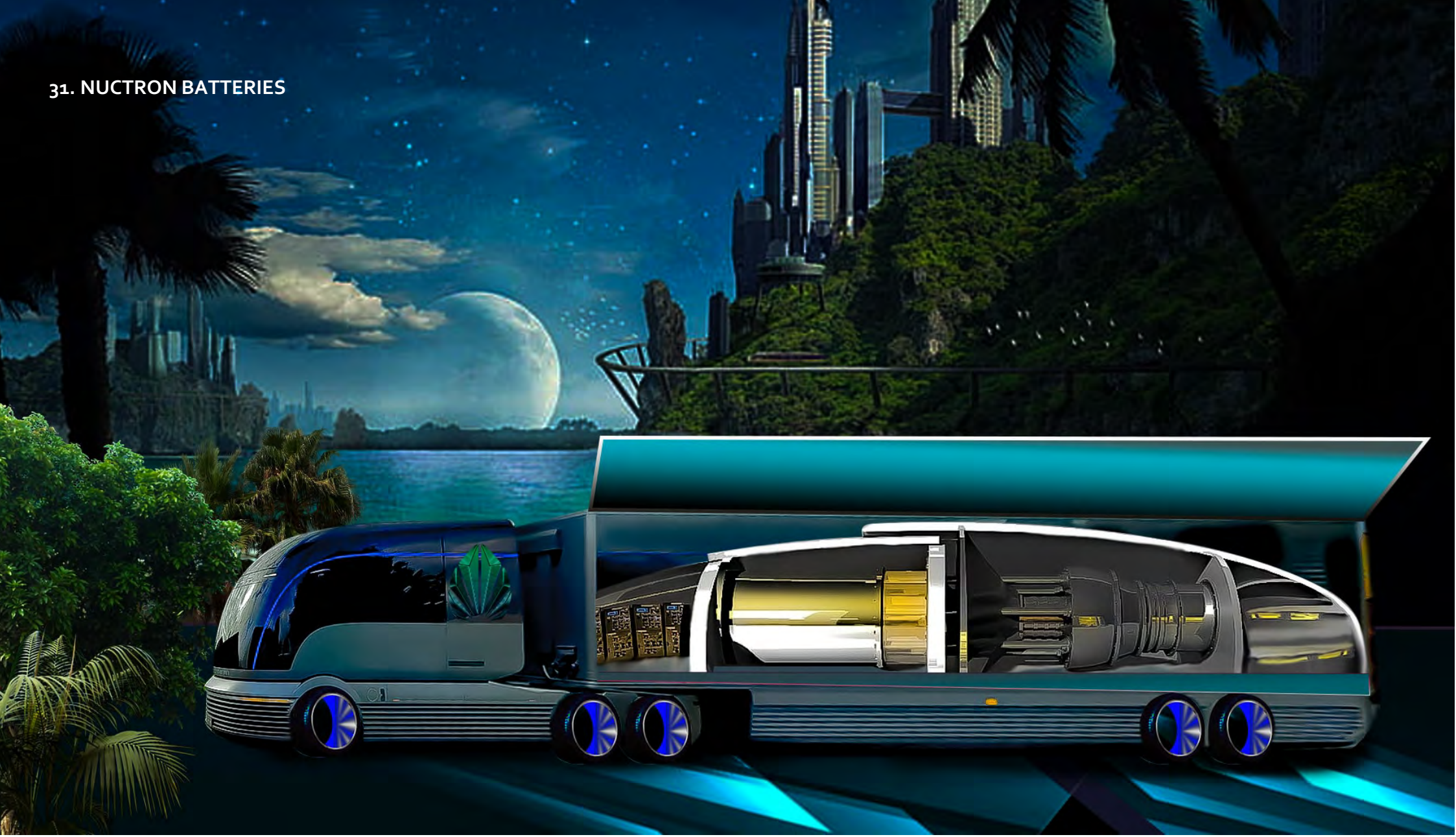
Through the field windings, an alternating magnetic field is created that moves water in one direction inside the toroid. Electromotive force is created by electromagnetic induction in individual windings. The cooling system of the generator housing was a closed circuit with circulating purified water. The torus temperature was maintained no higher than 55 degrees Celsius using a heat exchanger. The average output power under load was 220 volts x 6800 amperes = 1490 kilowatts. The current is constant. Periodically, it rose to 2,500 kilowatts. Depends on the cooling of the generator.

## 30. PRODUCTION ENERGY SERVICE & MANAGEMENT DEPARTMENT

| | |
|---|---|
| Plan 01-1. OG, 08.02. | |
| *central air compressor 1 item* | 4500.0 m3 per min. |
| *HMD* hydraulic generator of dynamic electric power* | 2.8MWh |
| *100 Generators totally* | 280MWh *102.200MWh year |
| *Industrial HMD Generators* | 20MWh |
| *50 Generators totally* | 1000MWh*365.000MWh Year |
| *Volt* | 440 |
| *transformer substation* | 1 Siemens |
| *consumption from the city (port) external electric network (emergency)* | 0<br>available on standby |
| *100 HMD Generators* | 2,80 MWh |
| *50 Generators totally* | 1000MWh |
| *Total* | 280 MWH |




*HMD operates on heavy water (D3O) circulated in and ring reactor is not a source of harmful radiation and waste e*mission "ZERO"*



# POWERFULL NON-TOXIC NUCTRON BATTERIES TO BE DELIVERED INSTANTLY TO WHEREVER NEEDED FOR CITIES & INDUSTRY

## 32. LABORATORIES DEPARTMENT

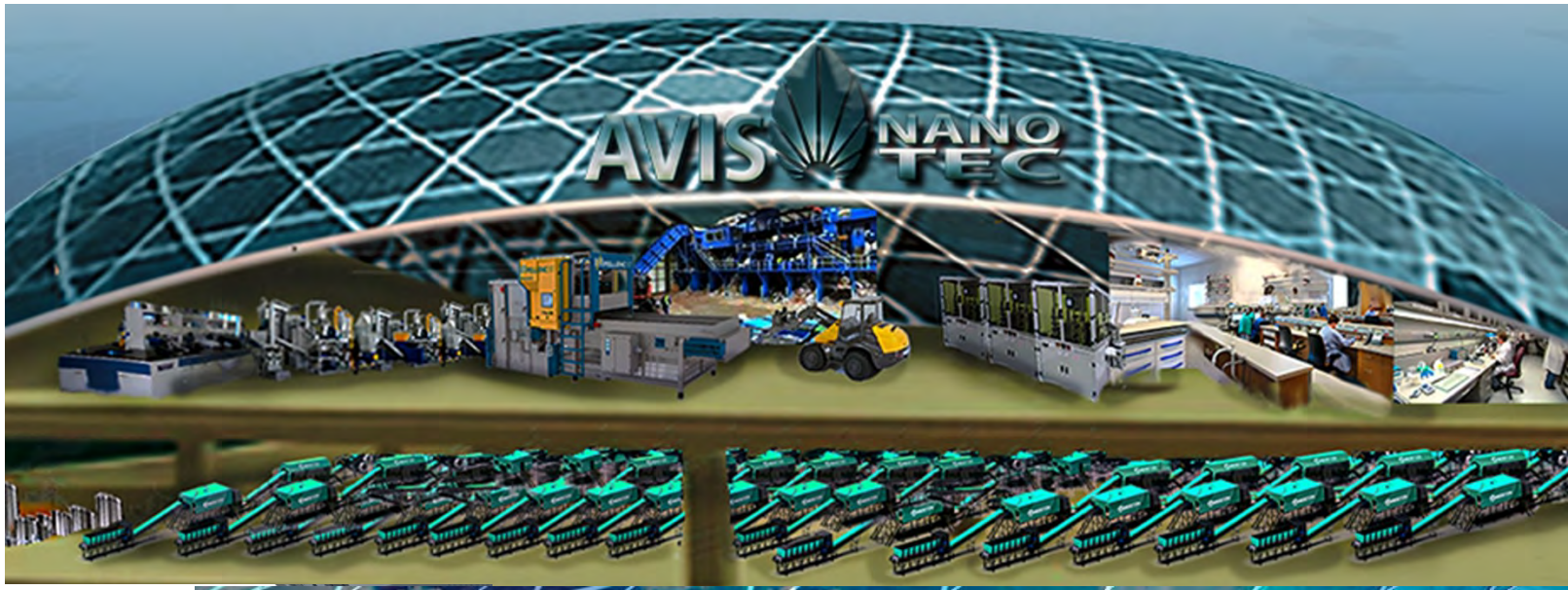
Waste input material controlling
Valuation and electronic distribution

Nano Powder output material controlling
electronic switchboard for distribution

Composite experimental laboratories

University interaction for new composite materials research

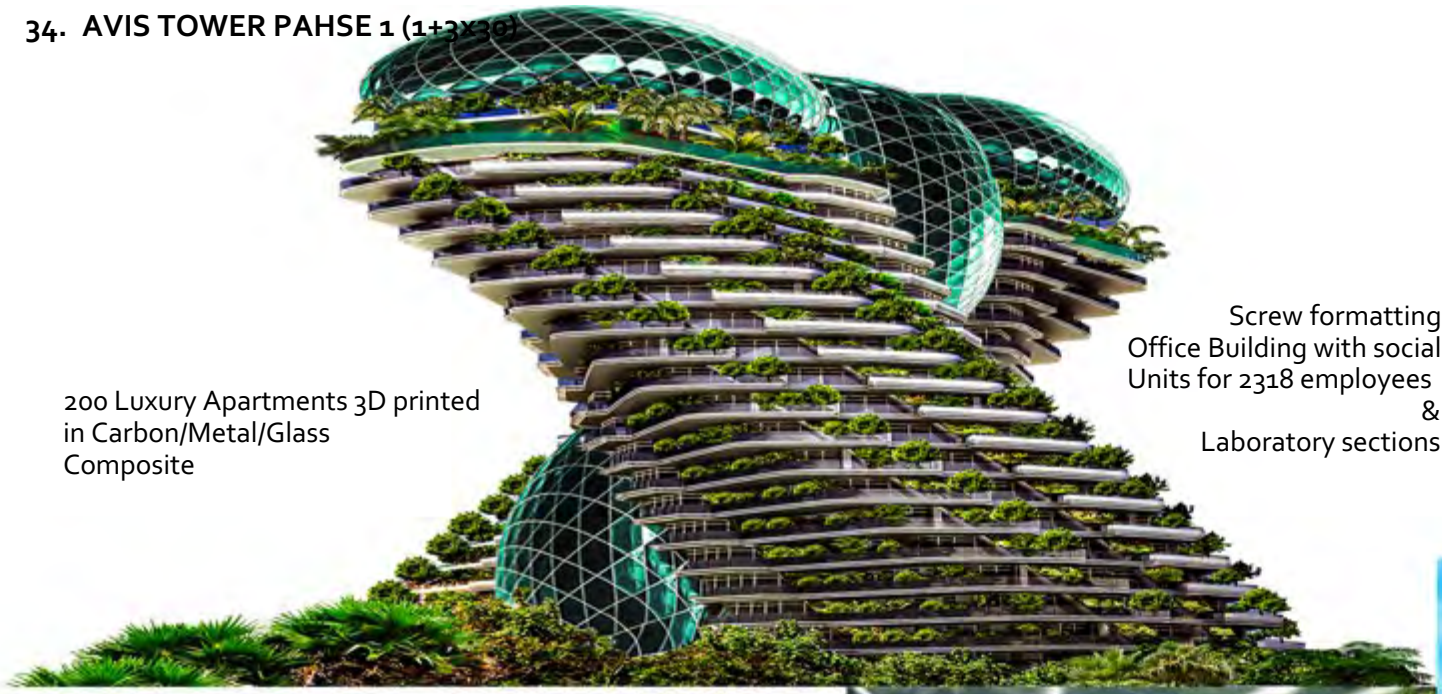
Selection laboratory for 3D kinetic fusion printers



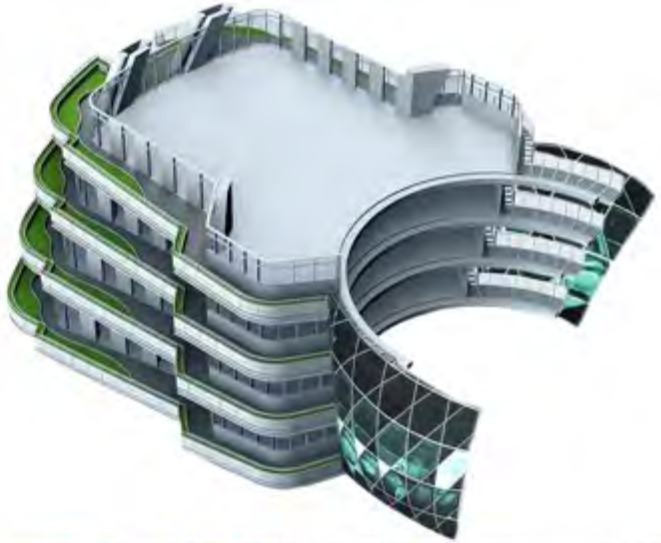

## 33. FIRE SAFETY

| | |
|---|---|
| Generally, fire measurements Taking care off | Structural fire protection is a preventive fire protection measure. It aims at preventing the further propagation of fires. Its maxim is "divide and conquer" ("divide et impera"):<br>Accessibility for the fire brigade, protection intervals between buildings and installations, fire walls between adjacent buildings , construction materials and construction parts made of hardly combustible material, high fire resistance of girders and load-bearing parts, creation of fire compartments to limit smoke and heat propagation sealing off installation ducts and channels, short and safe escape routes and emergency exits, if possible, separate ignition sources from combustible materials, lightning protection systems Manufacturing a door with a predefined fire resistance value. But making sure that the fire door will indeed be locked tight in case of fire. |
| Installations | Safety Systems<br>Gas Warning Systems<br>Fire Detection Systems<br>Alarm and Evacuation Systems<br>Escape Routes and Emergency Lighting<br>Smoke Protection Systems<br>Fire-Fighting Systems<br>Fire Extinguishing Systems<br>Organizational Fire Protection |
| Fire Protection Concept taking care of | Fire protection regulations construction rules environment protection laws statutory orders on hazardous incidents accident prevention provisions. |
| Technology | https://www.downloads.siemens.com/download-center/Download.aspx?pos=download&fct=getasset&id1=A6V10430678 |

## 34. AVIS TOWER PAHSE 1 (1+3x30)

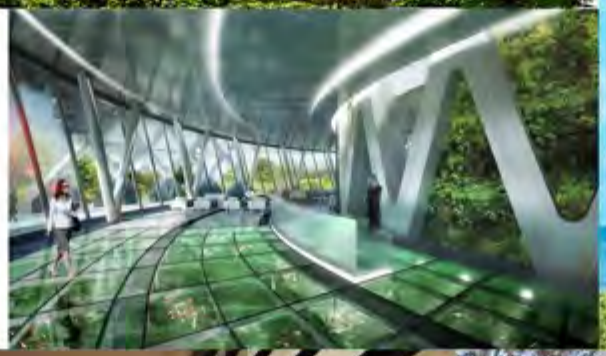


200 Luxury Apartments 3D printed in Carbon/Metal/Glass Composite

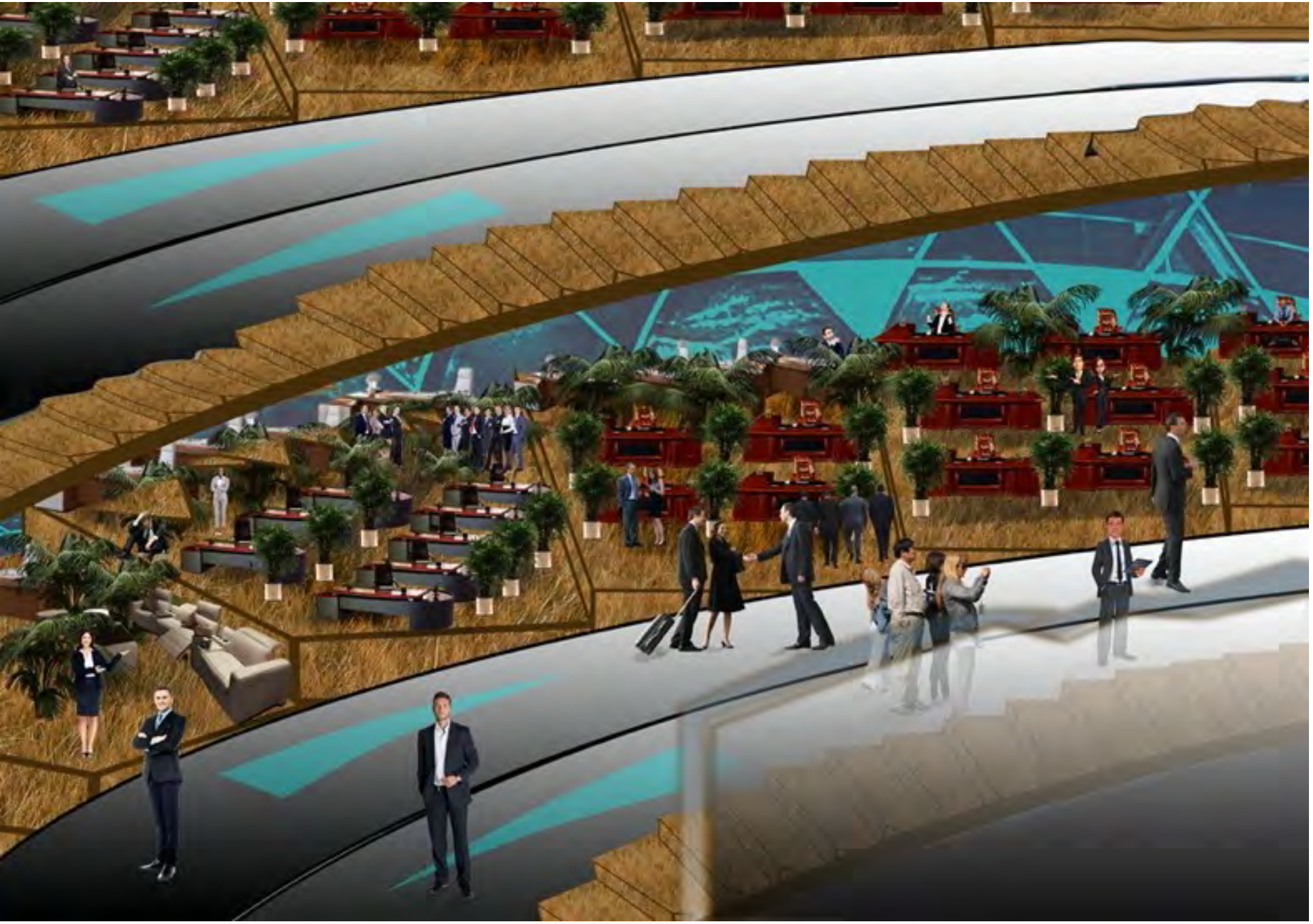


Screw formatting
Office Building with social Units for 2318 employees
&
Laboratory sections

Apartments floor 3D printed in Carbon/Metal/Glass Composite. prefabricated



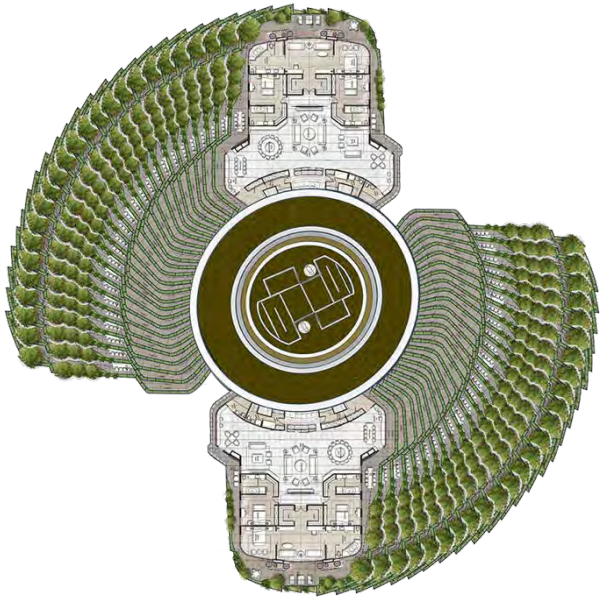
## 35. OFFICE SPIRAL FOR 2800 AVIS TEAM MEMBERS



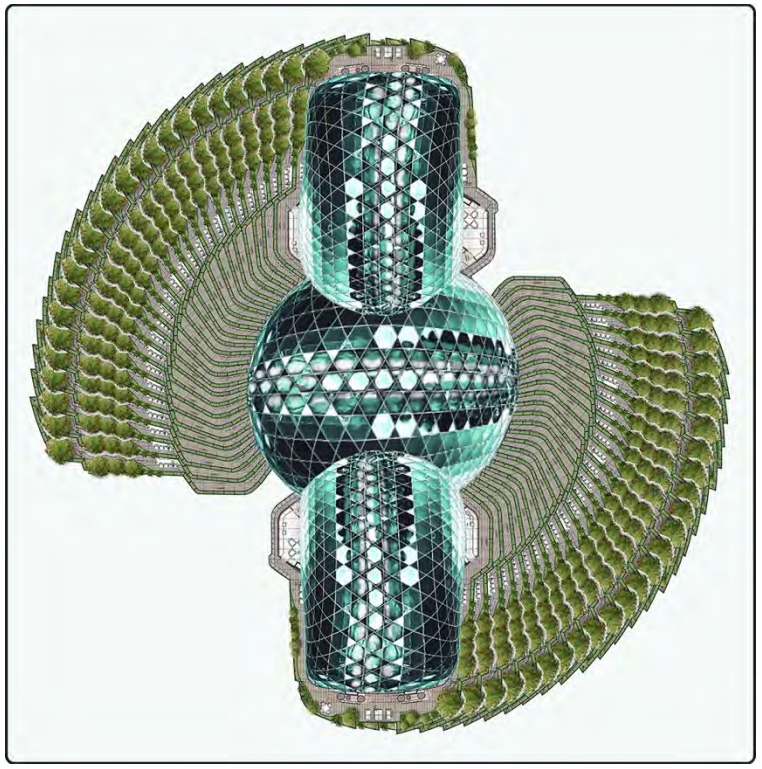
As AVIS Team member you have liberty working from home at your convenient time or you meet your colleagues somewhere at the building. Or maybe at your own working satellite in the tower.

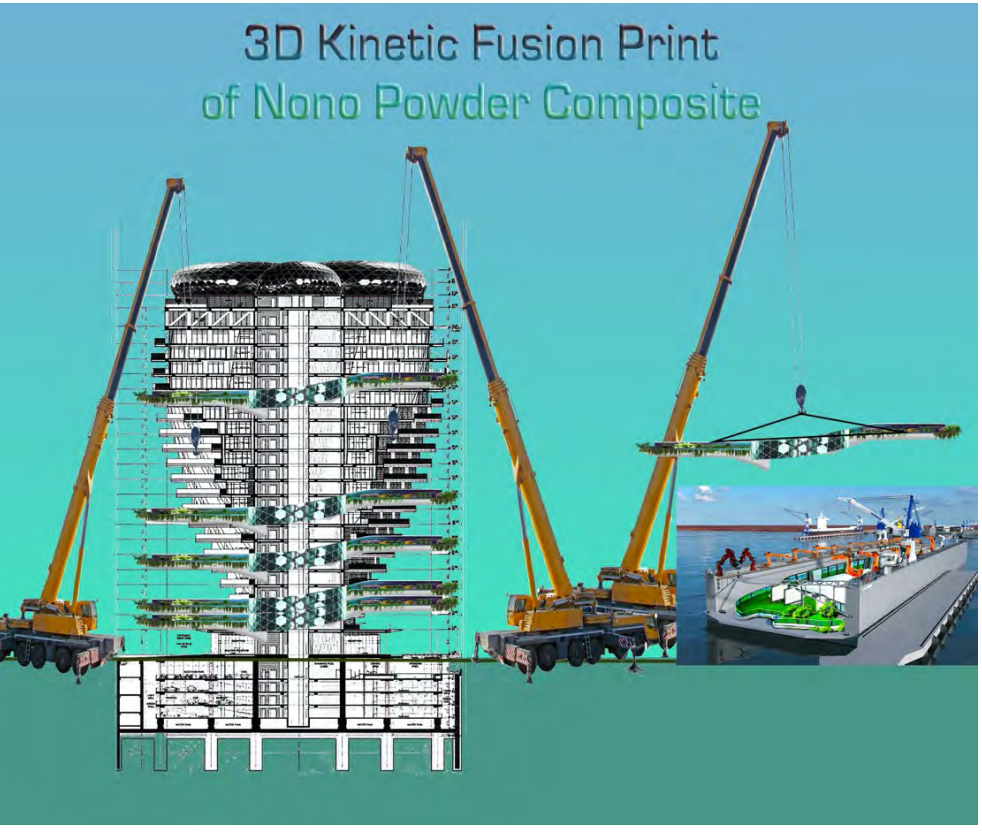
Design criteria and typologies of space adapt to the new working modalities derived of technological development and the information society, in the usual concepts such as the Internet, horizontal organizations, work by processes, causing the ways of working of people in institutions are modified, and the development of new Work spaces.

## 36. AVIS TOWER OFFICE AND LUXURY APARTMENTS - 3D COMPOSITE CARBON - GLASS - METAL CONSTRUCTION



200 Apartments between 85 to 600 m2 plus garden.
2318 Working satellites
45 Laboratories high secured
2 Server Centre
12 Restaurants
15 Coffee Shops
Indoor Pool
Social leaving area 10.000 m2
1000 parking spaces
Space 110 x110 direct construction area plus garden
12.100m2 plus 4800m2 garden






25 Floors with room high of 4 m
Apartment wing b40 x l30 m
**1200m2**

Central tube 27 m diameter
**572m2**

Office screw tower ring 50m diameter
25 floors office 34.775m2
1391m2 each floor offices 15m2 for each person
**2300 working satellites**

3 Basement laboratories each
**16.900 m2**

Heavy working laboratories
**50.700m2**

Each wing 1200m2 3D printed in bionic format

10% of weight and 100times stronger than conventional construction formatting

Automatic tropical garden system

Earthquake secured

90 days construction time

Own electric power production

Fire resistant

8 lifts person 2 lifts material

2m person traveling band in screw up

2m person traveling band in screw down

3D kinetic fusion robot printers using carbon

ceramic-glass-metal composite sourced from garbage

Printing facility up to 200m long and 50m wide

Movable swimming platform

Multifunction

For ship printing

Floor printing

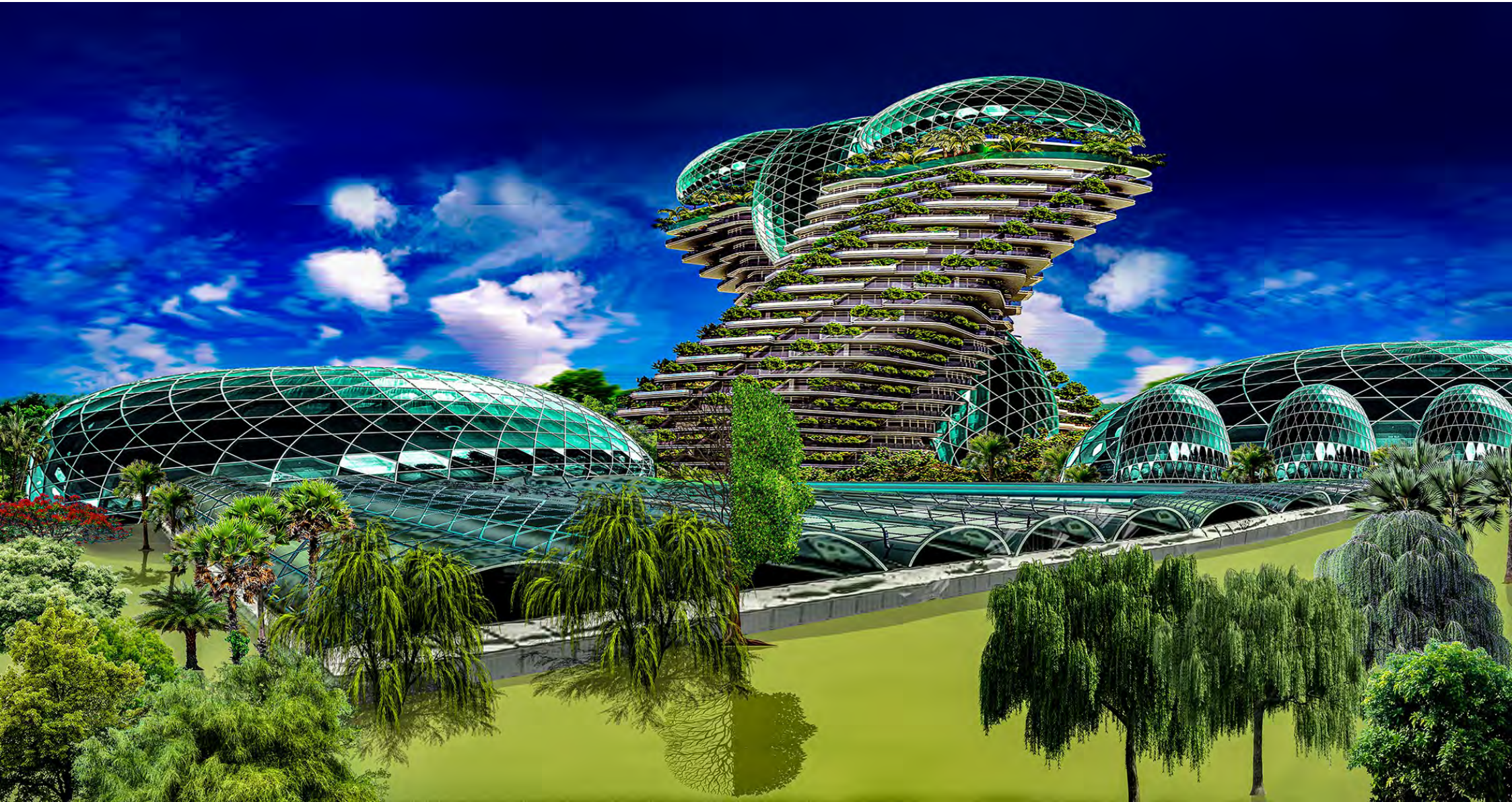
Large construction use

## 37. AGRICULTURE DEPARTMENT

| | |
|---|---|
| Type of greenhouse | 5 Ha tropical doom formatted glass composite 3D printed |
| Roof glass skin | 3 D printed Photovoltaic skin, hermetic closed |
| Area | ±50.000² including service area |
| Ventilation | NON, hermetic closed |
| Technology | High performance Photovoltaic printed skin |
| Temperature | Permanent 40°+/- tropical temperature |
| Humidity | 95% |
| Agriculture products | Jackfruits & vegetables and technologies are capable to replace the animal farming industry |
| Quantity | 30.000.000 kg/year |

## 38. AQUACULTURE DEPARTMENT

| | |
|---|---|
| Fish growing basin | Carbon composite 3D printed |
| Roof glass skin | 3 D printed Photovoltaic skin |
| Dimension | ±140x6x6 |
| Growing lines | 10 |
| Capacity | 10x250 mt/y |
| Temperature | Permanent 20° to 22° |
| Quality | High sea fish growing free of chemical products |



ATOMTHREADS
THE WORLDWIDE LEADER IN GRAPHENE THREADS

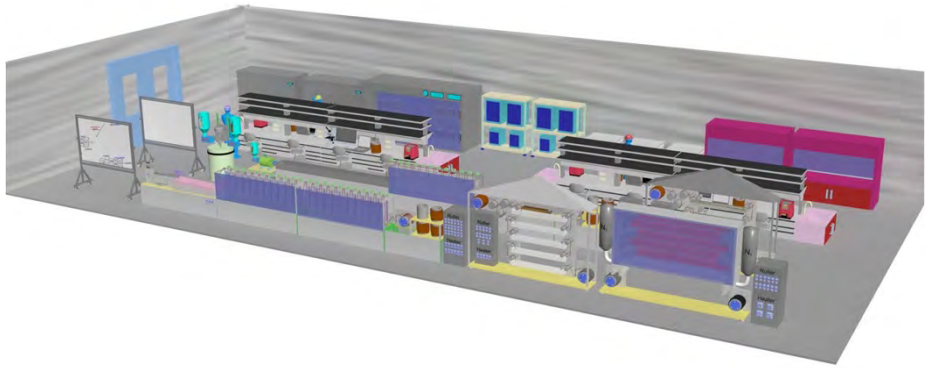
# Design for Pilot-Scale Lab in COLOMBIA

## AVIS ATOM THREADS PLC

GRAPHENE

HANYANG UNIVERSITY

# Design for Pilot-Scale Lab for ATC in HYU, Korea [Series A]

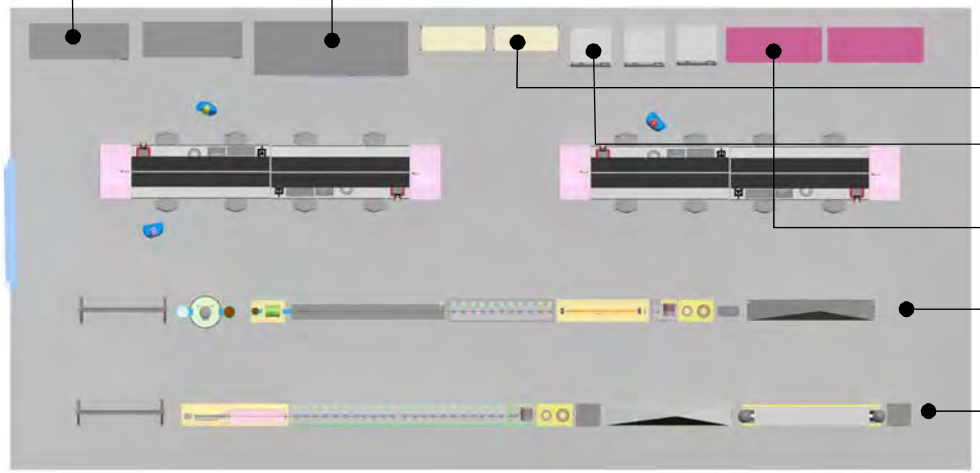


**Size** : = 12 x 25 $m^2$

= 39 x 82 $ft^2$

= 3230 $ft^2$

**Productivity Scale**: 0.5 ~ 1.0 km long fiber



Refrigerator

Fiber storing chamber

Oven

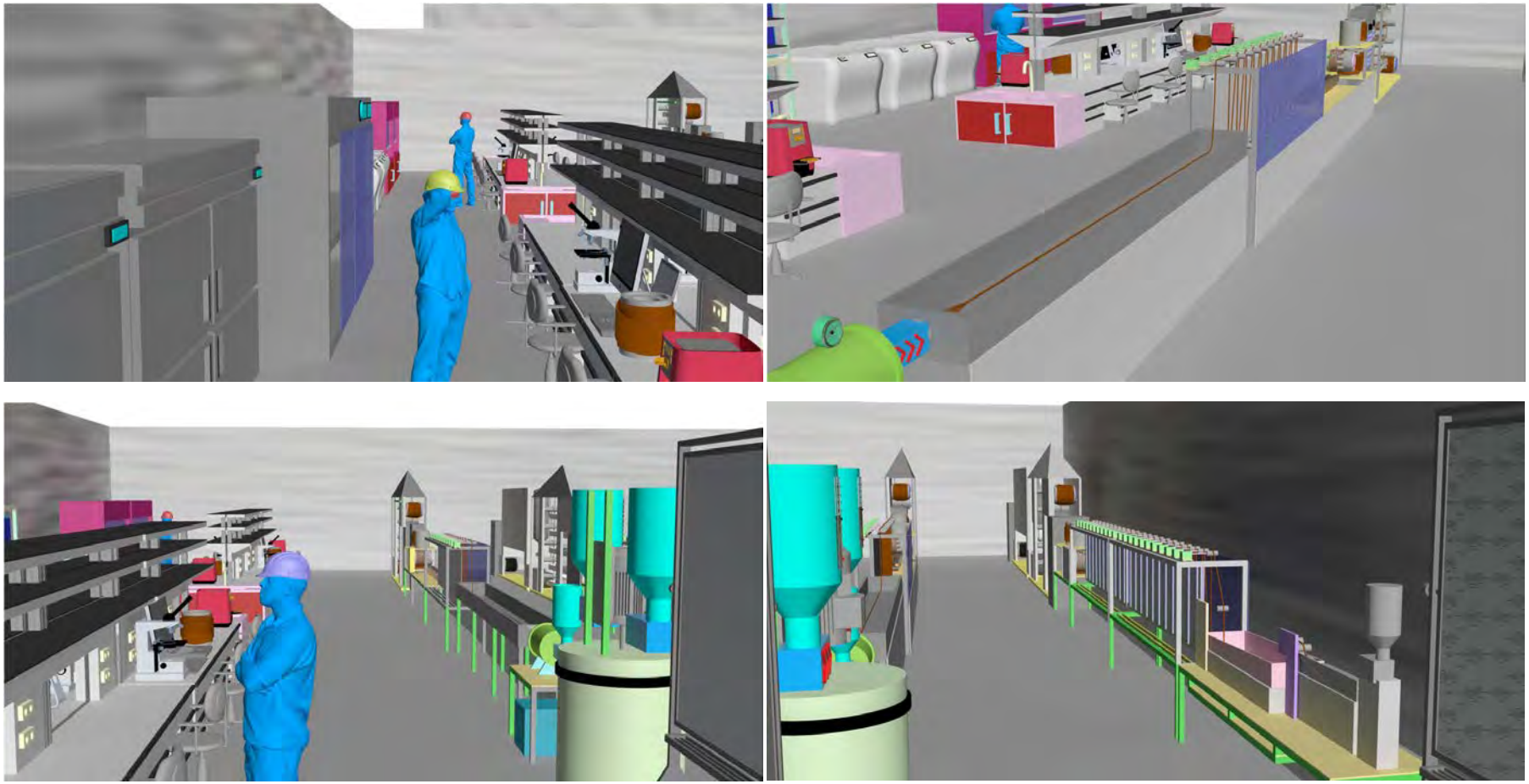
Centrifuge

Hood

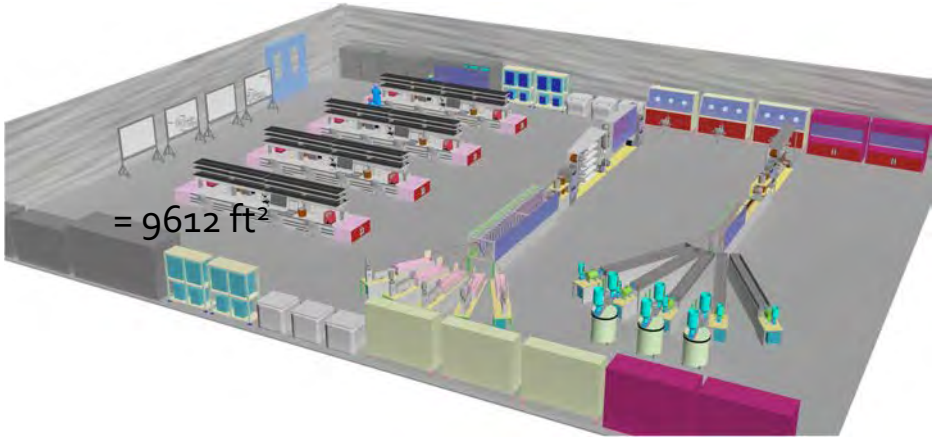
(Ultra strong) US-GF Line

(Highly Conductive) HC-GF Line

# Design for Pilot-Scale Lab for ATC in HYU, Korea [Series A]



# Design for Pilot-Scale Lab for ATC in COLOMBIA

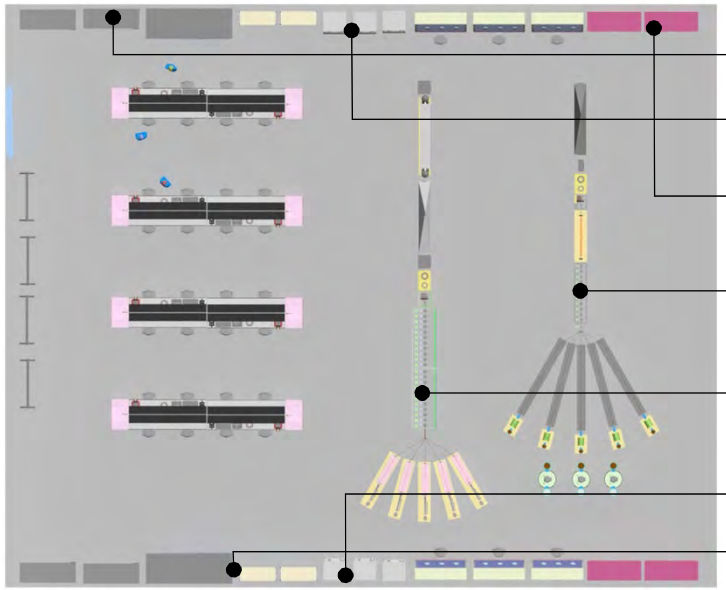



**Size** : = 27 x 33 m²

= 89 x 108 ft²

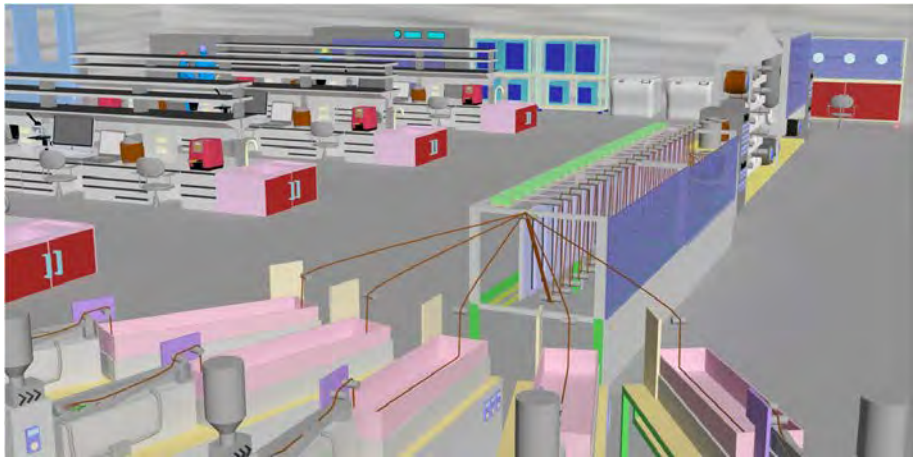
**Productivity**

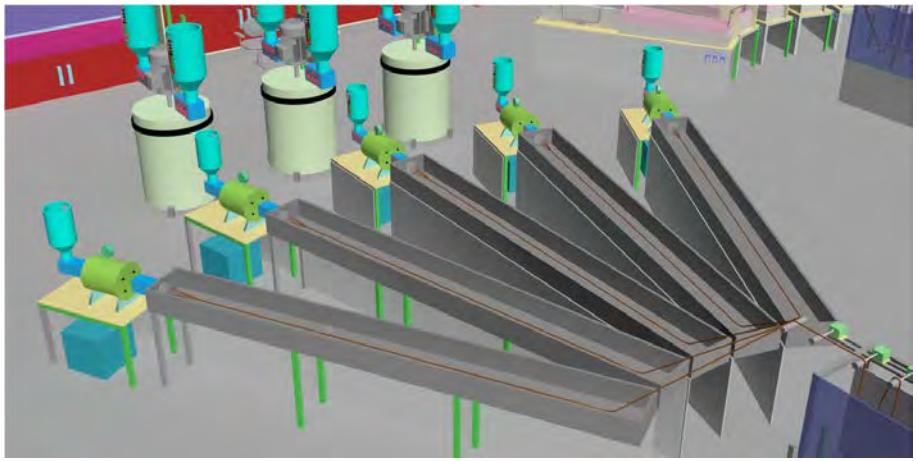
**Scale** : 1.0 ~ 3.0 km long fibre

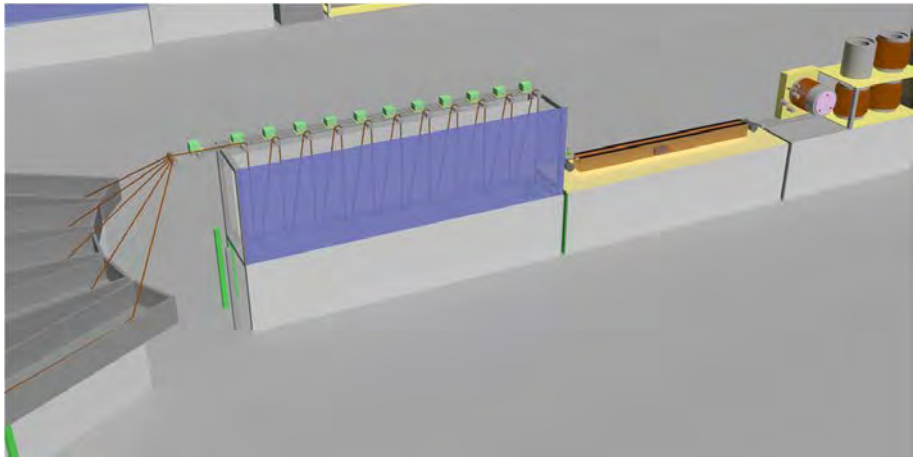


- Refrigerator
- Centrifuge
- Hood
- (Ultra strong) US-GF Line
- (Highly Conductive) HC-GF Line
- Oven
- Fiber storing chamber

# Design for Pilot-Scale Lab for ATC in COLOMBIA







## 40. HOST LOCAL TECHNOLOGY DELIVERY FOR THE POPULATION AND LOCAL INDUSTRY

**Mining technologies for organic non harmful save and health mineral extraction & for recycling of old landfills and toxic waste dumps**

## GOLD 3D PRINTING TECHNOLOGY

# PURED OUTPUT PRODUCTS

**TITAN** + a plant for the production of metal powders and micro powders and ceramic metal magnetic powders and powders for special 3D-Printing.

**BIO** + a plant for biotechnology, focused on the production of biologically active substances (BAS) from vegetable raw materials, biological crop protection and nutritional supplements.

**POLIMER** + a plant for deep processing of lignin-containing raw material, production of new polymer materials, BAS and biofuels.

**CERAMIC** + a plant for production of mineral micron powders, pigments, metallic powders for 3D-Printing, activated and functionalized building mixes, additives in concrete.

**PRECIOUSES METALS** like gold, silver extracted direct from the mining. The gold containing rocks must be cut in 8 cm diameter and treated with the industrial Vortex. 15 metric tons each hour applications available.

**UNSORTED WASTE** treatment plant for municipal, industrial and toxic waste is a reach source of prime material for new composite structures for 3D-Printing.

# INTERIMS FACILITIES DISTRIBUTION BASED ON CONTAINER MUDULES

TO BE USED AS PRIME MATERIAL FOR

# NANO POWDER FOR THE NEXT GENERATION OF 3D PRINTED PRODUCTS

## 41. ECONOMIC BUDGET

| Nº | Name | Unit | Summary |
|---|---|---|---|
| 1 | *The total area occupied by the plant* | thousand m2 | 91.000 |
| 2 | *Volume of powders produced, per year* | million tons | 15 |
| 3 | *Volume of products by 100 TITOMIC 3D printers, per year* | thousand t / year | TBA |
| 4 | *The total number of employees, people* | men | 2500 |
| | *Including working people* | women | 1000 |
| 5 | *Energy carrier's consumption* | | |
| | *Compressed air* | thousand m3 per year | 2.365.200,00 |
| | *Nitrogen* | thousand m3 per year | 728,00 |
| | *Technical water consumption* | thousand m3 / year | 10.00 |
| | *Electricity consumption* | MWh / year | 113.880,00 |
| 7 | *Cost of production facility* | € | 50.000.000,00 |
| 8 | *Cost of harbor installation* | € | 25.000.000,00 |
| 9 | *Cost of Green house facility* | € | 45.000.000,00 |
| 10 | *Cost of Algaculture facility* | € | 28.000.000,00 |
| 11 | *Cost of AVIS Tower* | € | 260.000.000,00 |
| 13 | *Cost of Infrastructure* | € | 20.000.000,00 |
| 14 | *Budget Construction cost Phase 1* | € | 418.000.000,00 |
| a | *Budget Simmtronics facilities* | € | 500.000.000,00 |
| b | *Budget Graphene installation and Laboratories* | € | 500.000.000,00 |
| 15 | *Cost of production Equipment* | € | 300.000.000,00 |
| 16 | *Cost of laboratories* | € | 25.000.000,00 |
| 17 | *Software & Hardware* | € | 150.000.000,00 |
| 18 | *Cost of Prototyping 3D printer streets* | € | 150.000.000,00 |
| 19 | *Selling and marketing* | € | 10.000.000,00 |
| 20 | *Budget Equipment Phase 2* | € | 635.000.000,00 |
| 21 | *Gate fee income* | € | 1.500.000.000,00 |
| 22 | *Trades of nano powder 15.000.000mt price range €50,00 to €300,00 per kg* | € | 1.000.000.000,00 |
| 23 | *Trades of industrial products* | € | 50.000.000,00 |
| 24 | *Trades of power production surplus (353.320.000KWh x€1,25)* | € | 416.000.000,00 |
| 25 | *Trades of organic food 30.000.000,00 kg* | € | 13.000.000,00 |
| 26 | *Trades of high sea fish 2500mt* | € | 8.500.000,00 |
| 27 | *Cross income* | € | 3.087.500.000,00 |
| 28 | *Cross expenses* | € | 179.250.000,00 |
| 29 | *Cost finance & Banking* | € | 70.000.000,00 |
| 30 | *Net Benefit* | € | 2.838.250.000,00 |
| 31 | *Budget Construction Phase 3* | € | 15.000.000.000.000 |

## 42. REGULATORY DOCUMENTS

*All works at the plant are organized in accordance with the main EU directives when dealing with waste:*

*The Waste Framework Directive (2006/12 / EC).*

*On the protection of the environment and soil when using sewage sludge in agriculture (86/278 / EEC).*

*On hazardous substances in batteries and accumulators (91/157 / EEC).*

*Hazardous waste (91/689 / EEC, 94/31 EU).*

*Supervision and control of transboundary movement of waste (Regulation 259/93 / EEC).*

*On the waste of electrical and electronic equipment (2002/96 / EC).*

*Landfills (199 9/31 / EC).*

*Waste incineration (2000/76 / EC).*

*Incineration of hazardous waste (94/67 / EC)*

*Waste statistics (2150/2002 / EU).*

*On the disposal of used oils (75/439 / EEC).*

*On the limitation of the emission of certain pollutants into the air by large combustion plants (2001/80 / EC).*

*Reporting (91/692 / EEC)*

Technology basics: https://www.downloads.siemens.com/download-center/Download.aspx?pos=download&fct=getasset&id1=A6V10430678