ISLAND CITY
CONSTRUCTION

ICC-Information brochure (short version)
February 2019

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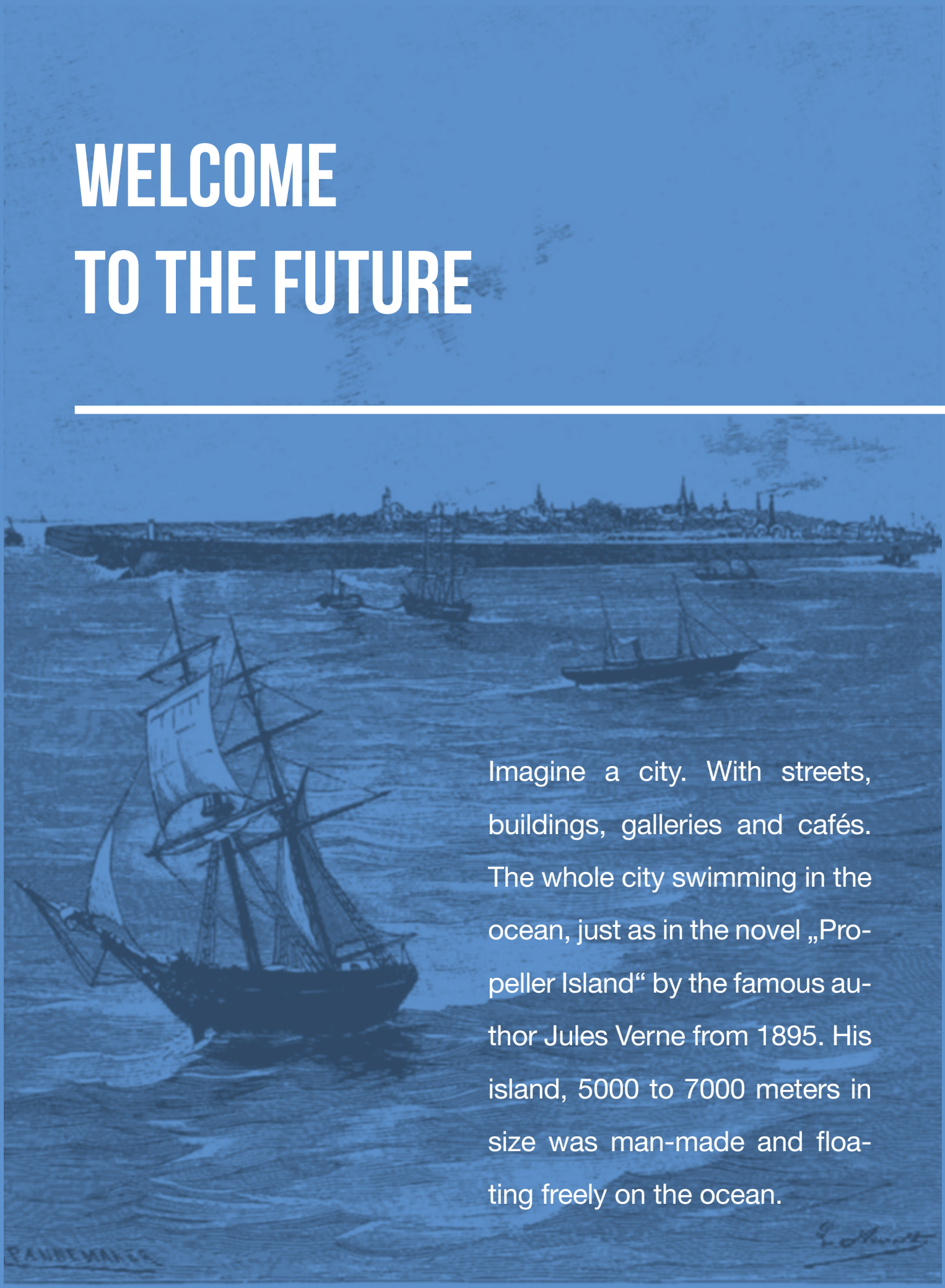
INHALT

WELCOME TO THE FUTURE



Imagine a city. With streets, buildings, galleries and cafés. The whole city swimming in the ocean, just as in the novel „Propeller Island“ by the famous author Jules Verne from 1895. His island, 5000 to 7000 meters in size was man-made and floating freely on the ocean.

MANY OF JULES VERNE'S VISIONS ARE ALREADY PART OF TODAY'S REALITY.

The famous Nautilus from „Twenty Thousand Leagues under the Sea", which we can recognize in today's nuclear submarines. His journey „From the Earth to the Moon" actually happened a hundred years after.

„Around the world in 80 days", his legendary tale, which seemed almost impossible at the time, only brings us a mere smile today. But what about his floating island in the ocean? Why has this vision of Jules Verne never been more than just a dream? The answer is simple:

> It was technologically infeasible!

But we are about to change that. With our already patented invention, we are able to bring one of Jules Verne's last visions to life. We enable land reclamation on the ocean, create offshore-industrial plants and revolutionize the naval engineering.

Soon, it will be possible to observe dolphins and wales from an artificial beach, while once in a while, at the furthest horizon, the mainland beach can be spotted. Imagine a floating platform in the middle of the sea, filled with solar cells and wind mills – and there are no citizen's initiatives against the project – because it does not disturb anyone. Think of an oil rig, not made of steel, but put on a floating island, saving huge manufacturing costs and being low maintenance. Or imagine projects of land reclamation such as The Palms in Dubai – just that they are not built on sand and require annual rework, but with technology which promises longevity and comfort from the very first day.

Wishful thinking? No. Simply our invention. And your chance as an investor.

The inventors behind Island City Construction and the Island Construction Module System are Michael Kostic and graduate engineer Michael Rutzen.

As technical and strategic consultants in the field of SME, they have been deeply engaged in the topic of foundations for floating cities. After the conception and development stage, the registration of the patents took place in December 2017. The international property right is guaranteed through the application at the German Patent Office.

Visualization of the modules
at the ratio of a persons
height of 180cm.

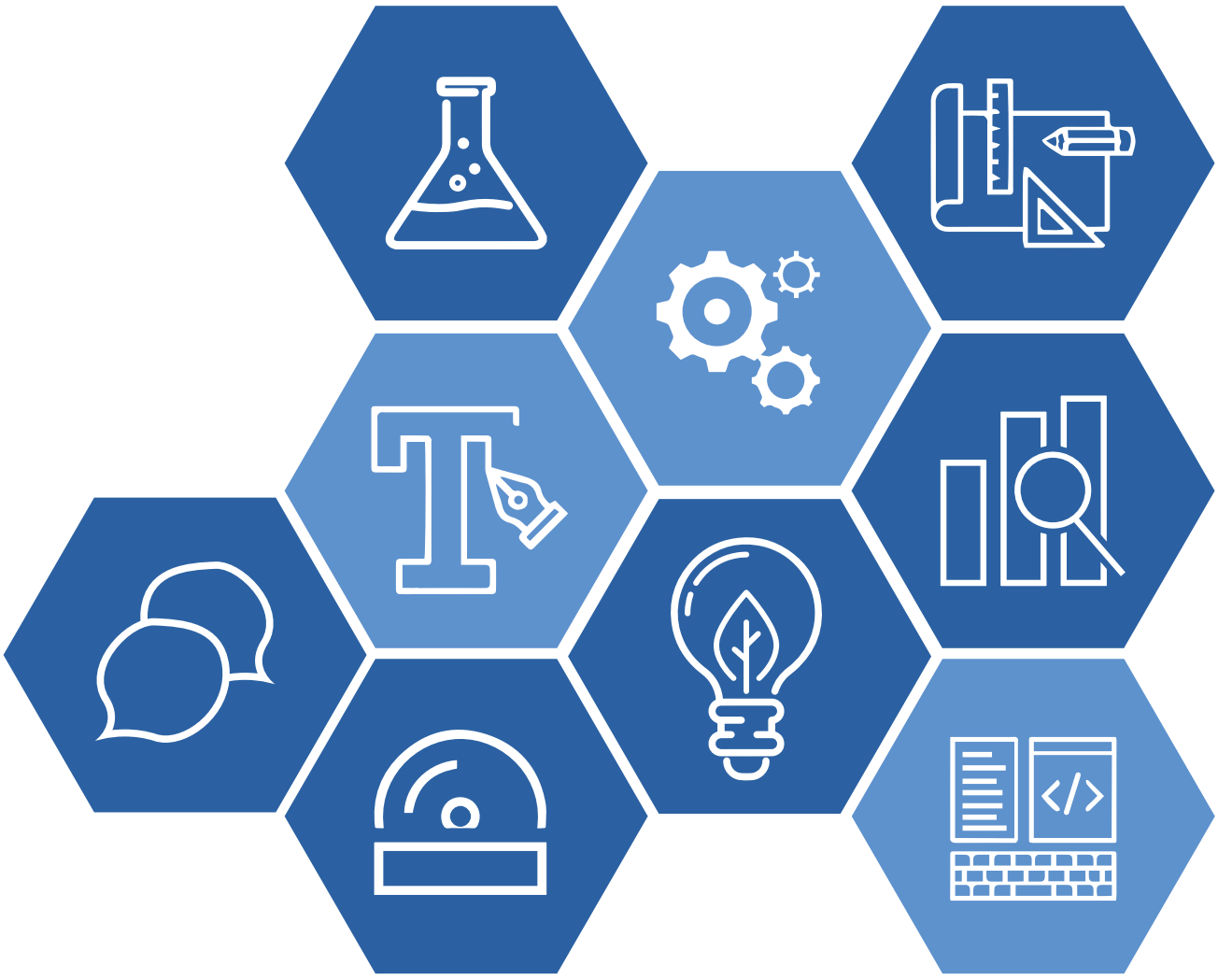
THE NETWORK BEHIND ISLAND CITY CONSTRUCTION

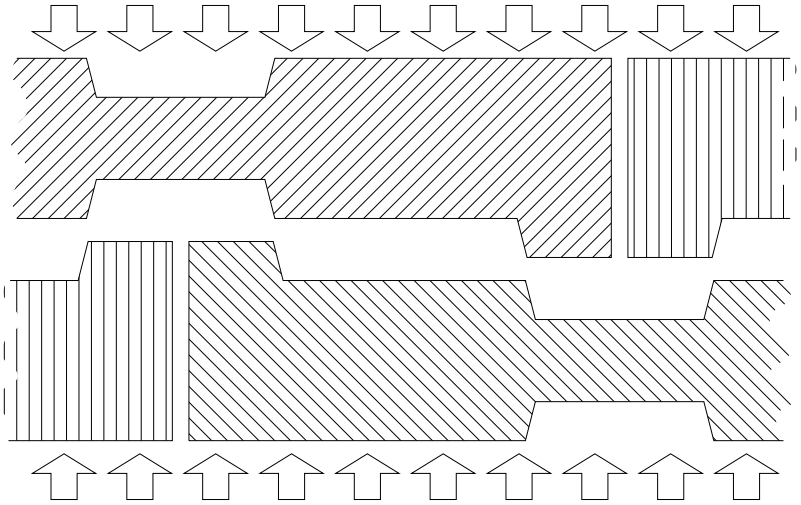
The inventors of the patent are motivated, have a patent registration for a product, which is worldwide the only of its kind, and want to make this vision become reality. A network of experts has already developed around Island City Construction and offers support for all essential steps. Thus, a potential investor has immediate access to a network of proven specialists.

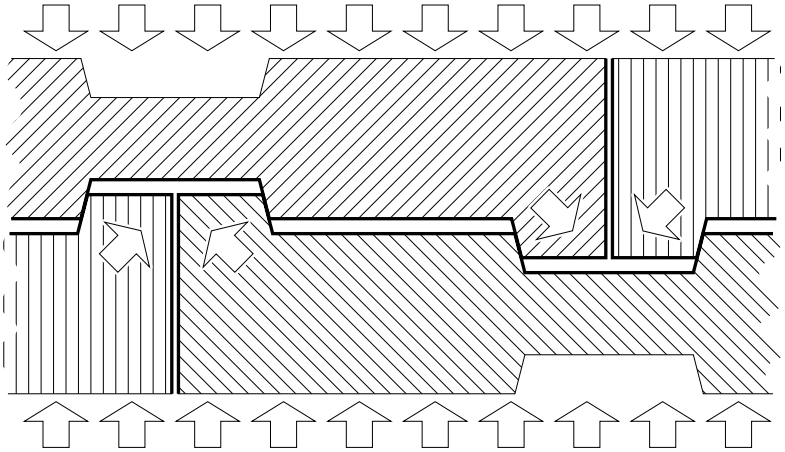
- Process Technician
- Chemist
- Architects und Structural Engineers
- Experts for Energy Systems
- Designers and Developers
- Communications Manager
- Business Administrators
- Digital Manager
- Industrial Designers
- Software Developers
- Art Directors

Through the already existing connections to experts in their respective fields, the realization of this complex project is possible in little time. As an investor, we promise you a short time to market with early return on investment.

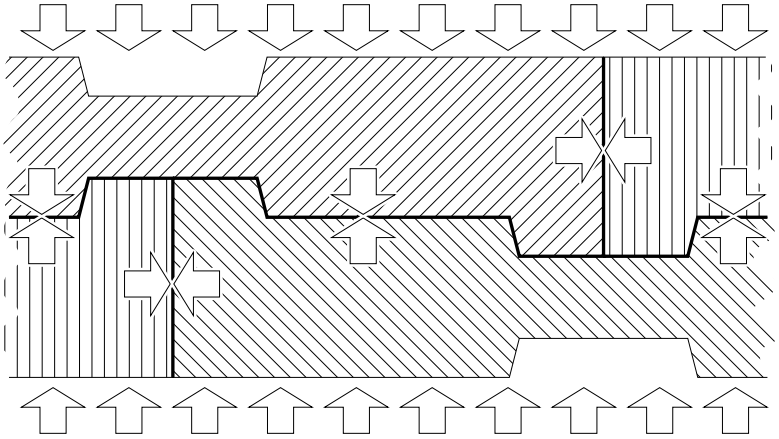
„THE ONES, WHO ARE CRAZY ENOUGH TO THINK THAT THEY CAN CHANGE THE WORLD ARE THE ONES WHO DO.“
(STEVE JOBS)



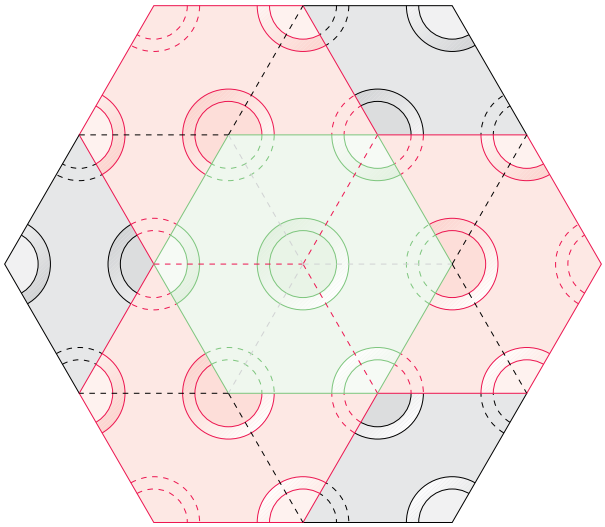




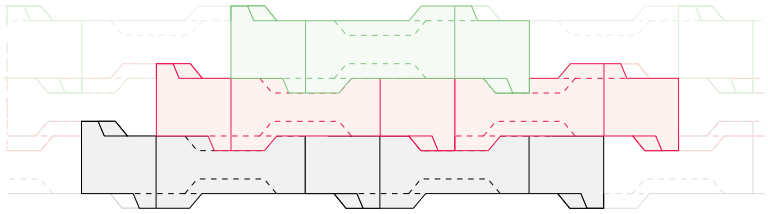
WEIGHT FORCE

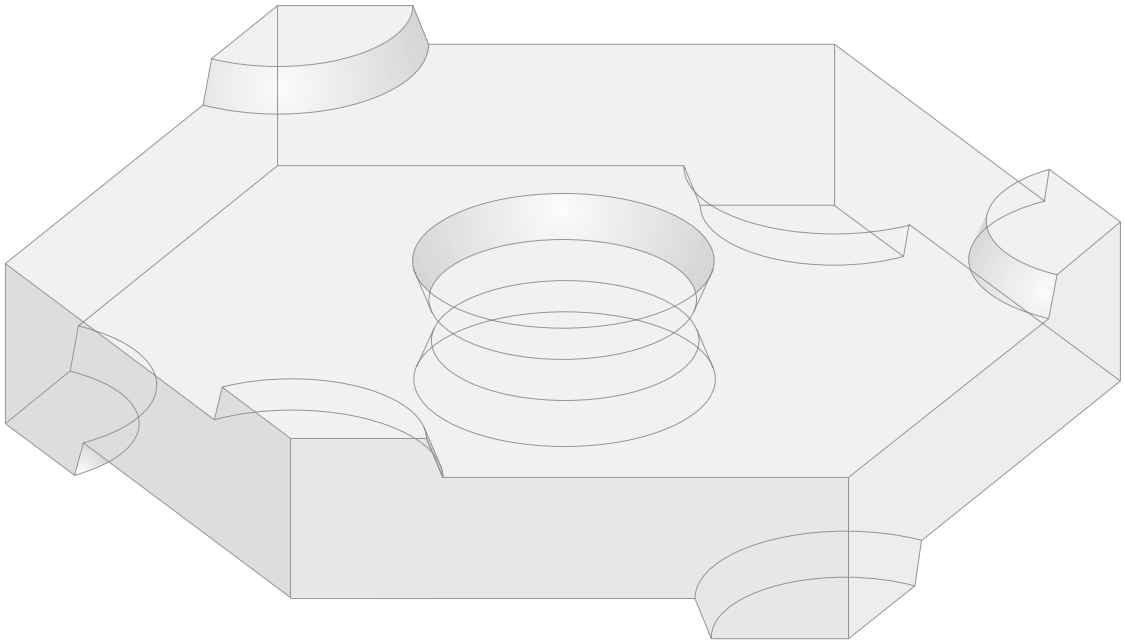


BUOYANCY



The illustrations shows how the patented modules slide in positive-fitting and friction-locked connections.





SAMPLE PROJECTS

EVENT ISLAND IN INLAND WATERS

Imagine, that you could build a brand new event location in the centre of Berlin or Hamburg, even though the property market is completely dried up. Impossible? No – we simply make use of places, where there is still available/accessible space which cannot be used today. We build a floating event island with all its necessities on water.

For the realization of an event island in inland waters, we calculated a platform of 2500 sq. m., whose overall loading capacity lies beyond 3000 tons. Even with maximum load, the platform still lies a meter above the waterline. As a comparison, an average detached house with two storeys and a floor space of 80 sq. m. weighs approximately 300 tons.

Such a platform would need around 29.000 modules. With a precalculated safety reserve of 3%, 30.000 modules would have to be produced. With the previously estimated material costs of € 68,52 per one-meter-module, the total production costs for the entire object would be € 2.055.600,-.

At the present time, we estimate 100% gross proceeds, whereby the object costs the customer € 4.111.200,-. Additionally, the costs for transportation, assembly and approval are overall € 10,- per module, which make an additional € 300.000,-. We estimate the costs for a 700 sq. m. venue for events such as weddings, office parties, birthdays etc. at roughly € 650.000,-, since modern technology is to be used. Thus the total costs for an economically utilizable event island are around € 5.061.000,-.

These costs are offset by a daily income of at least € 5.000,-, normally € 7.500,- and ideally € 10.000,- gross. At a year-round usage of 365 days, deducing 52 days off, 30 days of frost and 30 days of almost zero degrees, in short 253 days, bring a potential income of at least € 1.265.000,- (worst case) and maximum € 2.530.000,- (best case) gross per year. Personnel costs and operating costs of any gastronomic mangagement need to be deduced from this. Therefore the payback/amortization period in case of commercial use lasts from 3 to 5 years.

SAMPLE PROJECT

This means the construction method with our modules is profitable for investors within a short period of time. As a result, it is to be expected that such event islands can emerge on multiple inland waters worldwide. The modules, conception and even the assembly will then be managed by Island City Construction. However, it is also possible that Island City Construction operates these islands by itself, which generates an annual revenue of a 7 digit amount.

OIL RIG IN THE ATLANTIC

Another profitable application will be offshore oil extraction. To deliver oil, we will have to go farther and farther away from the shore. But since oil drilling platforms can no longer be anchored in these increased water depth, enormous ships are currently used to extract the oil.

A current example: „Pazflor“ FPSO (floating production storage): The ship is 325m long and 61m wide, constructed for crude oil and gas extraction in the Atlantic, approximatively 150km ahead of Angola. Its operating time is designed for 20 years. It weighs 120.000 t and carries an additional 32.000t in form of several constructions. It has a storage capacity of more than 300.000t. The total production costs were about 9 billion dollars.

The costs of the hull itself were about 2,3 billion dollars. We could deliver an equivalent island, which measures 350m times 350m and could deliver a load capacity of 377.000t at a depth of 11m and a height of 9m above the water line. Without any doubts, we could take on another 130.000t of load and would still lie 8m above the water line. The total load capacity, before the object could even be at risk of sinking, lies at approximately 1.600.000t! Based on the technical data of our product, we estimate an operating life of more than 100 years.

The costs for the island would amount to around 800 million dollars. This means that our price would be half of the usual at most, with 5 times the performance value. That way, our patent can make offshore oil extraction possible with significantly lower costs. Similar concepts can also be applied to offshore energy generation.

The total load capacity of our island with measurements of 350 times 350 meters and a height of 20 meters amounts to 1.600.000 tons.

Further explanations of the calculations:
The whole object has an own profitability which we see as 100%, which include all production and maintenance costs. Regarding the main production costs, we know that the hull costs 2,3 billion, thus accounting for 25,6 percent. 49 percent of the costs of the floating body can be reduced for the producer with the usage of our island at a purchase price of 1 billion € (around 1.18 billion $), which increases the overall calculation by about 12,4 %. Furthermore, the operator can save up to 60% of maintenance costs per year due to our product.

In the future, oil production needs to be transferred further onto the sea and it won’t be possible to to significantly lower the costs for ships (steel). Current developments (trade war China - USA) actually allow to estimate a remarkable rise of the costs for steel, which will steadily increase extraction costs. Our modules promise high cost savings for the offshore oil extraction, and therefore mean an obvious economical added value for any oil-producing company

THE TOTAL LOAD CAPACITY OF OUR ISLAND WITH MEASUREMENTS OF 350 TIMES 350 METERS AND A HEIGHT OF 20 METERS AMOUNTS TO 1.600.000 TONS.

Industry island

„THE PEARL“ IN QATAR

Another important market of the future for our product is the offshore land reclamation. Projects like this have become known through enormous projects, such as the ones in Dubai and other Arabic countries. In these cases the development of 400 ha (4 million m3) devoured around 20 billion dollars. At a depth of only 8m and a height of 2m above water line, we ensure a bearing load of more than 16.740.000t. However, the net production costs are just 10 billion dollars, which are only half of the current costs. Additionally, this involves the known advantages of our product. For instance, with our islands there is no need for an annual ground renewal, which poses an enormous cost factor. Apart from that, our product would be buoyant.

In case of offshore land reclamation, it is then possible to have immediate savings of up to 30 percent with our modules. In addition, offshore land reclamation projects could be the rescue for island states such as French Polynesia, whose Islands will completely disappear due to the rising sea levels over the next years in times of climate change. This shows that our modules do not only allow the creation of luxury projects, but also got the potential to save the living environment of a lot of people through solely humanitarian projects as well.

One valuable side effect, which should not be neglected, is the maneuverability of the floating land. To avoid a tempest, a currently available and reliable meteorological long-term prognosis can detect weather catastrophes at an early stage, and safe maritime areas can be headed for.

**“THERE’S NO IT WILL NEVER WORK!
THERE’S ONLY A IT WILL NEVER
WORK LIKE THIS!“
(ARTUR FISCHER VON FISCHERTECHNIK)**

Aerial view of „The Pearl“ in Qatar.

WHAT HAPPENS WHEN...?

... A TSUNAMI HITS?

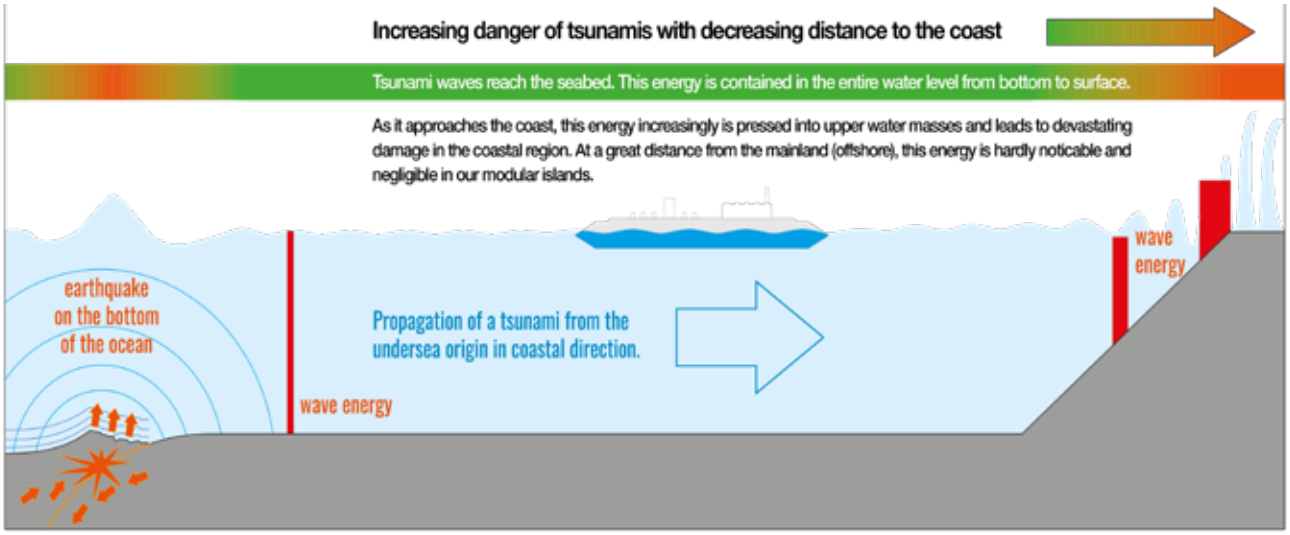
Tsunamis are gravity waves generated by displacement of water. 90% of all tsunamis are caused by earthquakes (other causes being landslides, volcanic activities or calving of glaciers for instance). Suprisingly only 1% of earthquakes cause tsunamis - This is because special conditions are required for an earthquake to cause considerable water displacement:

- The earthquake must be strong enough (Richter Magnitude of 7 or higher)
- The earthquakes hypocenter must be close to the sea bed
- The displacement of the ground must be vertical (this most likely happens at subduction boundaries of tectonic plates)

The primary danger of a tsunami is the energy it contains, which it obtained from an earthquake underwater at the sea bed. Tsunami waves reach to the seabed. Their energy lies in the entire water level between ground and surface.

With decreased distance to the coast, this energy is „pushed“ into the upper water masses. This energy is carried by the wave as soon as it hits the shore. There, the energy „piles up“ leading to the emerge of a single very large wave and several small ones, which have very destructive effects.

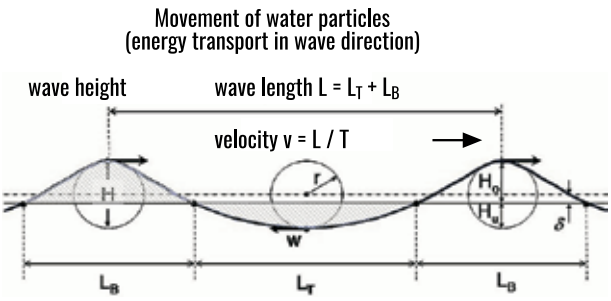
With great distance to mainland, that energy is barely noticeable and can be neglected with our modular islands. As with all ships and our floating islands, this kind of wave simply flows under our objects and therefore neither poses any danger to the object itself nor its extensions.



WHAT HAPPENS WHEN…?

…. A HEAVY SEA OR ROGUE WAVES OCCUR?

Rogue waves are water waves, which propagate independently of ordinary wind generated waves. They can have triple the height of the average waves at a given moment. They come suddenly without warning as a soliton wave or as a group of a few waves.



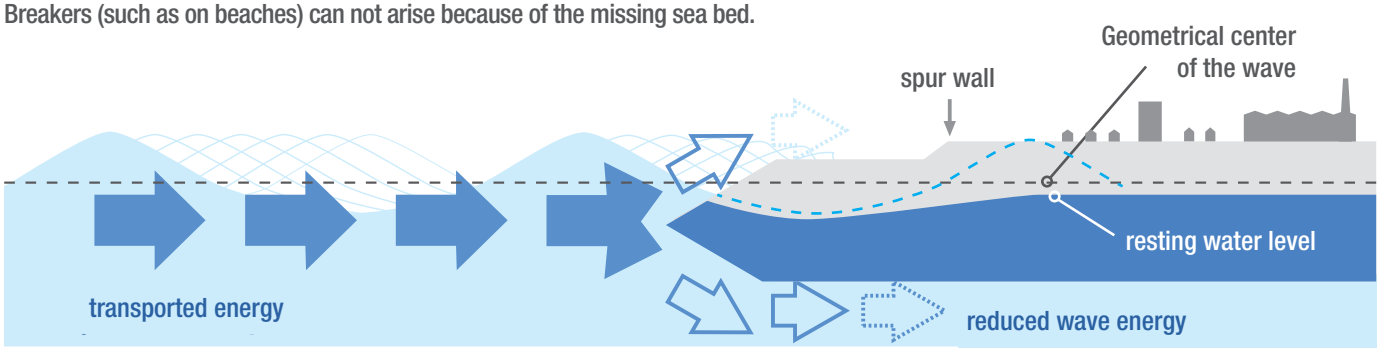
Other than tsunami waves, they have very short wave length and therefore floating bodies can't ride them but rather cut them. This leads to severe pressure loads, which can exceed the designed loads for ships by a factor of 6.

Rogue waves are in the focus of extensive research since 1995, where the first indisputable evidence of such waves has been recorded (on Norway's Draupner offshore platform 16/11-E). Previously, witness reports of freak waves have been doubted.

Due to their design, all sides of our high sea objects offer a horizontal wedge for the breaking of colliding waves. Contrary to conventional ships, waves don't collide with a steep ship wall or frontal extensions.

In the event of heavy sea or so-called rogue waves, our wedge edge takes up a very large amount of any deep waves' energy, because they get cut horizontally and only a small part of the wave hits the islands "coast". Of course, this water drains back into the ocean. Additionally a spur wall can protect the buildings on top of the island by keeping away any water emerging the island at bad weather conditions.

The low partial energy of colliding waves is broken down on the edge in short time.
Breakers (such as on beaches) can not arise because of the missing sea bed.



WHAT HAPPENS WHEN...?

.... EARTHQUAKES OCCUR?

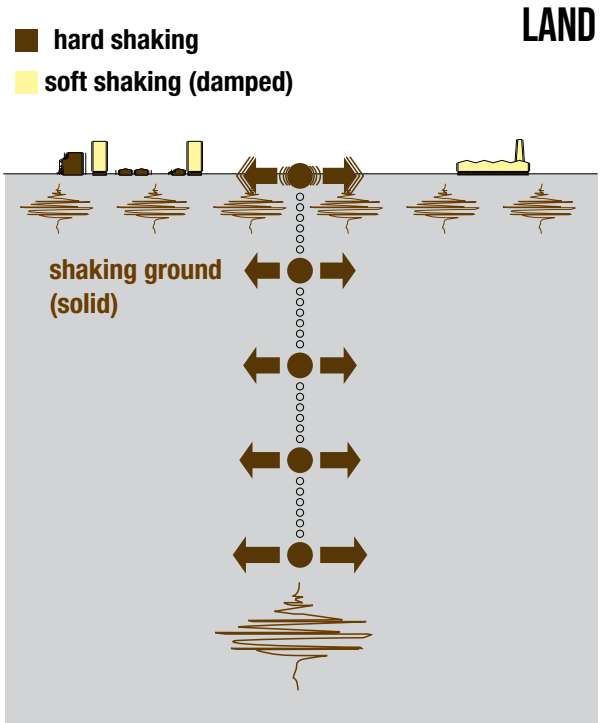
Earthquakes are particularly frequent in certain regions of the world. The most vulnerable areas are the regions on the edges of tectonic plates. Earthquakes often cause major casualties among the populations of affected countries. This affects human lives, buildings and infrastructure in equal measure.

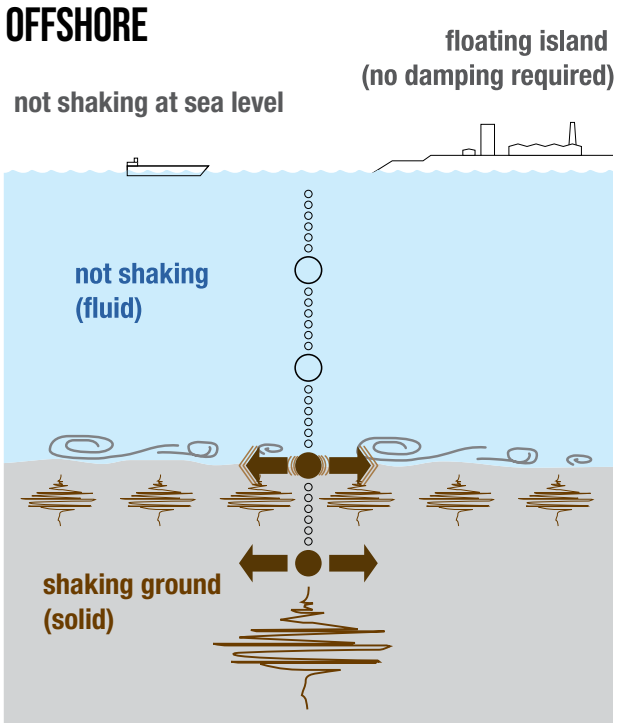
As already mentioned, only 1% of all earthquakes produce the dreaded tsunamis due to their strength, vertical orientation or proximity to the surface (seabed). Most earthquakes are either significantly weaker or mainly horizontal.

On land, earthquakes - regardless of their orientation - are devastating at a certain magnitude or near the epicentre.

All earthquakes with a horizontal orientation - i.e. when continental plates shift horizontally against each other - are normally not perceived on the high seas. The reason for this is, that the masses of water above do not move with the seabed even at low distance to the source of the earthquake due to their mobility and inertia.

On the high seas, earthquakes pose no danger to human life, buildings or other infrastructure on the surface of our floating islands. There is no need for special precautions with the building foundations for a damped transmission of movement through moving earth masses, as is necessary on land.





EXAMPLES OF USE

Nearshore construction projects

Only our system will allow most of these visions to become possible. The situation today shows, that many energy groups are working on that visions, but so far, were not able to execute any of them, because of the lacking technological groundwork. With our module system, their visions can be realized.

In principle, one thing applies to all nearshore objects: no land tax needs to be paid (so far), since the objects are located on the water. Let's suppose we build a 3 x 3 kilometers island before the coast of Rotterdam with 80.000.000 tons maximum load capacity as well as loading and unloading units. This means that only small tender boats, which can carry up to 10 containers and have nearly no draught, would need to commute between Rotterdam and the offshore harbor. Port expansion on main land with all its juristical problems becomes obsolete and no further land tax is due. The port operators save several billion euros on taxes, construction and maintenance costs every year. If one day the load capacity should no longer be enough, simply more modules will be added to and below the already existing fundamental structure. Customized to your needs, without any problems with the given population, possible building regulations or missing expansion possibilities.

Detail of an offshore harbour

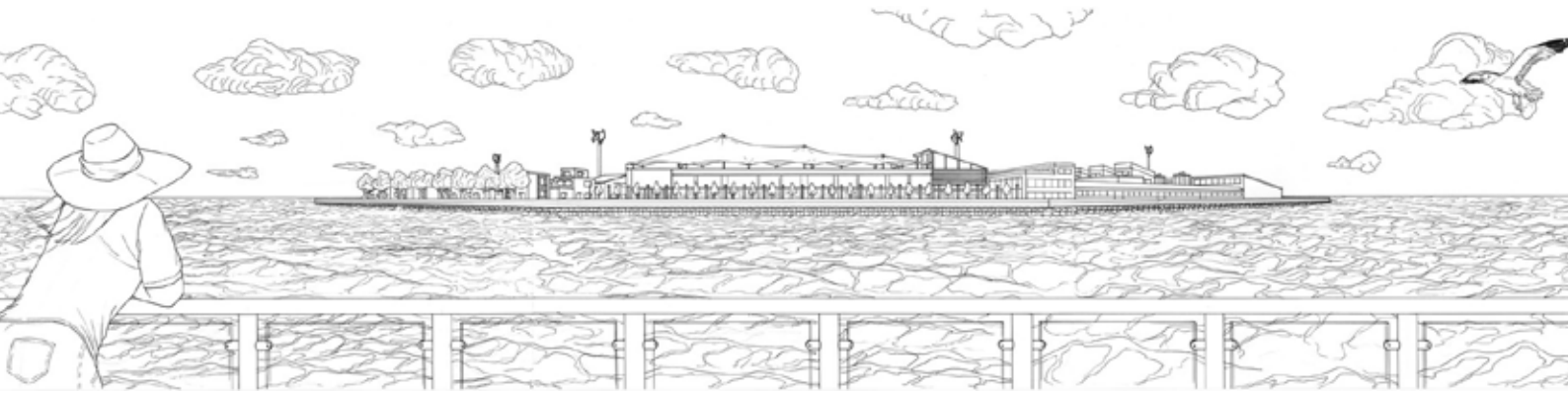
Semis production with self-sufficient power supply

Since the production of aluminum from the raw material bauxite requires a considerable energy input through electrolysis, it would be useful to move this production as close to the source of energy production as possible. The finished raw material aluminum could then be stored on the production platform until the transport vessels of the processing companies collect it. Optically repellent fabrication plants, as well as all noise pollution and odor nuisance would no longer be a thorn in the side of the population. The production (industrial plants) as well as the necessary energy production can be realized in close reach of each other through sufficiently large scaled facilities. A pleasant side effect is the lack of kilometer long electrical lines between the industrial areas, which would otherwise interfere with the populations field of view.

Supply Platform

(Refueling, waste disposal, fresh water/food supply of ships or airplanes)

To avoid growing pollution of oceans, supply platforms could be established. These platforms could follow alongside passenger and cargo ships at a lower speed and exchange waste, as well as supply them with fuel, potable water, food and if necessary other consumer goods. It would also be possible to provide platforms for layovers of aircrafts.
Less fuel mass would be necessary for trans-oceanic flights, which would at the same time protect the environment. The island could supply itself through on-site produced crude oil. A refinery on the island for the processing of the crude oil to aviation fuel seems reasonable as well.

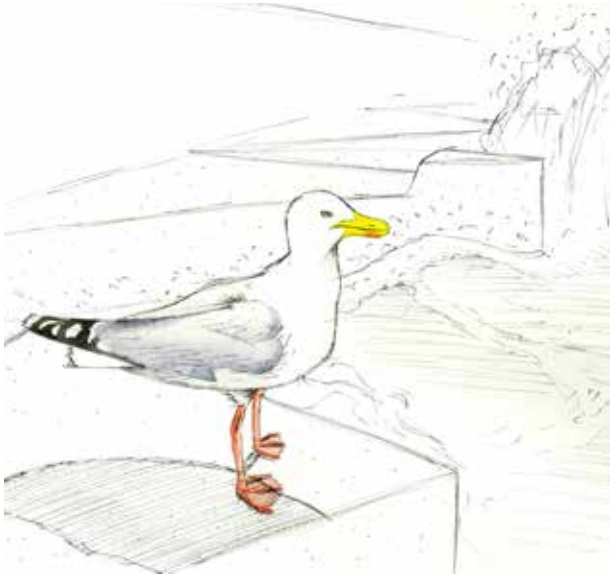


Land reclamation for food production

Additionally, new markets emerge through the possibility to urbanize oceans. Floating islands can be used to create space for food production, fish farming or as industrial territory.
Usually -in case of high population density- agricultural production areas take up areas, that are impassable and can neither be used for recreation nor cultivation. There is no denying that these areas are necessary for food production, however, this land area could be relocated off the coast. Not only does that apply to agriculture, but to cattle breeding as well. Cows or chickens will certainly not plunge into the ocean voluntarily! In addition to that, these offshore-plantations are geographically isolated from the rest of nature. Pests that severely damage harvests on the mainland, are unable to even enter such production islands. Even fish farms with fish species that would avoid swimming into dark, unmanageable areas could be implemented. This would allow the realization of islands in the ocean arranged in a ring around the fish farming area. Another possibility would be to span protection nets around the whole area into great depths. Whether it is in order to hold fish, that is more challenging to hold, or to create a protective barrier against predators.

Research platform for the exploration of the marine flora and fauna

Current marine biological projects either need research facilities on coasts or are part of any special equipment on research vessels which are tailored for their specific needs. With our island system it is possible to construct quasi-stationary research facilities on the open sea. Advantages would be the freely configurable expansion, as well as possible on-site facilities for laboratories. Research staff could stay in calm, spacious residential areas with conditions similar to those on land. With sufficient expansion of the areal, the typical movement of the water surface is no longer noticeable. The acoustical isolation of energy and heat supply facilities creates an undisturbed working environment. The confined conditions on current research vessels are omitted. A modular expansion of the research platform is possible, similar to the concept of the International Space Station (ISS).



Environmental Regeneration

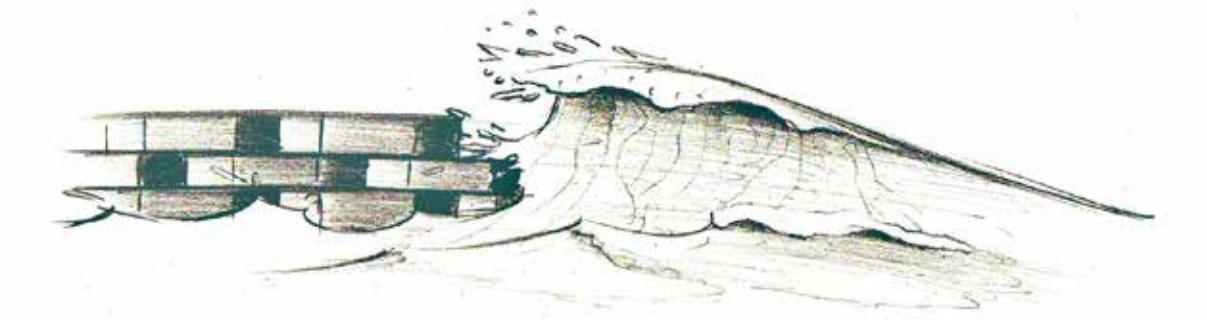
Platforms with a few hundred meters diameter can be used as base camp, collection and recycling stations, especially in critical areas of the sea with high plastic pollution.

The increasing plastic pollution of the sea needs to be stopped immediately, and if possible made reversed before the high concentration of micro plastic grows further through the mechanical shredding of any plastic components. If the reduction of plastic waste is handled through the usage of ships, costs and the additional pollution for the environment due to fuel consumption will grow. Furthermore, these attempts have previously failed, because of the vast spread of the plastic and the limited loading capacity of the ships.

A remedy would be platforms without propulsion, which would drift to the same places as the plastic waste, due to the ocean current. The platforms could serve as operational base for small boats or current based clean up systems (see project The Ocean Clean Up) to support the removal of any debris in the water. A professional processing (compaction, melting, production of synthetic bars, recycling, processing facilities for the production of components similar to crude oil…) of the salvaged products could be made carbon-neutral through the energy production with natural resources.

Anti-piracy stations for defense and prevention of criminal activities in critical sea areas

The growing threat of criminal assaults by armed pirates, e.g. Somalia – Indian Ocean, requires the presence of law enforcement posts, to prevent assaults. An offshore surveillance station, equipped with speed boats, could recognize early threats and prevent attacks. It is also possible to install communication and tracking systems on these surveillance stations.



LOAD-CAPACITY UPON NEED

The pursued density of our modules amounts to a minimum of 0,4/cm³ or less and can consequently bear an additional load of 0,6 per cubic meters volume above the water surface. The bigger islands are made to carry heavier loads.

SCALABLE, MODULAR

Almost any form of structure of the islands is possible, as long as it is in compliance with the minimum dimensions. Deliberate disparate static loads are systematically absorbed by modules that are placed precisely below. An expansion or conversion to new shapes at a later stage is possible at all times.

DURABILITY

Due to the usage of the latest manufacturing processes and a high degree of quality control, our modules are extremely endurable (+100 years) and withstand all currently known environmental influences. Our modules can even overcome minimal damages unproblematically. Major damages, caused by a vessel for instance, only affect the outer-border modules. These modules are easy to replace without endangering the carrying capacity of the entire island. Furthermore, the object does not deform after damage of this sort, which means that the overall static equilibrium is maintained. The dry dock henceforth belongs to the past!

PRICE

For the manufacturing of our modules neither expensive materials, nor scarce resources are required. The used resources are nearly unlimited and cheaply available worldwide. Thus, production facilities are feasible in all politically stable countries of the world.

UNRIVALED

There is an exclusion of similar systems for at least 20 years through the patent protection. The distribution established in this time, will more importantly maintain a sustainable and continuous demand, which means that any later competitors will face several difficulties entering this particular market.

“THE KEY TO INVESTING IS NOT ASSESSING HOW MUCH AN INDUSTRY IS GOING TO AFFECT SOCIETY, OR HOW MUCH IT WILL GROW, BUT RATHER DETERMINING THE COMPETITIVE ADVANTAGE OF ANY GIVEN COMPANY AND, ABOVE ALL, THE DURABILITY OF THAT ADVANTAGE.”
(WARREN BUFFETT)