# **CAS STATIONS BY THE SEA**

Johan Berggren Master thesis Chalmers 2015

# Gas stations by the sea

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A master thesis about the sea, diving and metal

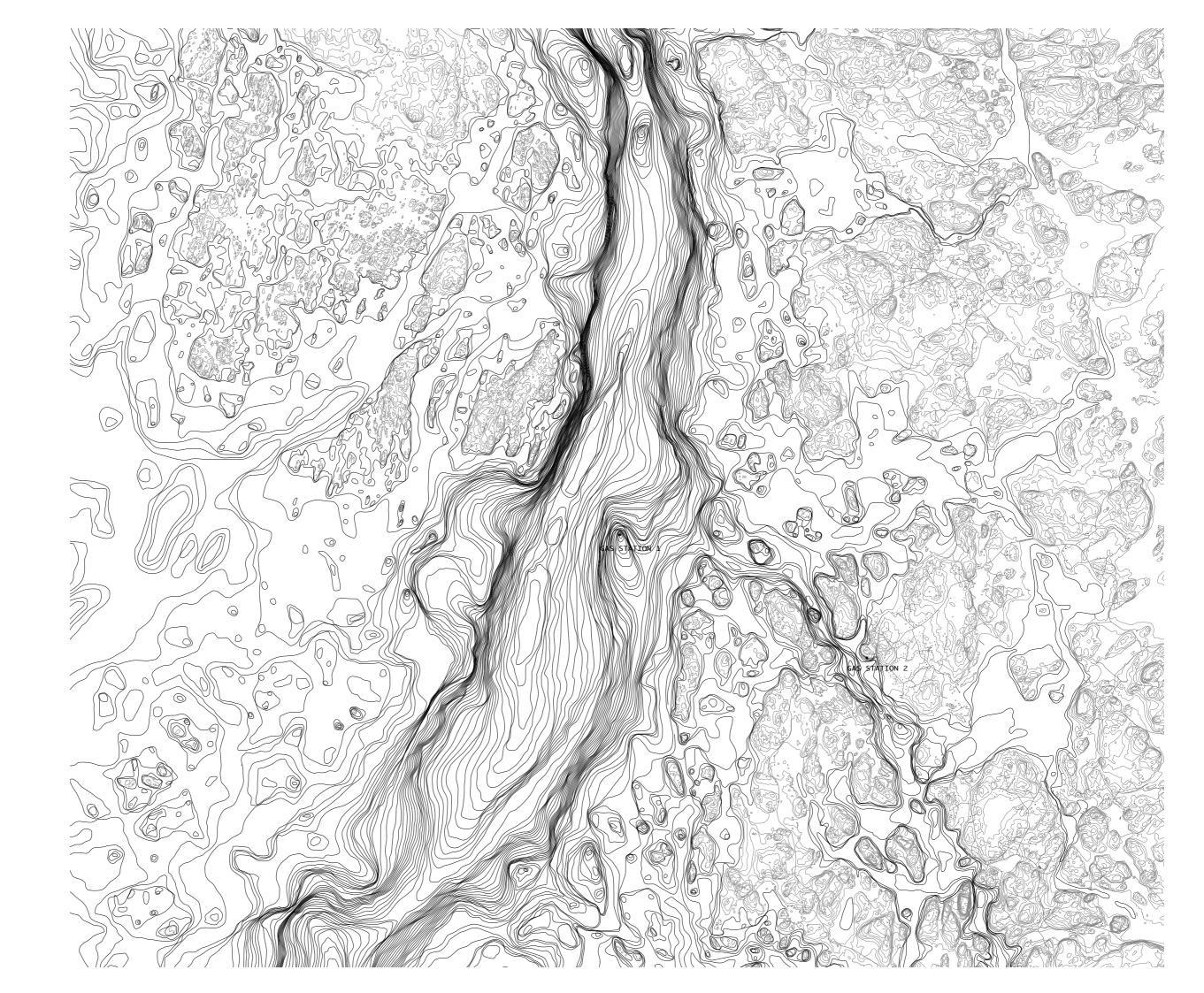
### The area

The archipelago of Koster, northern Bohuslän. Just south of the border to Norway.	Seagulls and seal
	Coffee thermos a
Cliffs, mountains and drop offs. And the sea surface. Under- neath it, also cliffs, mountains and drop offs.	And diving! In al

eals. Open waters and calm coves.

os and cheese sandwich.

n absolute world class.



A building to ease access to isles, reefs, shallows, diabase aisles, underwater fjords, full grown crabs etc ...

A gas station!

A gas station where you can refill your diving tanks and buy a slice of pizza.

# Gas station 1: Kosterfjorden

Floating in open waters. Plenty of good diving within a 10 km radius. Further away it is good too. Entry point for diving in Kosterfjorden. Gas supply: Air.





## Gas station 2: Resö harbor

Full gas supply: Air, oxygen, argon and helium. Food and drinks. Luggage spaces. Tools and spares. Electrical outlets and showers. Acess from mainland by car. Boat rentals. House reef.

# Gas station 1: Kosterfjorden

Fill air. Wait for air to fill. Carry on to somewhere else.

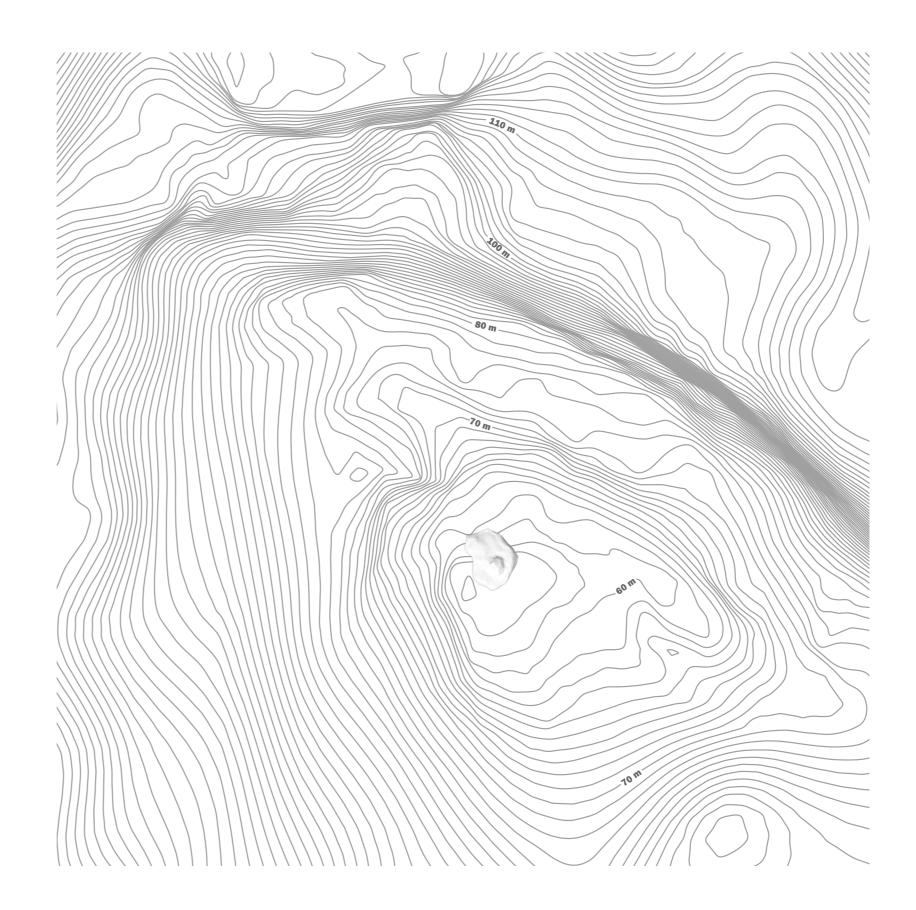
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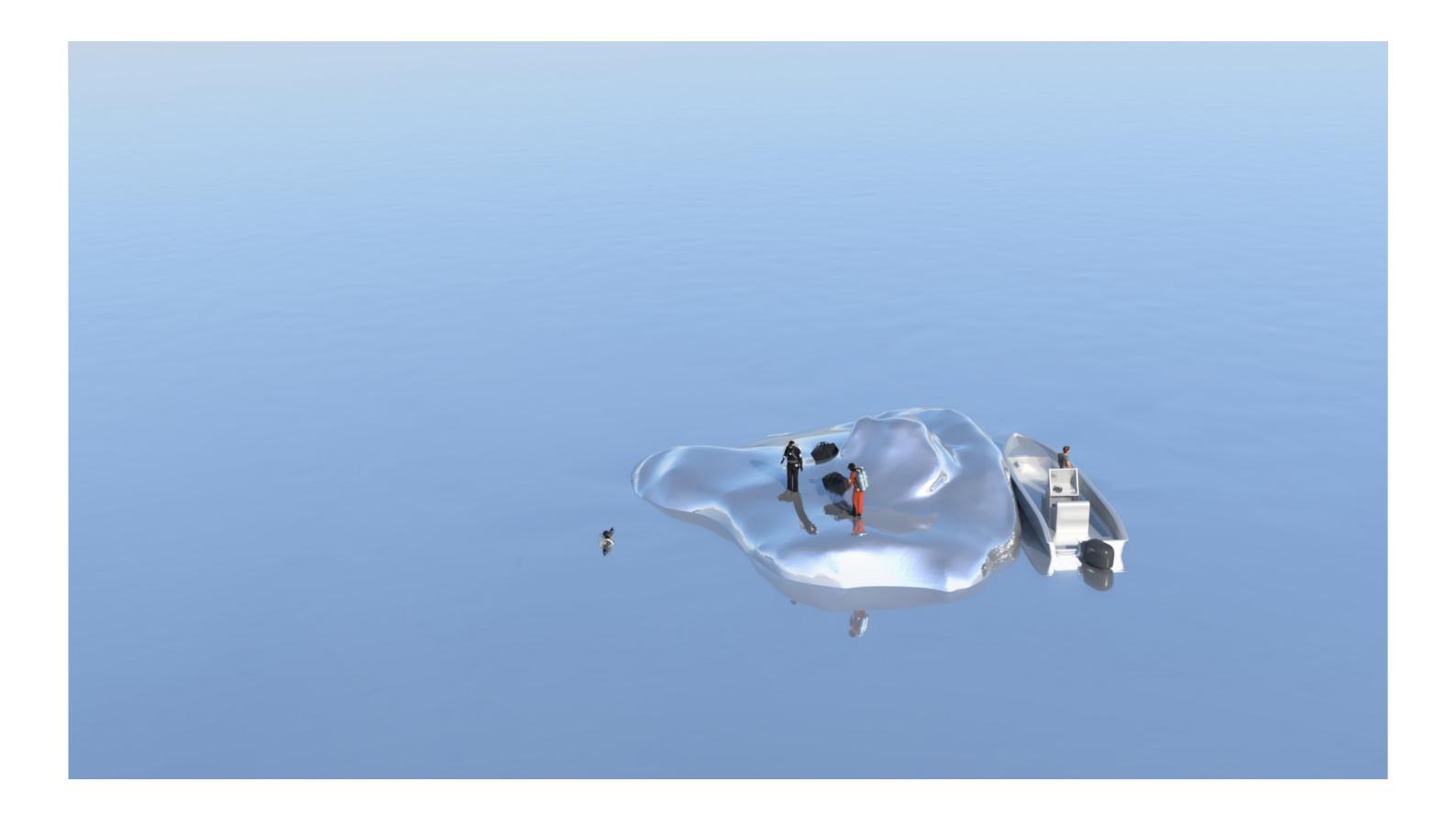
Stay. Unpack equipment. Put equipment on. Jump in. Swim down to 150 meter. Look at fishes.

Here floats a gas station in open waters, anchored to the tip of an underwater mountain next to Kosterfjorden.

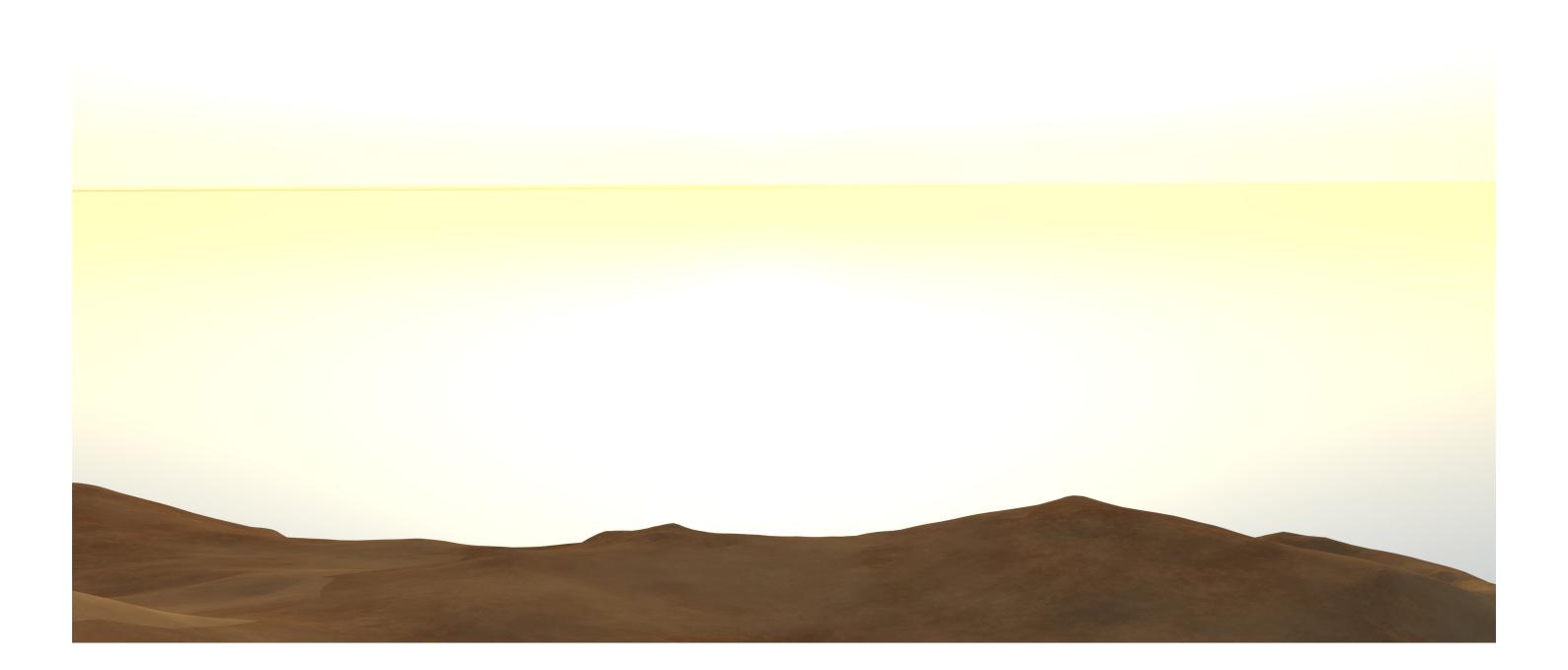
For those intending to dive deep just follow the gas stations anchor line down the tip of the mountain. And yes it is deep and it gets deeper. And wonderfully dim so a torch is good to have. Here and there in the fjord are coral reefs. Just to keep looking.

The position out in the sea makes the opening hours of the station somewhat weather dependent. But some day, or hour, now and then, then it goes!

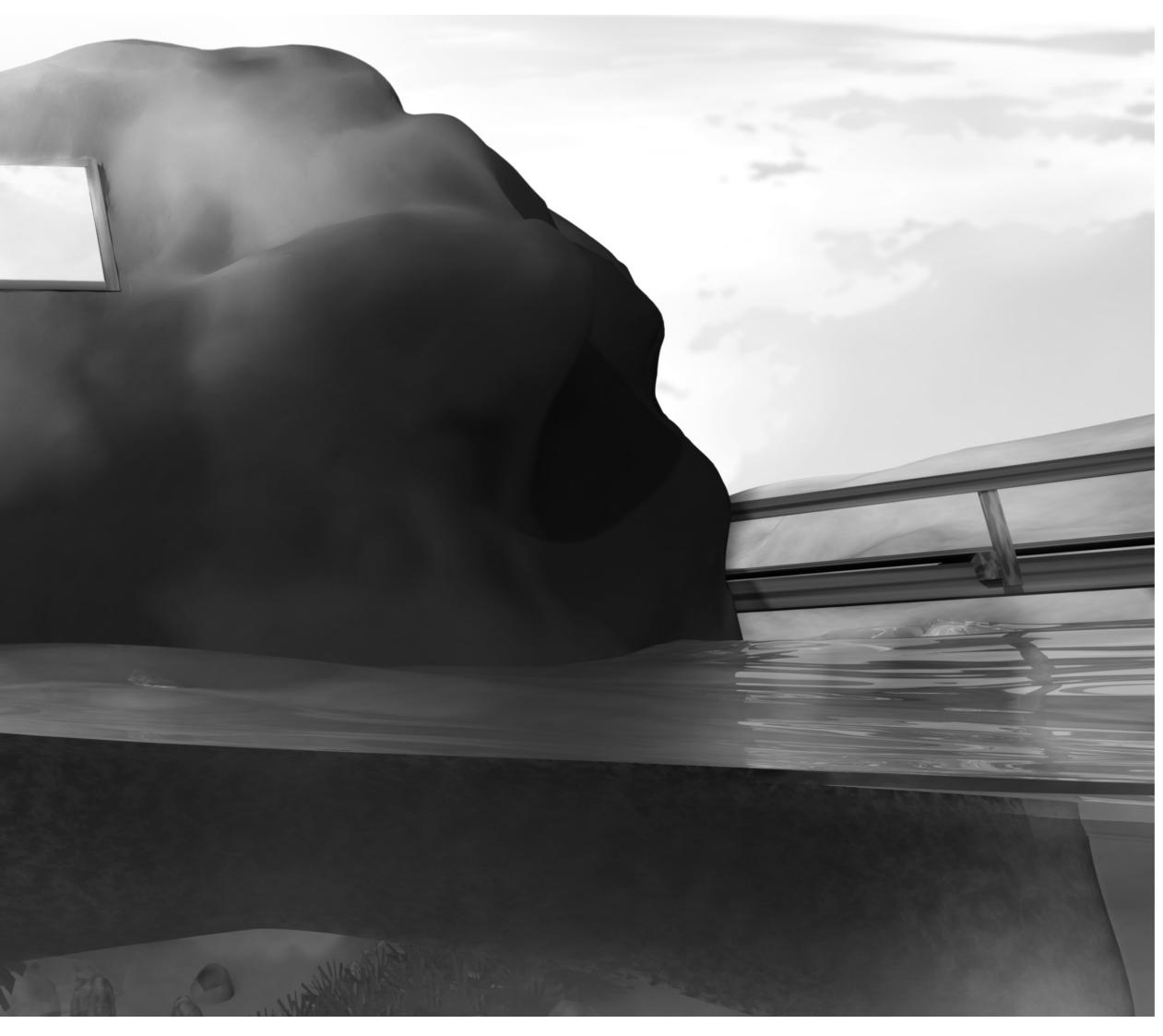




View over the sea from the station (That has got itself some rust).

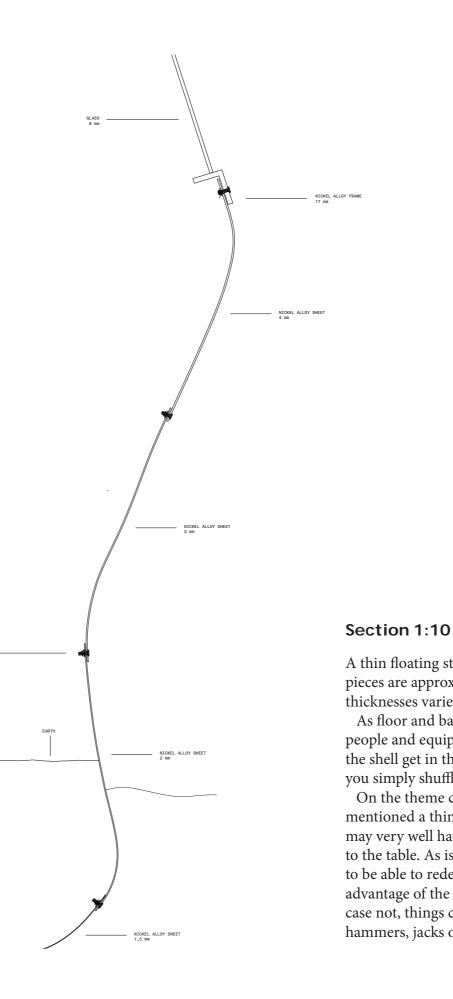






# Gas station 2: Resö harbour

Also floating and anchored to the sea bed. Slightly more weather protected site and added to that, is everything here that a cold, wet and hungry diver could wish for.



A thin floating steel shell. As a quilt. The steel pieces are approximately 50 x 50 cm and their thicknesses varies between 0,4 and 13 mm. As floor and ballast: Earth. Soaking wet people and equipment, no problem. Should the shell get in the mood of changing its form you simply shuffle the dirt.

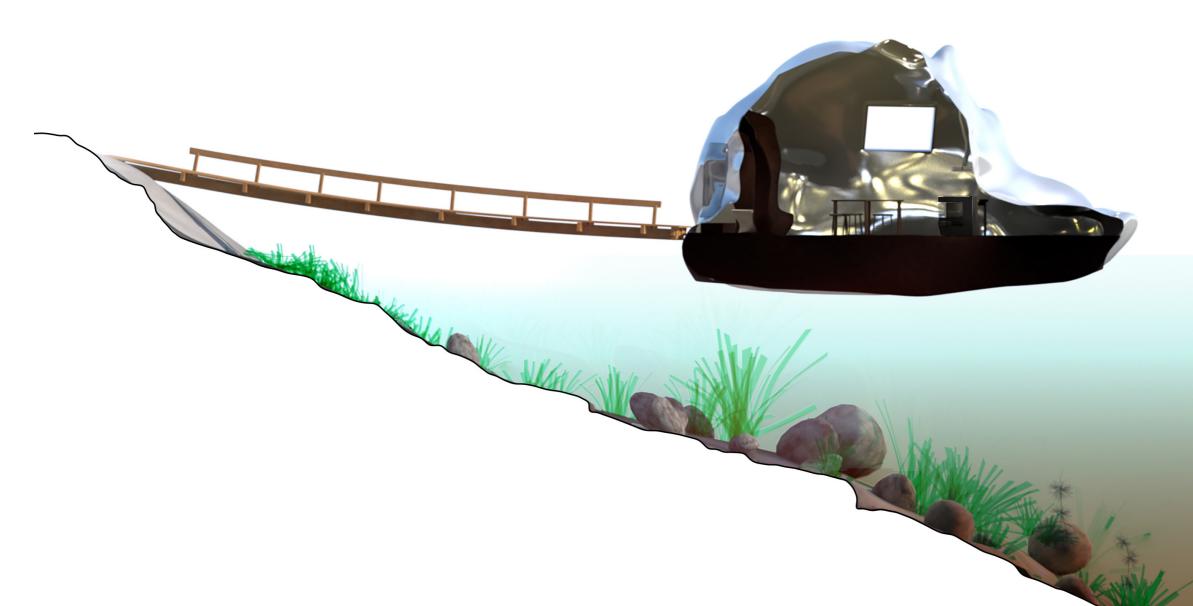
On the theme changing forms, this is as mentioned a thin shell. And autumn storms may very well have a thing or two to bring to the table. As is perceived, a storm ought to be able to redesign the shell. Maybe to the advantage of the facility's users, maybe not. In case not, things can be rearranged by kicks, hammers, jacks or what might be at disposal.

#### Section 1:75

At Resö harbour you park the car, walk out on a dock that goes at to a small island (that protects the island from waves). On the outside of the island is the gas station.

For whomever it is a somewhat decent bathing platform.

For those here to dive it is an extraordinary establishment for first and foremost filling tanks with breathing gas and perhaps renting a boat. Inside the gas station it might also be to one's advantage to have a look at charts to inform oneself of diving sites. Or maybe to buy an o-ring, a sandwich or finding the john.





## Plan 1:200

made of steel. gas banks and compressors. toilet.

parking boats.

The sea is big and in the floats a small bubble

Inside it are two tables and some chairs, a fridge and oven, luggage spaces along the walls and under the deck, and in the dirt floor

On the other side of the dirt wall/sofa is the

On the outside there isn't as much, pretty much only a shower. But plenty of space for making big piles of diving equipment and for

