



Abyssus Services



Abyssus Method



Common Method

## Strategic Use of Design in Offshore Projects

### COMPANY AND PROJECT GOALS

To maximize effect of design work in your project Abyssus helps you build a case study and gives you design viewpoint on your service in offshore operation. This overview can give you clearer image on what's possible and visualizes end result according to your company strategy

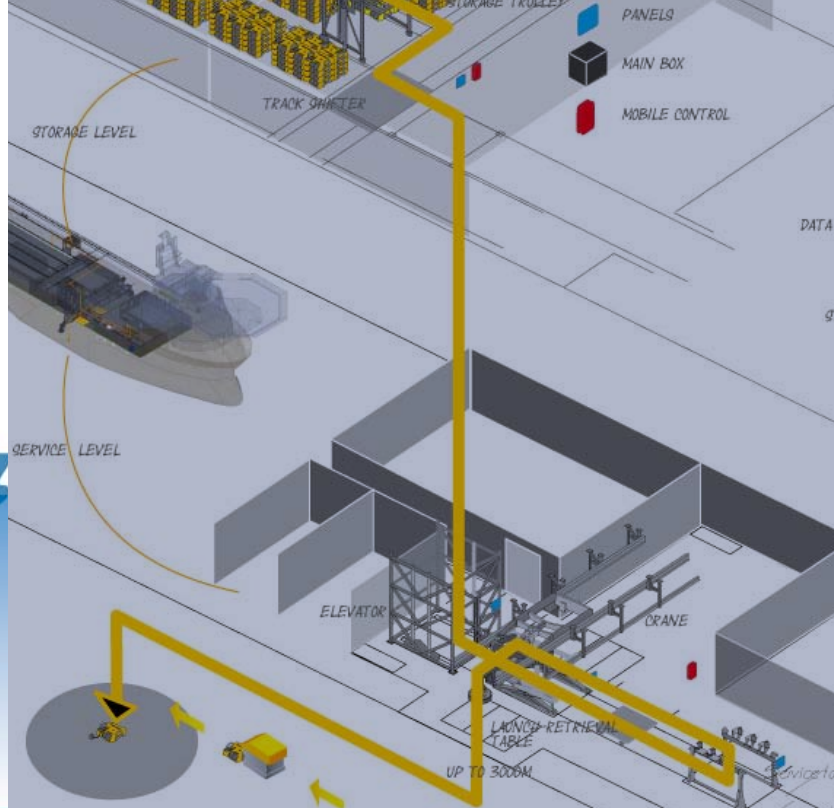
### ABYSSUS METHOD

- While mechanical engineering is focusing on functionality for minimum cost and effort, design has focus on user, operation logistics, and intuitive systems. This increases operation efficiency and brings technology closer to user and operation.
- Defining design demands is the process that sets ideal user-operation scenario for given cost/production constraints.
- This way functionality becomes an integrated part and leading role in user operational environment not the goal for itself.

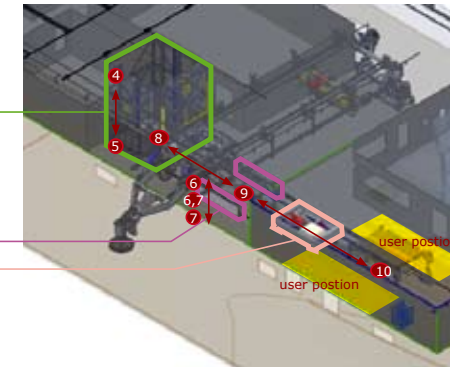
### BENEFITS

- Maximizes procedures efficiency, equipment usability, optimize operation and equipment cost and increase safety and never the less appeal to your clients.
- Examining user needs, making system intuitive and logical; on a highly competitive market this method brings big success as system becomes self explanatory, and operative.
- Benefits are visible in development process securing that suppliers are answering design demands not easiest to do solution
- Emphasizes company strategy making it more recognizable





- MC 2000 CONTROLS:
1. Key activator- turns on MC2000
  2. Push button locks the keyboard
  3. Push button stops all devices controlled by MC2000
- ELEVATOR CONTROL:
4. Push button UP- sends Elevator to UP END position
  5. Push button DOWN- sends Elevator to DOWN END position



## Designing Your Offshore Service

### USER WORKSHOP

- User is in focus of Abyssus Method. We start every project with talking to those who will run the operation and use the equipment. We examine staff structure and operators competence levels.
- Through discussions and observation of users we get a deeper understanding of their motivation, context, and needs. Searching for their opinion and previous experiences we collect rich documentation for the next step>

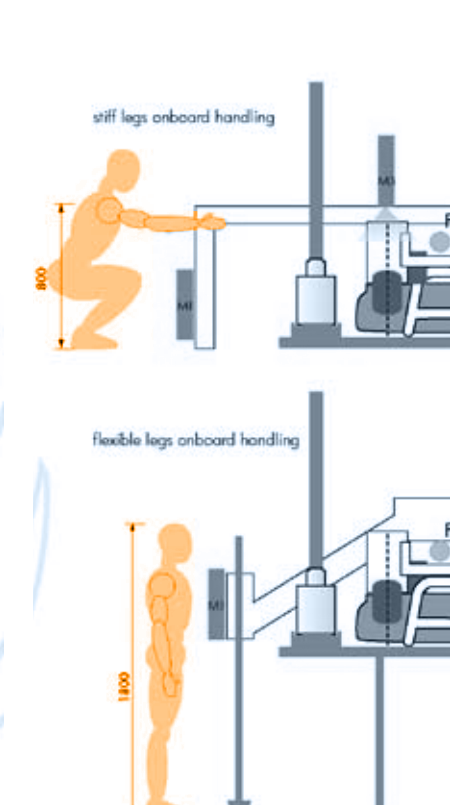
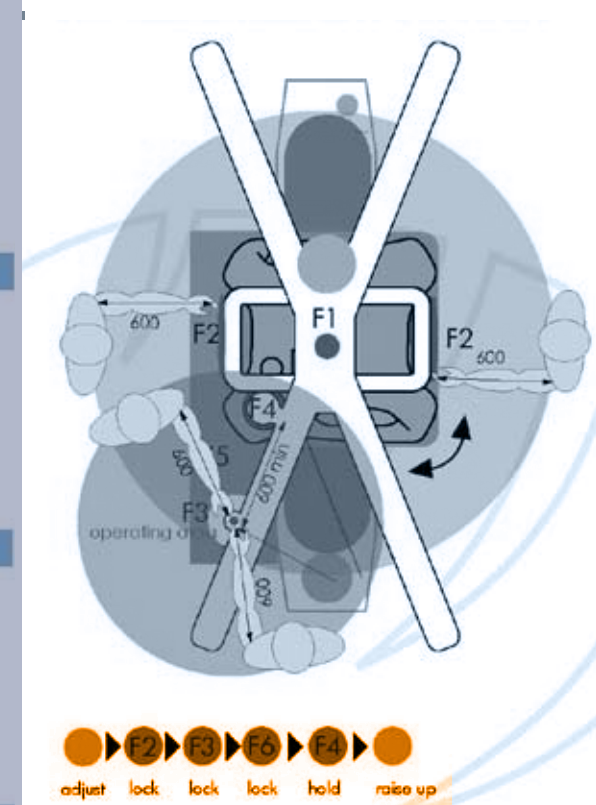
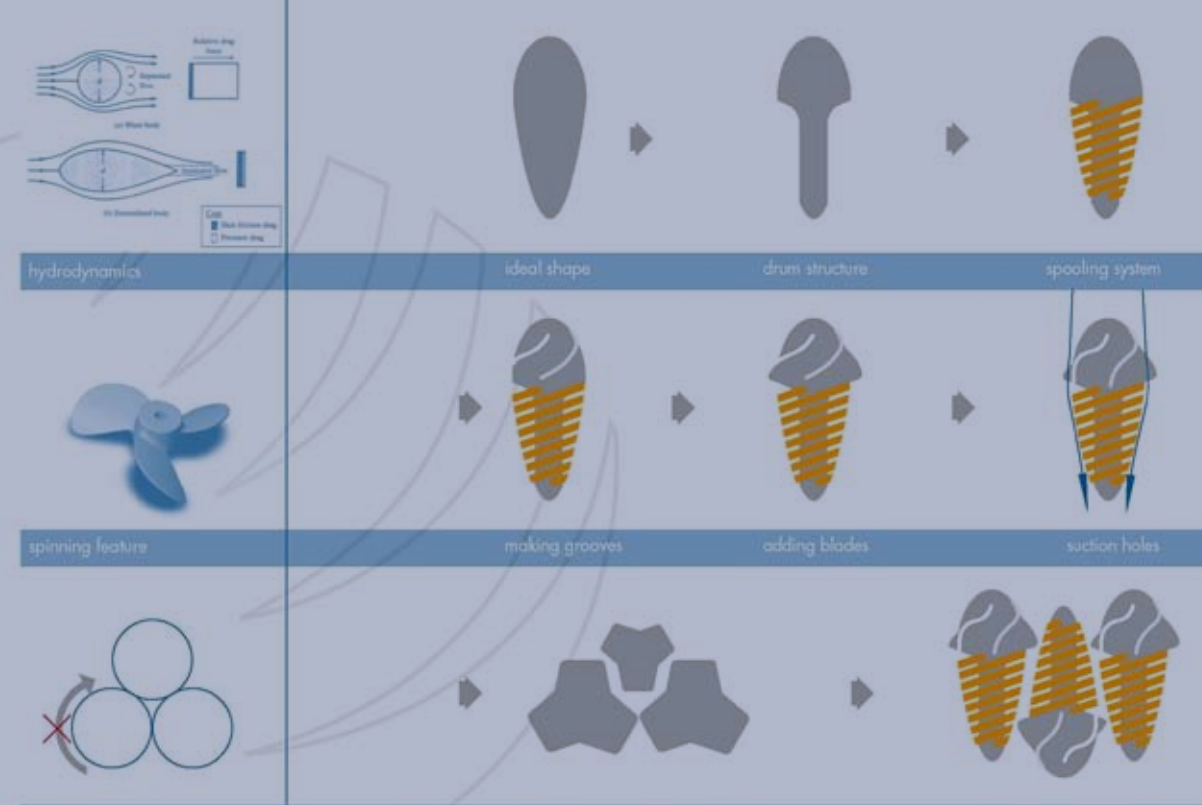
### OPERATION SCENARIO

- On this stage we break operation into procedures and procedures into steps. The basic sketch of logistics and time sequence is planned here.
- This gives overview on the scope of work and gives basic layout of environment the operation takes place.

### USER SCENARIO

- User scenario is created to list user activities in procedure sequence. We use discussion and observation to see how staff is perceiving operation and use opportunity to remove odds and adjust operation towards staff logistics.
- On this stage we identify interfaces / interaction points and layout routs used throughout the procedures.





## Equipment Design Demands

### OPERATION FEATURES

- Here we examine needed features to support operation sequence. The basic layout of equipment/product is formed through operation LIFECYCLES description. We focus on product function in operation system and environment.
- Basic demands are therefore set here including equipment behavior onboard: transport, stacking, assembly; and subsea: interaction units, subsea features, transformable parts.

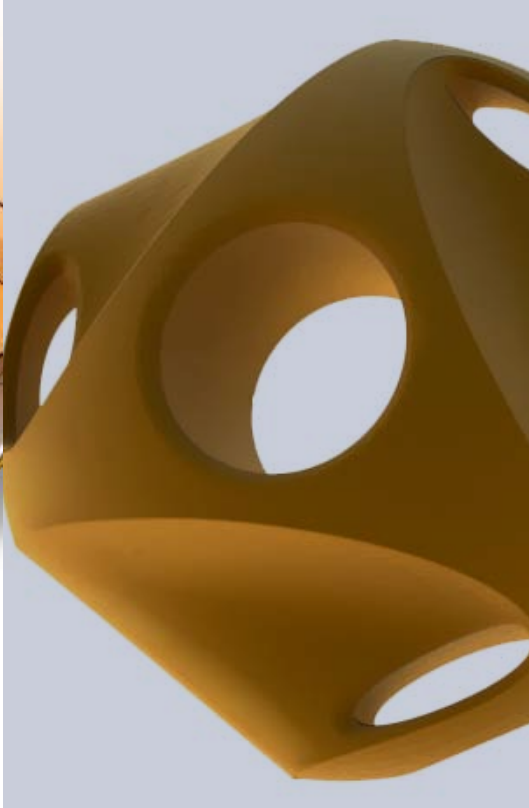
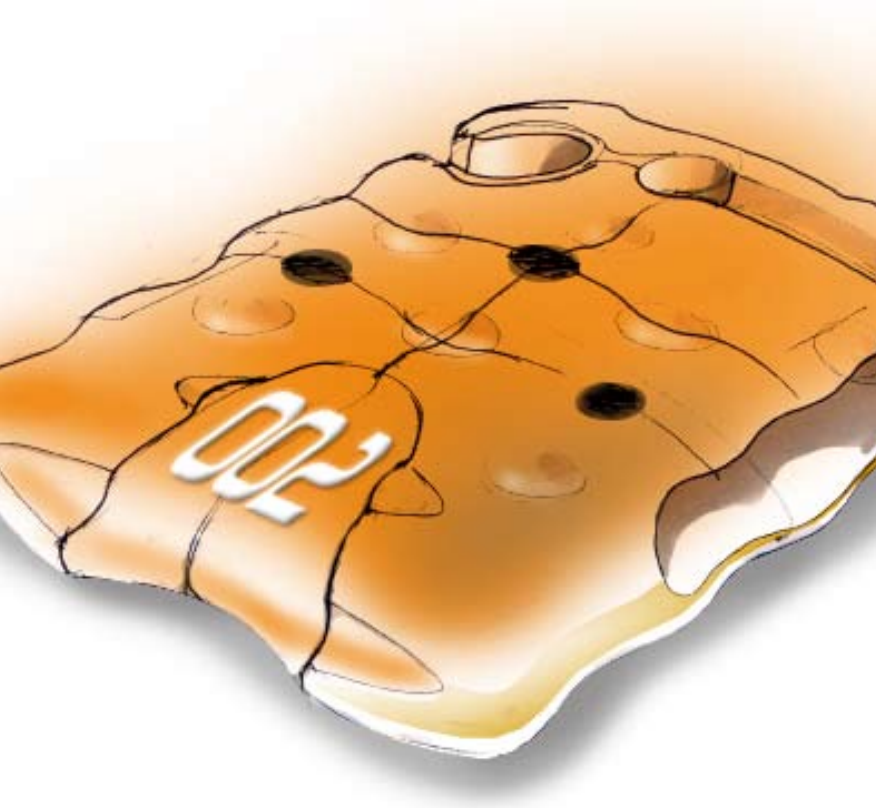
### USER / FUNCTIONALITY / SAFETY

- User interfaces are defined and controlling system discussed. This is time to bring issues on ergonomics and user demands on product structure.
- User involvement models are examined: attention levels for each step, control efficiency, functionality of the product and intuitiveness of product use.

### COST / PRODUCTION / MATERIAL

- It is time to involve suppliers and discuss construction, durability, eco solutions in total life cycle.
- Cost versus production scenario.
- Possible number of parts and assembly





## Industrial Design and Engineering

### SKETCH

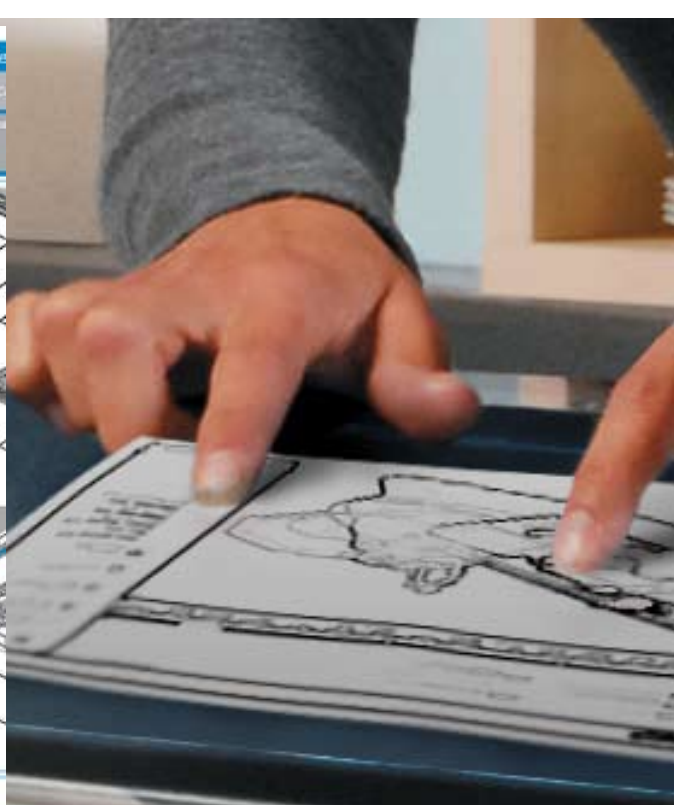
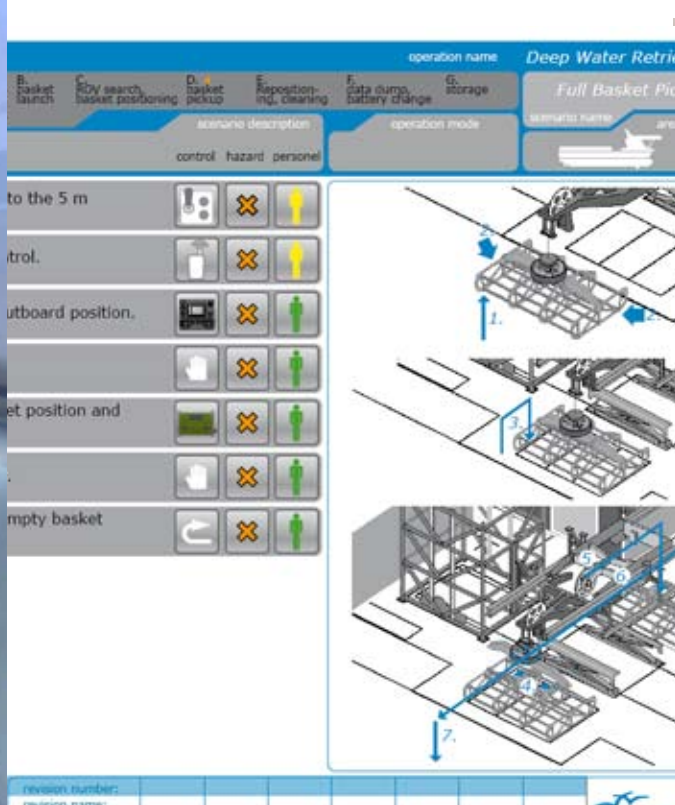
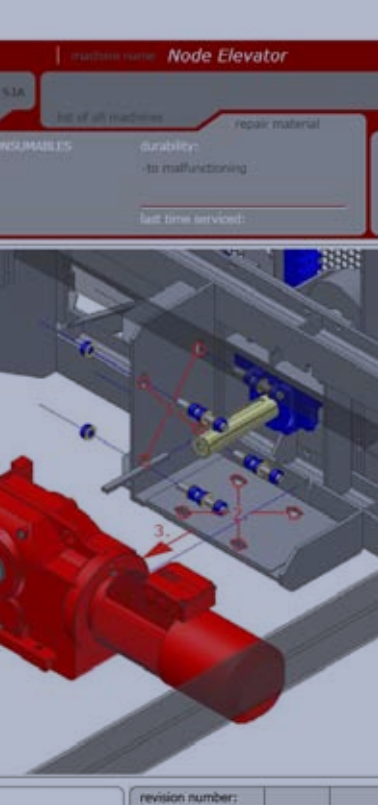
- There is no better medium than sketch for this complex process of analysis and then synthesis of ideas.
- We use sketch for exploring possibilities, developing concepts, merging product features, and giving it form.
- We merge good concepts and synthesize experience and insight we got through sketching phase.
- Sketch is also very useful in early phase visualizing final result fast, boosting confidence and propelling process.

### FORM-GIVING / MODELS

- We use clay and foam models to develop the shape of a product and detail features.
- Our staff has also experience with rapid prototyping and we are often using this technique to examine concepts and even work on RPT models adding features and modifying ideas.
- Rapid prototyping models always speeds communication and fuels discussions.

### CAD / VIRTUAL PROTOTYPING

- Abyssus staff is proficient in CAD modelling and can bring additional expertise on virtual prototyping and testing to insure our concepts.
- Abyssus uses Autodesk Inventor platform



## Interaction Design

### EQUIPMENT

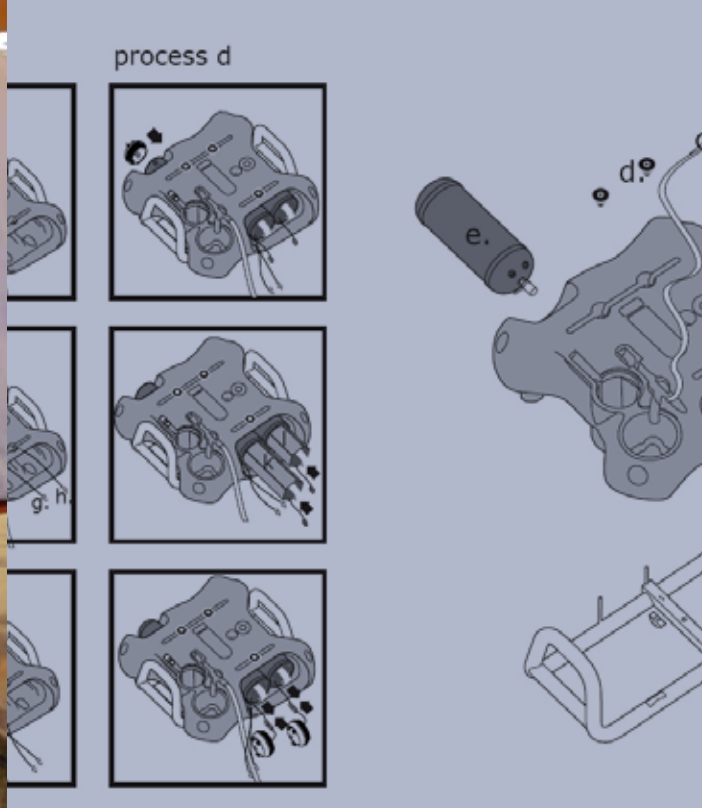
- Interaction design is integral part of every product and is defined by user's experience when using it. If it's good user experiences mastering, motivation, and pleasure.
- There is variety of factors in hostile offshore environment and taking care of user's attention level as well as motivation is of utmost importance for safety.
- We focus on making intuitive environment where user learns how to use equipment successfully in everyday routine.

### OPERATION

- Successful interaction design enhances operation and everyday routine. Highly aware of this fact Abyssus built experience in designing interactive manuals. These are used as introduction/teaching material about onboard environment and operation to newcomers as well as data base with detailed troubleshoot description.

### GUI

- Abyssus has experience with developing Graphic User Interface and network of suppliers for software development.
- Abyssus is using task analysis and basic user testing methods. We are also using paper and flash prototypes.



## Product Development and Testing

### PROTOTYPING

- Abyssus makes functional models for subsea testing. It is of utmost importance for us to simulate operations and challenge our ideas in reality.
- Results are compared and adjustments made before the final solution is adopted

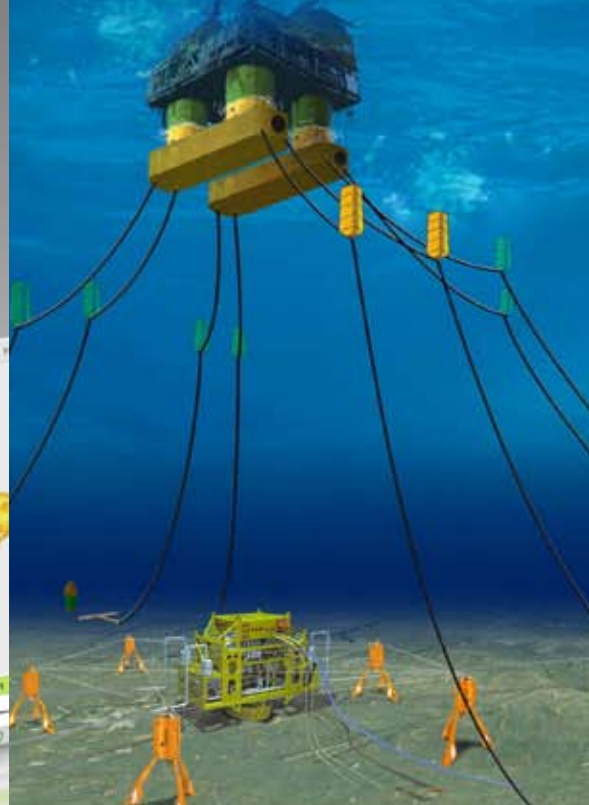
### TESTING

- Abyssus have the ability to follow projects through all parts of manufacturing and production. This way we can offer our clients expertise on site, and close follow up of their most important projects.
- Post installation support and offshore work is part of the Abyssus offering, with all staff certified for stay at sea. We follow up our deliveries to a ship or installation, with tailored manuals and procedures optimizing the solution.

### PRODUCTION / ASSEMBLY PLAN

- Abyssus follows up production through established network of suppliers
- We are heavily involved in mould tooling adjusting features toward production demands and designing additional production features
- We are involved in assembly planning and consider that as part of our product lifecycle





## Promotion

### PRINT / WEB

- Abyssus is constantly communicating ideas. Through this activity we get to develop web content, illustration, graphic stationary and your product/service identity.
- Abyssus is using full Adobe package for web and desktop publishing

### 3D / ANIMATION

Abyssus takes care that your clients easily understand potential of your service. For this we use 2d flash and 3d animation.

