

# DELIVERING THE DIFFERENCE™



# Circular Ocean Conference, Ålesund September 1.-2. 2016

## Mørenot Aquaculture - division

- **Bente Lund Jacobsen**
- Mørenot Aquaculture
- CEO



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- Mørenot Aquaculture – 12 companies – 8 along the Norwegian coast, 1 in Spain, 1 in Shetland, 1 in Scotland and 1 in Canada – for now...

# Are fishnets made for recycling?

- From a suppliers point of view



# Mørenot Group – established in 1948



**MØRENOT**  
FISHERY



Mørenot Fishery manufactures and supplies all types of fishing gear that can be used for commercial fishing. Through our own affiliates, or agents, we are present in all major markets where there are fisheries.



**MØRENOT**  
AQUACULTURE



Mørenot Aquaculture produces netting and nets in nylon and Dyneema®, and delivers custom moorings, de-lousing tarpaulins, top nets, dead fish collectors and other equipment to farms. We also offer services such as wash, repair and coating/impregnation.



**MØRENOT**  
OFFSHORE



Mørenot Offshore has extensive experience and is well established as a supplier of equipment for the global marine seismic industry. In recent years, we have made significant investments in product development and increased our expertise in design and advanced calculations.





# What is forgotten or dumped in the sea?

Examples:

- Trawls
- Purse seines
- Gil nets
- Wires
- Chain
- Bolts
- Shacles
- Bouys
- Ropes
- Etc
- Etc



- Wastedumping in the sea from different segments

# Mørenot Group

## Fiber purchase and production

- Purchase most of the non advanced ropes from suppliers in Europe and Asia
- Produce special ropes – Plexus ® and floate rope at factory in Norway
- Produce netting in Nylon, Dyneema® at factory in Norway
- Purchase neting in HDPE, Polyester, purse seine netting, trawl netting and gil nets from Suppliers in Asia

## Annual production of netting and rope

### Netting:

- Nylon 800 to 1000 ton pr year
- Dyneema 30-40 ton per year

### Rope:

- 60-70 ton per year
- 200.000 metres per year – plexus
- 400.000 metres per year – flote ropes

# Ghost nets or degradable fishnets?

- Fish nets made of Nylon, can ghost fish for more than 20 years
- Norwegian authorities make a yearly effort to reduce ghost fishing
- Degradable fishnets will also leave some traces in sea – we do not know enough but it is interesting to see the future gilnet

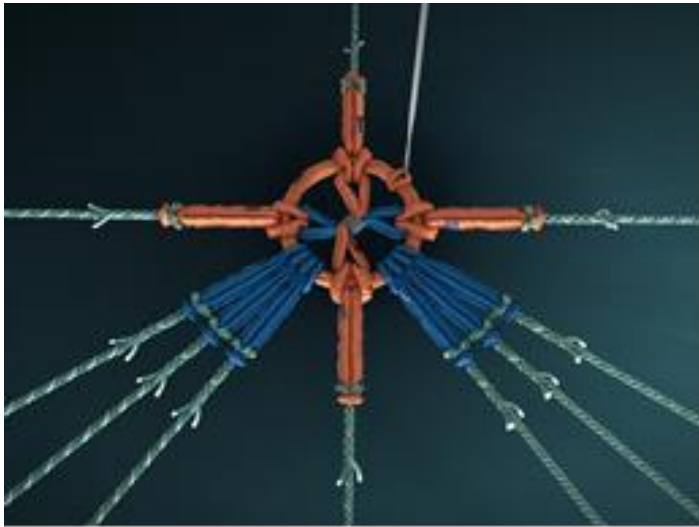






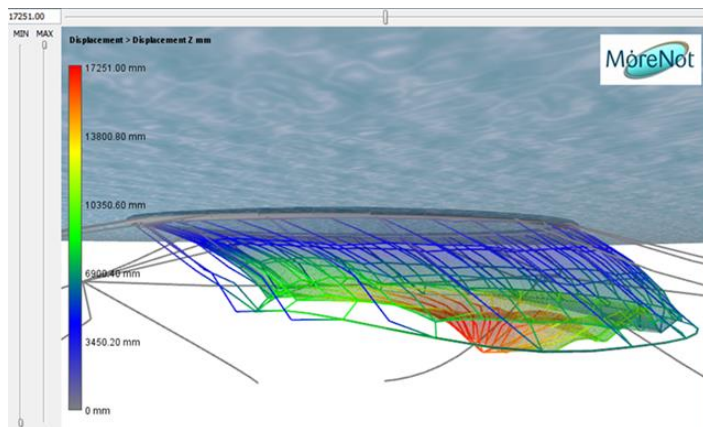
# How can we contribute?

# Flexilink® system



- Hardware free mooring grid
  - fibre ropes and slings
- Prefabricated grid
  - easy to deploy
- Less components
  - lower installation costs
- Provides great security
  - less components
- Long lifetime
  - less maintenance

## Nets and moring



- Design based on analysis, conditions, experience and industry standards
- Made by tested and best quality materials to avoid damages and escapes

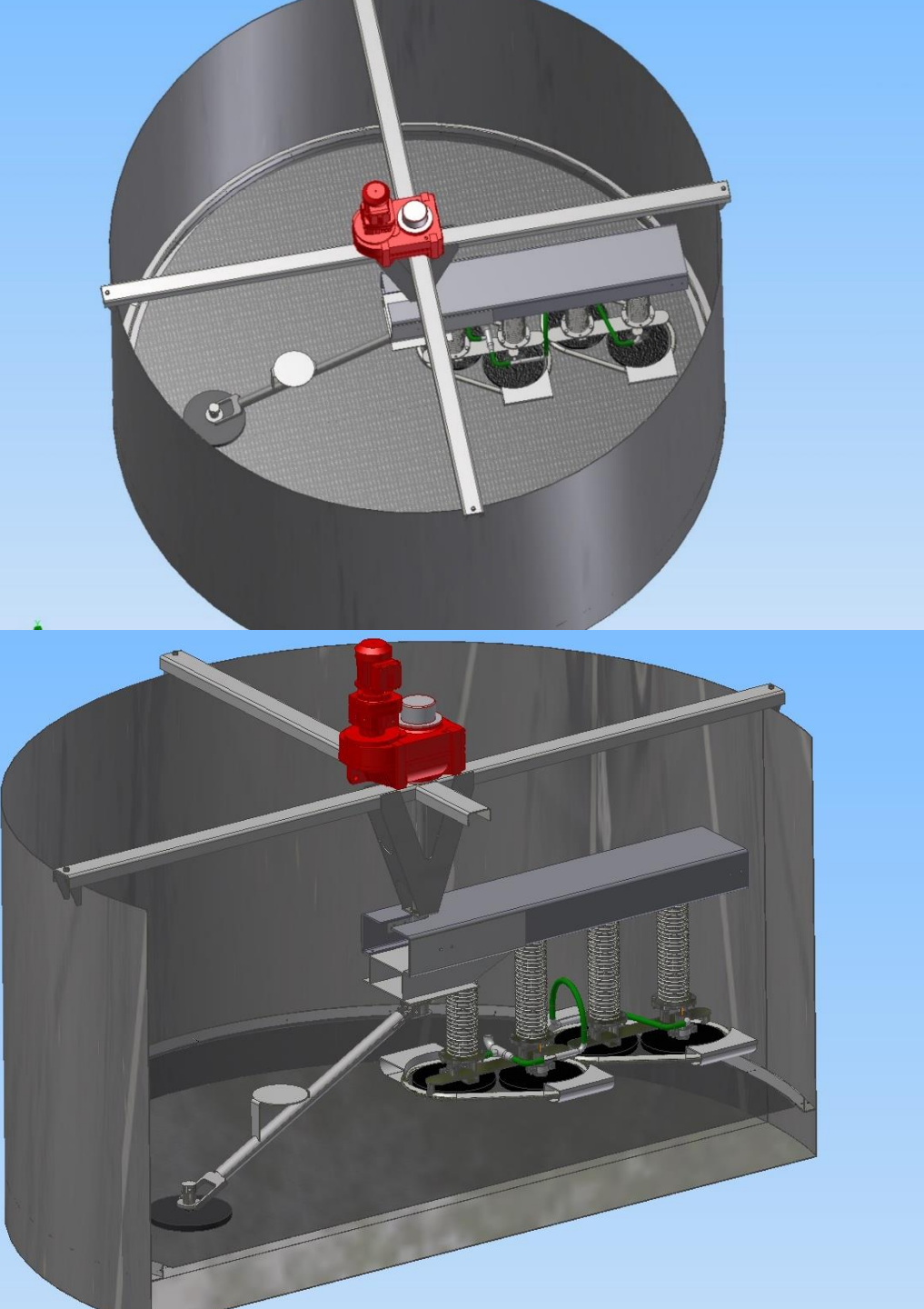
## Solutions

Fiber: Dyneema®

Coating: Vi-Cote,

Systems

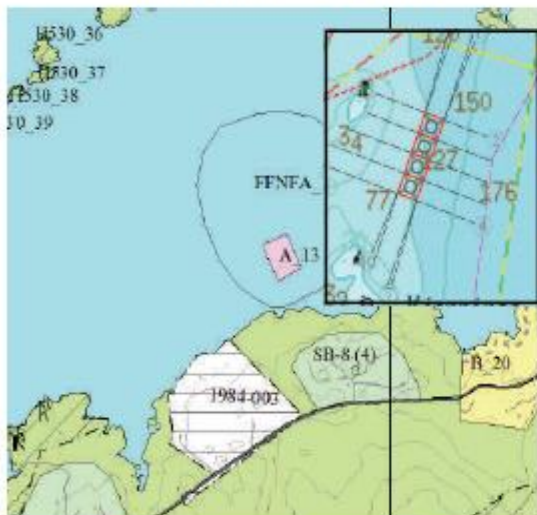
- Quality
- Stronger nets
- Coating – quality
- Lifetime



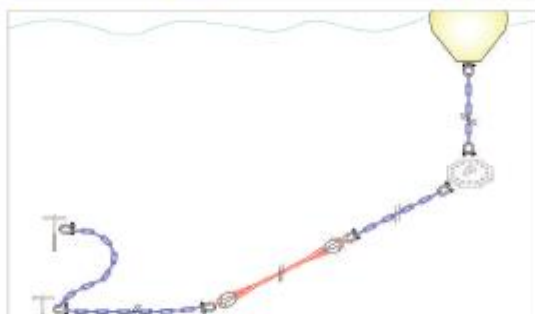
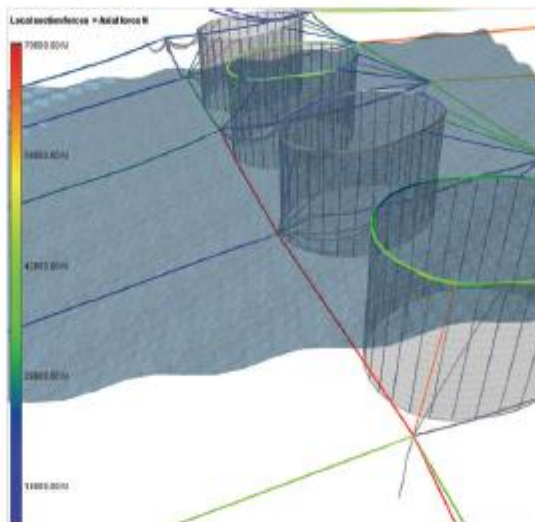


# Consultancy services – MMCD and monitoring equipment

Planlegging og søknad



Analyser og prosjektering



Installasjon og dokumentasjon



- Products in the sea at our customers can be monitored 24/7
- Traceability, technical safety and documented quality – reduces the danger of escapes and damages throughout the equipment's life time
- Radar reflector and GPS reflector on equipment
- Drones, cameras and ROV inspections

# Quality and RnD focus in Mørenot Aquaculture

## - How can we contribute for the future?

Main target:      Minimize the risk of escapes  
Simplify installation, operation and maintenance  
Environment focus

How

- develop new products and services
- develop better solutions on existing products
- participate in future fishery and aquaculture projects
- have strong technical competence within the company
- long lasting and quality equipment
- tracing   controles   manuals and systems

# Mother Earth is vulnerable – we must all take care of her.....

- Wash
  - Desinfect
  - Test
  - Repair
  - Treat
  - Reused at site
- 
- Nofir recycles gilnets, purse seines, trawls and aquaculture nets from Mørenot Group
  - All nets are sent for recycling – no waste
  - Maybe future fishnets can become Levi's?







# Thank you for your attention