



**European Maritime Champions**  
**An endangered species by 2020?**  
**Sustainable employment, innovation and growth!**

**MIF Plenary Session**

**European Maritime Day 2010**

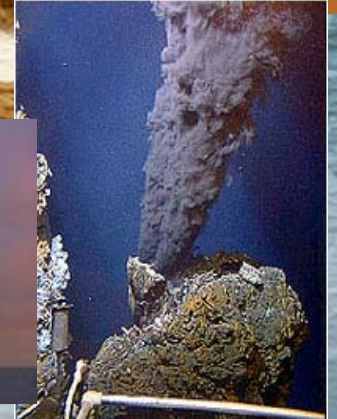
19-21 May 2010, Gijón-Asturias / Spain

**Innovation for Growth**

**Govert Hamers (President IHC Merwede, MIF  
Waterborne)**

# Market Opportunities for EU

- Tourism
- Sustainability
- Life cycle costs
- Renewable energy
- Land reclamation
- Coastal protection
- Marine Resources
- Extreme circumstances
- Waterborne SRA



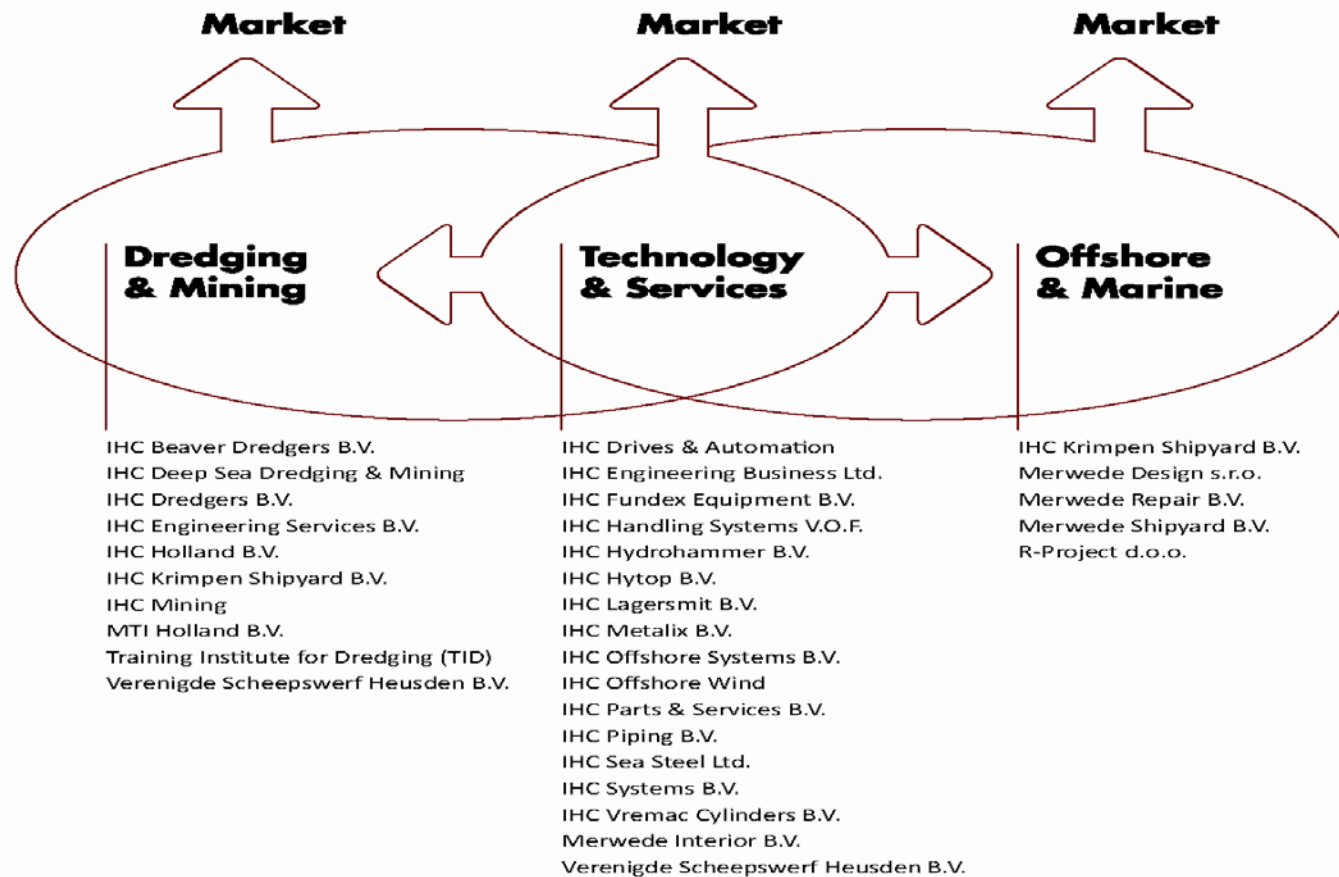
# IHC Merwede: The Technology Innovator

- Markets: Dredging, Mining, high end offshore construction
- Complex, custom-build standard versions
- Integrated ship design
- Ship - systems - Life Cycle Support
- Focus on innovation to benefit our markets





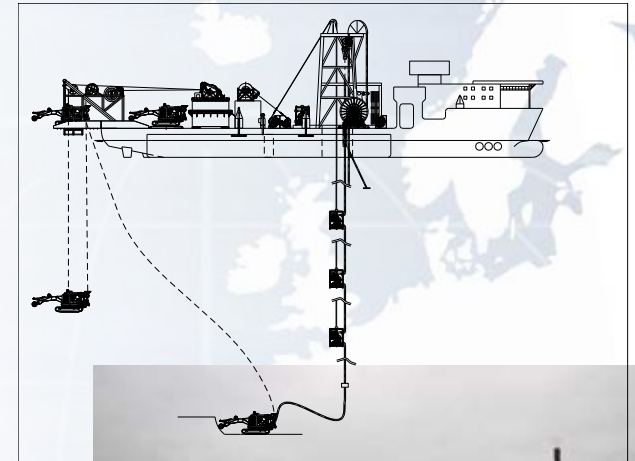
# IHC MERWEDE: decentralized organisation



- Each BU a leader in its field
- Strong growth topline and bottomline
- Crisis : So far so good

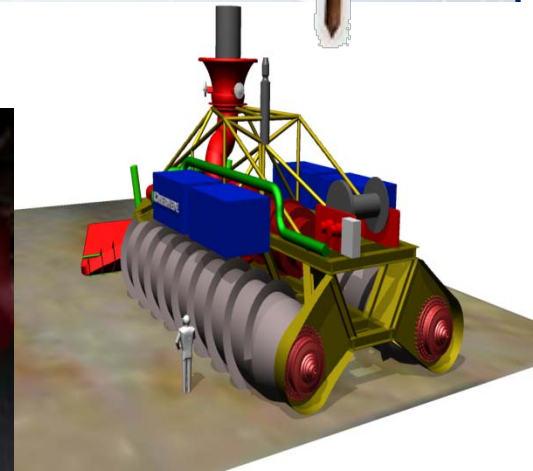
# Key Figures on Innovation

- 3% of turnover for R&D
- 300 -350 FTE's
- In-house research Institute, 60 FTE
- 25% of IHC employees +BSc
- Cooperation in maritime chain
- Innovation structure
- IPR, Subsidies, Patents
- Building with nature



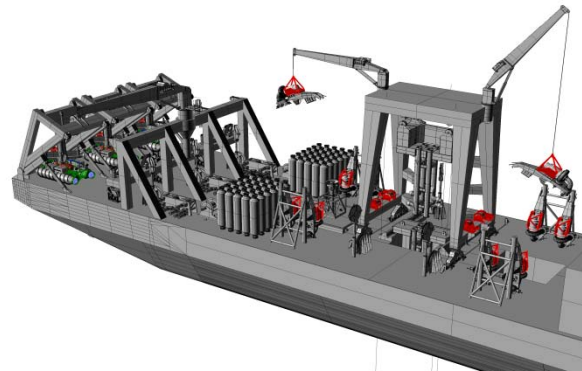
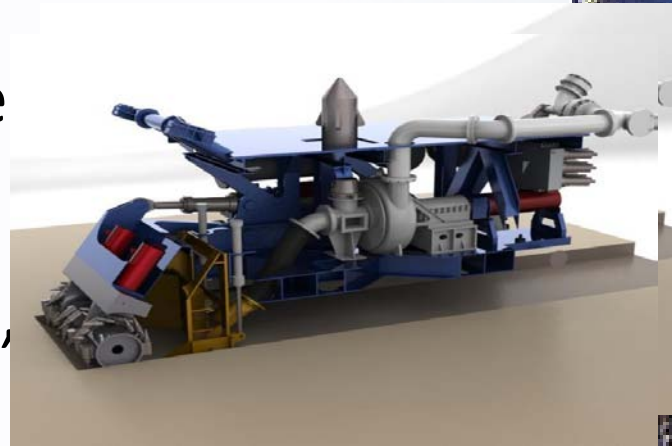
# Challenges for the high end maritime industry

- Products, systems, components and processes
- Focus on efficiency and operational costs over life cycle
- More extreme conditions
- Sustainable operations and construction
- Knowledge, technology, products and processes
- Fundamental Research



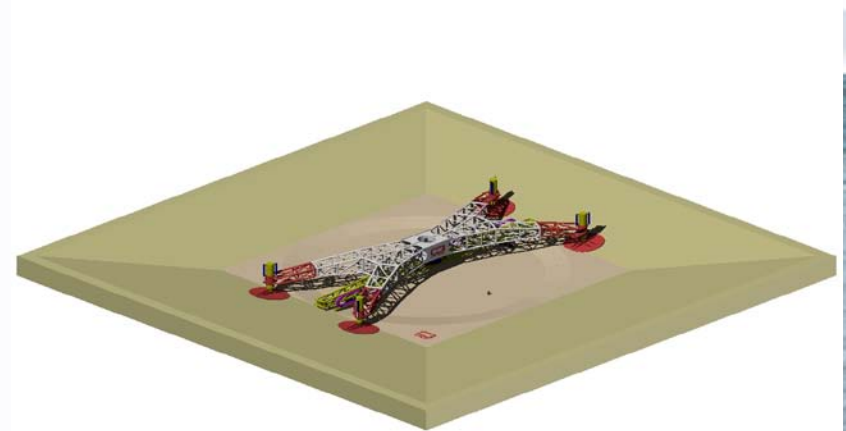
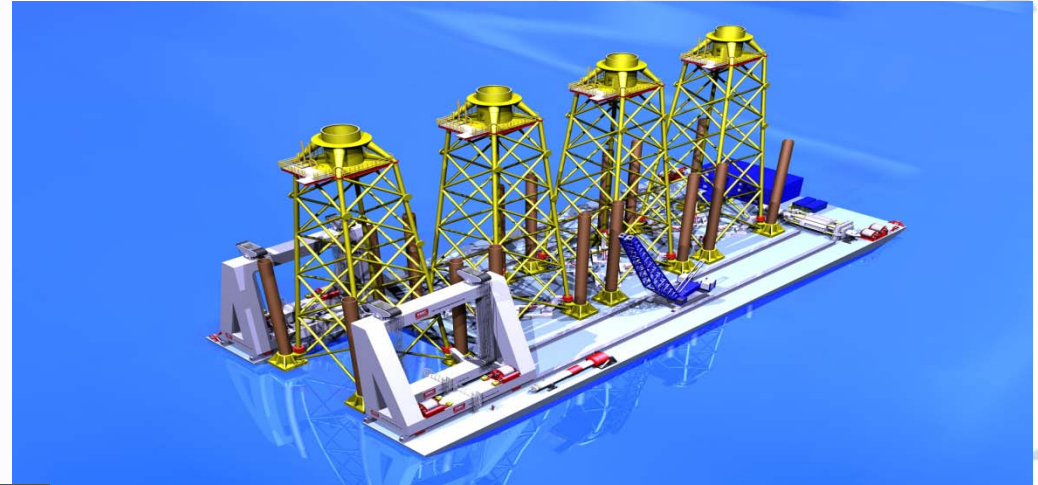
# Deep Sea Dredging & Mining

- New business line
- Acquisition
- Target knowledge, technology, products and market position
- Working together with.....





# Offshore Wind concepts





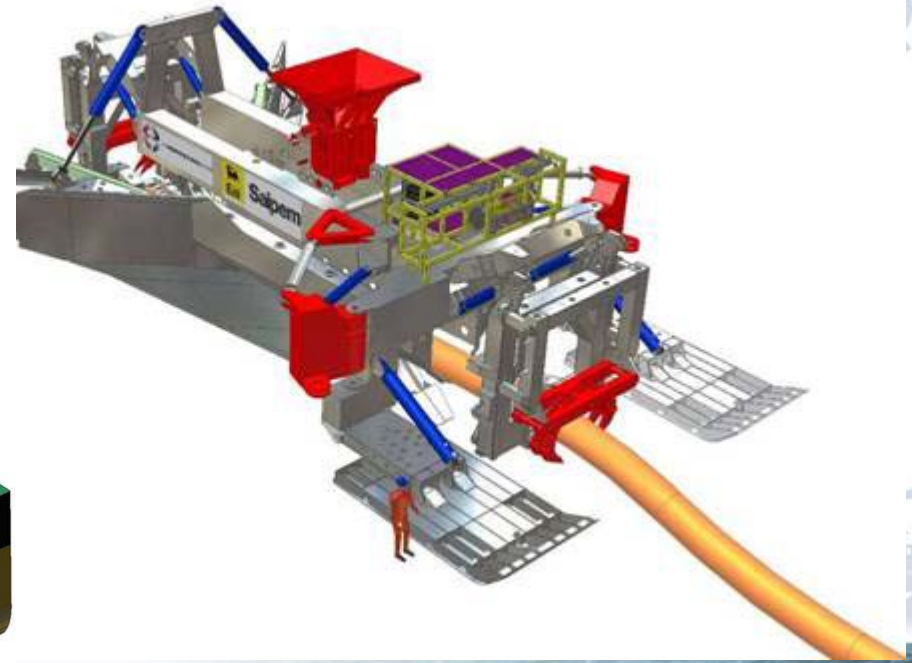
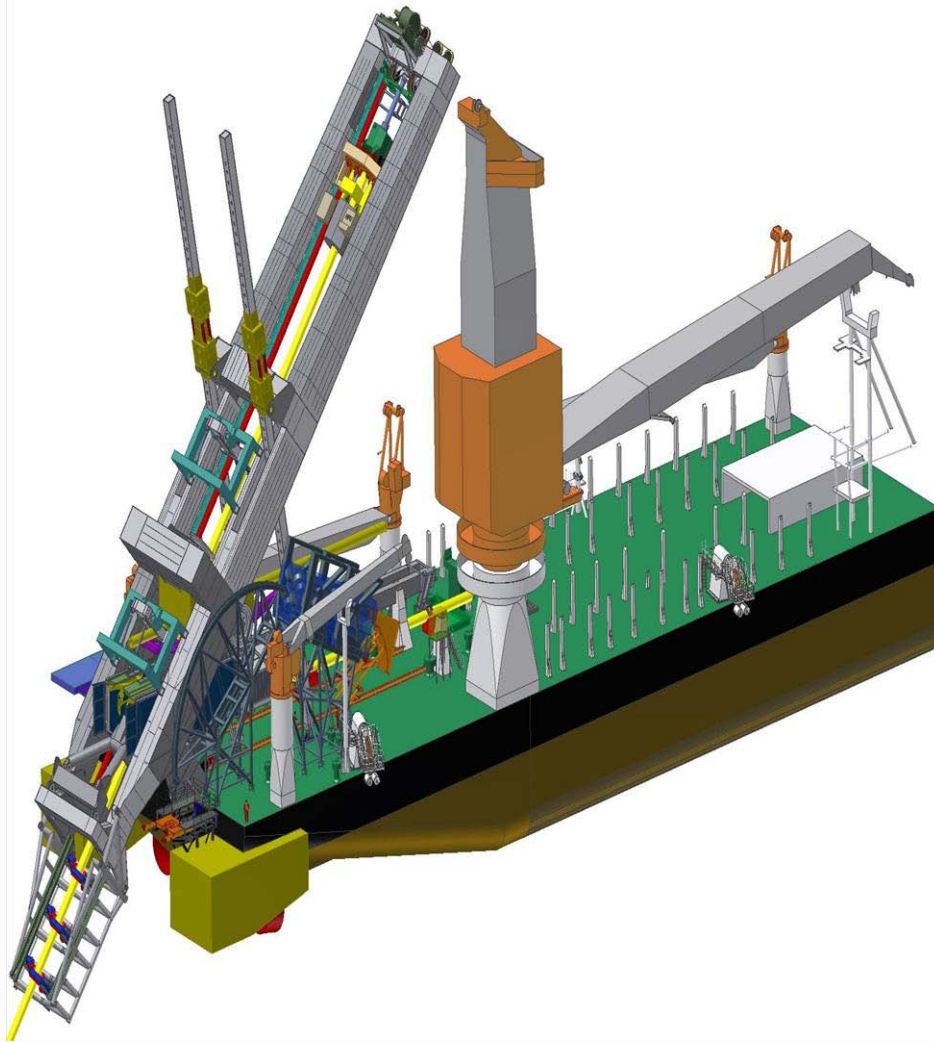
# Underwater Noise & Water Hydraulics



Blue Growth!

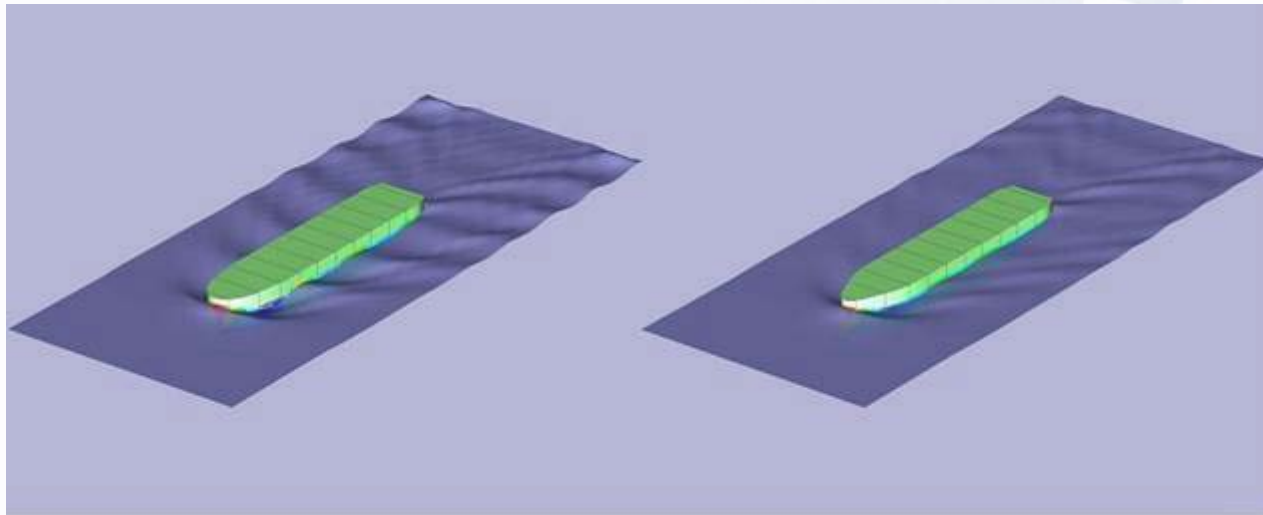
INDUSTRIES

# Offshore Equipment





# Advanced HydroDynamics

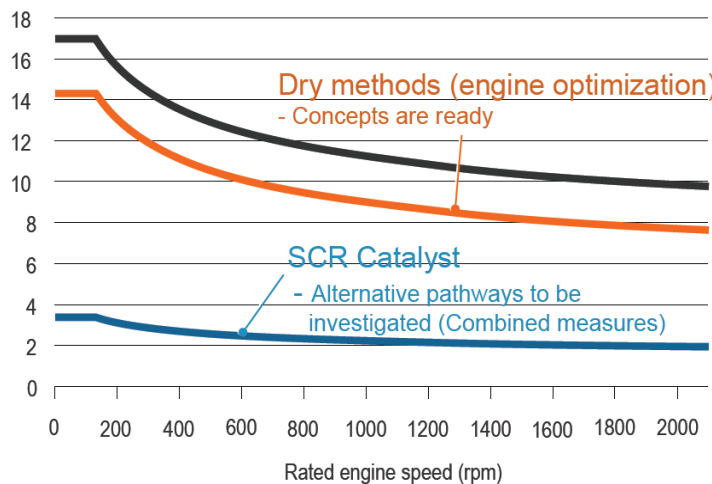


Innovation over a decade resulted in a 25% energy consumption reduction



# Ecological improvement – emission reduction

Specific NO<sub>x</sub> emissions (g/kWh)



Tier I (present)

Ships built 2000 onwards  
Engines > 130 kW

Retrofit: Ships built  
1990 – 2000  
Engines > 90 litres/cylinder  
and > 5000 kW

Wärtsilä: RTA, W46, W64

Tier II (global 2011)

Ships built 2011 onwards  
Engines > 130 kW

Tier III (ECAs 2016)

Ships in designated  
areas, 2016 onwards  
Engines > 130 kW



Well balanced approach between innovation  
and legislation is required

# Intellectual Property Rights

- IP is final result of innovation investment
- Very valuable
  - Core of our competitiveness
- Don't be naïve
- Maritime Industry is IP careless
- Protect it !
  - Fight for it !
- Guard SHIP

# Innovation is a must, but No Panacea

- No alternative for Innovation  
but  
It can not solve all problems
- Choose your markets well and develop new markets
- EU cost high
  - Production innovation
  - Low cost countries
- Education
- Financing
- Technical Rules



# Role of Governments and EU

- Helpful knowledge and education infrastructure
- RD&I subsidies
- Adequate and stimulating rules & regulations
- Level playing field
- IPR protection
- Financing instruments or stimulus
- Launching customer

# Conclusions

## INNOVATION FOR GROWTH IS THE WAY FORWARD

- Innovative products and processes
- Also marketing, finance, cooperation within chain
- Not only industrial partners, but the whole maritime playing field
- Role of governments and EU



# Innovation for Growth

Govert Hamers (President IHC Merwede, MIF  
Waterborne)

Thank you for your attention



# IHC Merwede: markets



Dredging & Mining

Offshore Workvessels



Offshore Systems

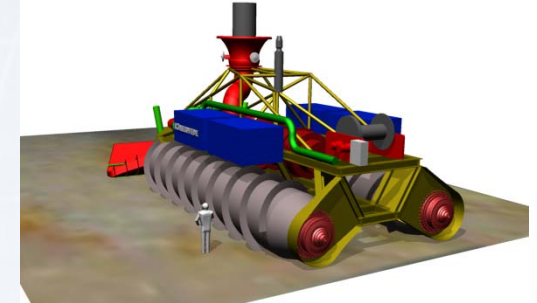
# Dredging and wet mining

## World market leader



**Hopper  
dredger**

**Deepsea technology**



**Cutter  
Dredger**

Specialization and integrated functionality requires choices



# Recognized builder of high-end offshore vessels

- Much bigger and divers markets
- Growing into specialism
- Acquisitions
- Target to develop operational functionality
- Lot of R&D efforts

