Business outlook – competitive edge

Mikael Mäkinen 31.5.2005
Vessel orders

Source: Based on data from Clarkson Research Studies
Note: Cargo vessels > 5,000 dwt
Market position of Wärtsilä’s marine engines 2004

### Own production
- **Medium speed main engines**
  - Wärtsilä 34% (28)
  - Total market volume 3,990 MW (3,462)

### Production of licencees
- **Low speed main engines**
  - Wärtsilä 18% (25)
  - Total market volume 24,863 MW (28,717)

### Own production
- **Medium speed auxiliary engines**
  - Wärtsilä 9% (8)
  - Total market volume 3,544 MW (4,325)

Wärtsilä own calculation based on: Lloyd's register - Fairplay, Clarkson's Research Studies and BRL Shipping Consultants
Ship Power businesses

Product areas
- 2-stroke diesel engines
- 4-stroke diesel and gas engines
- Propulsors
- Seals and bearings
- Solutions

Related services
- Design
- Engineering
- Project management
- Commissioning
- Lifetime support
Customer groups

Ship owners and operators
- Reliability
- Availability
- Life-cycle costs
- 2nd hand value

Shipbuilders
- Price
- On time delivery
- Engineering
- Project mgmt

- Relationships
- Operational support
- Ease of maintenance
- Documentation
- Local support
- Ease of installation
- Standardization
Market segments

Seaborne transportation

Offshore oil exploration and support

Cruise and ferry

Naval and governmental

Special vessels
**Global container ship fleet development**

![Bar chart showing global container ship fleet development from 2000 to 2006 (est).]

**Global LNG carrier fleet orders**

Wärtsilä figures may not match order dates from other source.

![Bar chart showing global LNG carrier fleet orders from 2000 to 2005Q1.]

Source: Clarkson Research Studies, First Quarter 2005, Lloyds Register-Fairplay, April 2005
Off-shore oil exploration and support

Global offshore fleet orders

- Platforms
- Offshore vessels

Source: Lloyds Register-Fairplay, April 2005

Ship Power presentation 2005 © Wärtsilä
Cruise and ferry

In 2004 almost 12 million people went on a cruise. The average occupancy level was close to 90%

CORE MARKET

- Destroyers, Frigates
- Corvettes, Offshore patrol vessels
- Support vessels (Auxiliary oilers, Landing platform docks, Fast transport craft …)
- Silent ships (antisubmarine ships, oceanographic vessels)

- References in 74 navies
Special vessels

Salvage Tugs

“Salvanguard”
4 x Wärtsilä 6L32LNE

Research Vessels

“G.O. Sars”
3 x Wärtsilä 6L32

“Queen of Penta Ocean”
2 x Wärtsilä 12V46

Heavy Lift Vessels

“Dockwise Yacht Carrier.”
2 x Wärtsilä 8L38B
2 x Wärtsilä 4L20
1 x Wärtsilä 9L20
2 x LIPS CS3500 Steerable Thrusters
1 x LIPS CT225 Tunnel Thruster
Suppliers of industrial systems can grow “solutions” in two dimensions, product and service.

Integration of “adjacent” systems and components into larger system.

Value-in-use solutions that reduce life cycle operation cost.

Source: Booz/Allen/Hamilton
Every second ship on the horizon to be powered by Wärtsilä