

#### CRUISE SHIPS BUILT IN FINLAND SINCE 1999

- 1999 **Voyager of the Seas** for Royal Caribbean International, Turku
- 1999 **Europa** for Hapag-Lloyd, Helsinki
- 2000 **Explorer of the Seas** for Royal Caribbean International, Turku
- 2000 **Costa Atlantica** for Costa Crociere, Helsinki
- 2001 **Adventure of the Seas** for Royal Caribbean International, Turku
- 2001 **Carnival Spirit** for Carnival Cruise Line, Helsinki
- 2002 **Navigator of the Seas** for Royal Caribbean International, Turku
- 2002 **Carnival Pride** for Carnival Cruise Line, Helsinki
- 2002 **Carnival Legend** for Carnival Cruise Line, Helsinki
- 2003 **Mariner of the Seas** for Royal Caribbean International, Turku
- 2003 **Costa Mediterranean** for Costa Crociere, Helsinki
- 2004 **Carnival Miracle** for Carnival Cruise Line, Helsinki
- 2004 **Birka Paradise** for Birka Line, Rauma
- 2006 **Freedom of the Seas** for Royal Caribbean International, Turku
- 2007 **Liberty of the Seas** for Royal Caribbean International, Turku
- 2008 **Independence of the Seas** for Royal Caribbean International, Turku
- 2009 **Oasis of the Seas** for Royal Caribbean International, Turku
- 2010 **Allure of the Seas** for Royal Caribbean International, Turku
- 2014 **Mein Schiff 3** for TUI Cruises, Turku
- 2015 **Mein Schiff 4** for TUI Cruises, Turku
- 2016 **Mein Schiff 5** for TUI Cruises, Turku
- 2017 **Mein Schiff 6** for TUI Cruises, Turku
- 2018 **New Mein Schiff 1** for TUI Cruises, Turku
- 2019 **New Mein Schiff 2** for TUI Cruises, Turku
- 2019 **Costa Smeralda** for Costa Crociere, Turku

Finnish Marine Industries coordinates the cooperation in industrial and economic policy among the companies at the branch. Members include leading marine equipment manufacturers, turnkey suppliers, design offices, software and system providers as well as shipbuilding, ship repair and offshore yards. The association represents its members in the European Ships and Maritime Equipment Association (SEA Europe).

[marineindustries.fi](http://marineindustries.fi)



**Meriteollisuus**  
**Finnish Marine Industries**

**Luxury Cruise Ships**  
**from Finland**



## CRUISE SHIPS – FINNISH MASTERPIECES

Finnish shipyards have built dozens of cruise ships and passenger ferries in cooperation with the Finnish maritime network. Finnish experts have designed and constructed some of the world's largest cruise vessels, for instance Oasis of the Seas and Allure of the Seas, each with a capacity for more than 6,000 passengers and 2,000 crew.

One of the Finnish masterpieces is **Costa Smeralda**, a 180,000 gross tonnage beauty built by **Meyer Turku**. Costa Smeralda is one of the first cruise ships running on LNG (liquefied natural gas). The ship also incorporates a series of cutting-edge technological innovations designed to further reduce environmental impact. Energy consumption has been reduced to a minimum by using LED lights, recovering the heat generated by the engines and by introducing new generation elevators that recover energy by re-producing it into the electricity system.

Each new Finnish cruise ship marks a significant improvement in energy efficiency: for instance, **New Mein Schiff 1 and 2** were engineered 10% more energy efficient compared to their predecessor. They are one of the first cruise ships to be equipped with catalytic converters for the main and auxiliary engines, reducing nitrogen oxide emissions. Also the cruise ships' passenger spaces have a number of new iconic features like the new diamond, which now spans almost a 50m breath of the ship, the new Lagune sun deck area, the new covered sports Arena, and the new elevated jogging track with a spectacular view. All the ships in TUI's Mein Schiff series have been built in Finland.

**Helsinki Shipyard** is currently working on two **luxury expedition vessels** for Swan Hellenic's use. The vessels are intended to operate both in the Arctic and Antarctic waters as well as in the tropical waters. These vessels will measure 113m in length and have a capacity for 157 passengers.

### Cruise Ferries

Sophisticated cruise ferries are also part of the Finnish network's expertise. **Rauma Marine Constructions' newbuilding, Aurora Botnia**, for Wasaline will be the first ever RoPax ferry with a Clean Design class notation. The vessel can utilize LNG or biogas in addition to diesel fuel in power generation and will feature a battery system and electrical azimuthing propulsion rarely seen in car and passenger ferries.

RMC's third newbuilding, Tallink's new shuttle ferry, **MyStar**, will be approximately 212m long and have a gross tonnage of approximately 50,000. It will be able to accommodate 2,800 passengers. The vessel will utilise the newest technology and innovative solutions, with the aim of building the most environmentally friendly and energy-efficient vessel possible. This includes machines that will run on dual-fuel and an option for a battery solution, with the main source of fuel being low-emission liquefied natural gas (LNG).

## FINNISH MARINE INDUSTRIES' MEMBER COMPANIES

### CABINS, BATHROOMS AND RELATED EQUIPMENT

Antti-Teollisuus  
Jukova Corporation  
Parmarine  
Piikkio Works

### CATERING EQUIPMENT

Kavika  
Metos  
SeaKing

### COMPONENTS AND MATERIALS

ISOVER Saint-Gobain Finland  
Lautex  
Mesekon  
nora flooring systems  
Paroc  
SBA Interior  
SSAB Europe

### CONSULTING

Emmanoa  
Stellio

### ELECTRICAL SYSTEMS AND COMPONENTS

AQ Trafotek  
Atexor  
Elcoline Group  
Helkama Bica  
Laivasähkötyö  
Promeco Group  
Pinja Industry Solutions

### ELEVATORS AND ACCESS SYSTEMS

KONE

### ENERGY, ENVIRONMENT AND PROPULSION SYSTEMS

ABB  
Adwatec  
Alfa Laval Aalborg

Bertel O. Steen Power Solutions Finland  
EIE Maskin  
Evac  
Lamor Corporation  
MAN Energy Solutions  
Norsepower  
Oilon  
Onninen  
Kongsberg Maritime Finland  
Steerprop  
TEVO Lokomo  
The Switch Engineering  
Valmet  
Wärtsilä

### ENGINEERING AND TECHNICAL CONSULTING

Aker Arctic  
Allstars Engineering  
Beacon Finland  
Bluetech Finland  
Deltamarin  
Elomatic  
Etteplan  
Foreship  
Insinööritoimisto Comatec  
Jalmare

### HVAC SOLUTIONS AND COMPONENTS

Halton Marine  
Koja

### NAVIGATION SYSTEMS

Furuno Finland

### PRODUCTION SYSTEMS

Kemppi  
Pemamek

### SAFETY & FIRE PROTECTION

Marioff Corporation  
Saajos

### SHIPYARDS

Helsinki Shipyard  
Meyer Turku  
Pori Offshore Constructions  
Rauma Marine Constructions  
Suomenlahden Telakka

Turku Repair Yard  
Uki Workboat

### SOFTWARE & ICT

Cadmatic  
IBM Finland  
NAPA  
VTT SenseWay

### SURFACE TREATMENT

FSP Finnish Steel Painting

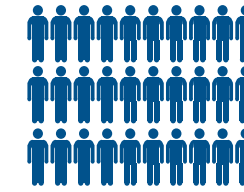
### TURNKEY PROJECTS

ALMACO Group  
E.U.-Adhoc Project  
I.S. Mäkinen  
Kaefer  
Merima  
Metalliasennus Huuhka  
Mobimar  
NIT Naval Interior Team  
Orsap  
RR Site Service  
R&M Ship Technologies Finland  
S.A. Svendsen  
Shipbuilding Completion  
Vallila Marine

### OTHER MEMBERS OF FINNISH MARINE INDUSTRIES

Kvaerner Finland  
Machine Technology  
Center Turku  
Prizztech  
Seaside Industry Park  
Rauma  
Wiima Logistics

## Finnish Marine Industry in the Finnish Society



Finnish marine industry employs 31 000 people



Annual turnover 9 billion €



1 100 companies in the industry

Source: Brahea Centre at the University of Turku

## Marine industry consists of:



Marine equipment manufacturers



Turnkey suppliers



Design offices



System suppliers



Software providers



Shipbuilding, ship repair and offshore yards

marineindustries.fi



### COSTA SMERALDA

Contract signed: June 2015  
Delivered: 5.12.2019  
Length: 337 m  
Width: 42 m  
Gross Tonnage: 183,900

Number of Passengers: approx. 6,554  
Number of cabins: 2,610  
Crew: 1,646  
Flag: Italy