



We use cookies on this site to enhance your user experience

Cookies are small files stored on your computer that allow us to provide enhanced services for each visitor.

Yes, I agree

No, I want to find out more



BY BRYONY MCCABE  
13 MAR 2020

# Controlling underwater noise



THE REGIONAL REPORT

SILENT class notations from DNV GL are designed to address growing levels of noise from operations at sea...



Fish and marine mammals rely on sound to communicate with each other, locate prey and navigate over long distances. These and other vital activities are disrupted by noise from ocean-going vessels, sonar devices and offshore energy operations. Scientists have become increasingly aware of this threat to biodiversity, and some rate underwater noise pollution as the next global threat after climate change and chemical pollution.

To address these marine noise-related issues, DNV GL issued the first underwater noise notation in 2010, the SILENT class. The intention of the notation is to provide owners of acoustically sensitive vessels with concise and realistic criteria for underwater noise emission, and to provide environmentally conscious owners with an opportunity to demonstrate a low environmental footprint.

The environmental impact of underwater noise is gaining more attention from governments around the

world. One example is the Port of Vancouver, where incentives in the form of port fee reductions were introduced in January 2017 to manage the impact of noise from shipping activities on at-risk whales in the region. The European Marine Framework Directive also includes underwater noise as a descriptor in order to achieve and maintain “good environmental status” by 2020 and new IMO requirements addressing underwater noise are reportedly in the pipeline.

As a result, SILENT class notation from DNV GL is increasingly being recognised and applied by shipyards, owners and design institutes. The notation provides rules for specific operations or vessel types, including fishing, seismic, research, acoustic and environmental, defining acceptable noise for each category and addressing the specific challenges in various areas of operation.

## **The notation provides environmentally-conscious owners with an opportunity to show proof to authorities of a low environmental ‘footprint’...**

The most relevant notation to superyachts is the SILENT-E (Environmental) class notation, which applies to any vessel needing to demonstrate a controlled environmental noise emission. The notation, therefore, provides environmentally-conscious owners with an opportunity to show proof to authorities of a low environmental ‘footprint’ and, as such, future-proof vessels for possible coming regulations and avoid exclusion from sensitive areas.

“The main benefits of the notation for superyachts include the economic incentives in north American waters and, with such long lifecycles, superyachts can futureproof operations against the expected new IMO requirements, as well as gain permissions to enter environmentally sensitive areas,” says Kai Abrahamsen, senior principal engineer at DNV GL. “Some superyacht owners might also want to stand out as environmentally friendly.”

Abrahamsen advises that the majority of superyachts would be able to achieve the notation with minimal additional cost. “Superyacht are built with on-board comfort a priority, and the sources for on board noise and underwater noise are the same,” he explains. “So, most yachts already have the in-built design and technology that would allow them to achieve the notation without changing anything. The main costs involved would be the classification costs to obtain the certification.”

DNV GL has experienced a high level of interest in the notation from superyachts. For example, The *REV Ocean* project has very strict underwater noise requirements and, falling under both research vessel and yacht categories, is being built under the SILENT-R or Research notation, the strictest level of underwater radiated noise requirement in the SILENT class notation.

### **Profile links**

**DNV GL**

*If you like reading our Editors' premium quality journalism on SuperyachtNews.com, you'll love their amazing and insightful opinions and comments in The Superyacht Report. If you've never read it, [click here](#) to request a sample copy - it's 'A Report Worth Reading'. If you know how good it is, [click here](#) to subscribe - it's 'A Report Worth Paying For'.*



Guardar



# RELATED NEWS

Heesen sells second hybrid superyacht

1 WEEK AGO

The future is not just electric

2 WEEKS AGO

New technology reduces noise generated by propeller cavitation

3 WEEKS AGO

German superyacht activity

3 WEEKS AGO

The impending threat of IMO Tier III regulations to sub-500GT yachts

3 WEEKS AGO

CRN achieves IMO Tier III certification for a megayacht

4 WEEKS AGO

Jeff Bezos pledges £7.7bn to fight climate change

4 WEEKS AGO

## Teakdecking Systems partners with The Nature Conservancy

1 MONTH AGO

## Emission-free operation in Norwegian fjords

2 MONTHS AGO

## Superyachts will no longer be able to anchor in areas of seagrass

2 MONTHS AGO



**Sign Up to**  
**our insightful**  
**SuperyachtNews**  
**Bulletin**

## FEATURED NEWS

### Design trends



An insight into the emerging trends at London Design Week

**DESIGN** 17 MAR 2020

### Travel restrictions impact superyachts in the Caribbean



A number of Caribbean islands are implementing measures to slow the spread of COVID-19

**BUSINESS** 17 MAR 2020

## Message from the Chairman of the Bored



The superyacht market after COVID-19

OPINION 17 MAR 2020

## Record number of graduates for UKSA’s Superyacht Cadetship



Welcome to the next generation of the industry

CREW 17 MAR 2020

## SUPERYACHT CONCEPTS

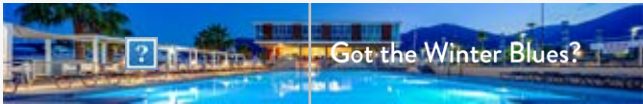
Imagine  
by FEADSHIP

Berlinetta series  
by ISA YACHTS

SuperyachtNews

SuperyachtNews

ADVERTISING



# SUPERYACHTINDEX PRESS RELEASES

## COVID-19: BEST PRACTICES FOR VESSELS ON-DEMAND WEBINAR AVAILABLE

MedAire answers questions for those in the yachting industry...  
**PRESS RELEASES** 09 MAR 2020

## List GC: Careers for women in the superyacht industry

The superyacht industry may not be large, but it is actively shaped and driven by a substantial number of top-class female experts...  
**PRESS RELEASES** 09 MAR 2020

## Pinmar appoints General Manager for France to spearhead growth in La Ciotat

Today Pinmar announced the appointment of Mar Pallàs as General Manager...  
**PRESS RELEASES** 06 MAR 2020

- ABOUT US
- CONTACT
- ADVERTISE
- SUBSCRIBE
- MAGAZINES
- PRIVACY POLICY

