Editor Nick Savvides
Assistant Editor Samantha Fisk
Design/Production Manager Sandy Defraine
Group Sales Director John Payten
Assistant Advertising Manager Valder Gates
Advertisement Production Manager Stephen Bell
Subscriptions & Publications Manager Josie Smith
Publisher Mark J Staunton-Lambert

Published by:
The Royal Institution of Naval Architects
Editorial & Advertisement Office:
8-9 Northumberland Street
London, WC2N 5DA, UK
Telephone: +44 (0) 20 7235 4622
Telefax: +44 (0) 20 7245 6959
E-mail editorial editorial@rina.org.uk
E-mail advertising advertising@rina.org.uk
E-mail production production@rina.org.uk
E-mail subscriptions subscriptions@rina.org.uk

Printed in Wales by Stephens & George Magazines.

The Institution is not, as a body, responsible for opinions expressed in *The Naval Architect* unless it is expressly stated that these are the Council's views.

Registered charity No. 211161

© 2014 The Royal Institution of Naval Architects. This publication is copyright under the Berne Convention and the International Copyright Convention. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted without the prior permission of the copyright owner. Permission is not, however, required to copy abstracts of papers or of articles on condition that a full reference to the source is shown. Multiple copying of the contents without permission is always illegal.

A 2015 subscription to The Naval Architect costs:

NAVAL ARCHITECT

12 months	Print only†	Digital Only*	Print + Digital
UK	£177	£177	£227
Rest of Europe	£185	£177	£235
Rest of World	£198	£177	£248

10 issues per year;

†Incudes p+p
*Inclusive of VAT

Average Net Circulation 10,933 1 January to December 2013 ISSN 0306 0209



7 Editorial comment

Robot ships

8-16 **News**

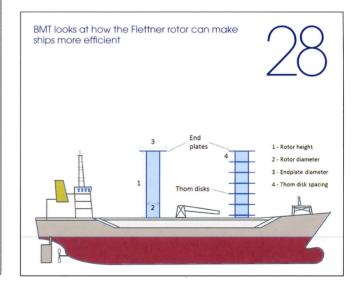
- 8-10 News
 - 12 News analysis
- 14-16 Equipment news



18-27 **In-depth**

- 18-21 **Technology** | From Eco-ships to Smart-Shipping: revolution or evolution?
- 22-24 **Standards** | Making the case for adding variety to Goal-Based Standards
- 26-27 **China Ship News** | China's lacklustre marine diesel industry must power up

58 Diary





28-51 Features

Feature 1 Green ships

28-30 The Magnus effect, a well spun yarn

31-33 Anthony Veder develops green fleet

Feature 2 South Asia

34-36 Major overhaul needed for Filipino yards

Feature 3 CAD/CAM

38-39 Big data in shipbuilding

39 Dassault's future thinking

40 CD-Adapco simulates reality

Feature 4 CFD & hydrodynamics

41-42 Putting the theory to the test

Feature 5 Mediterranean

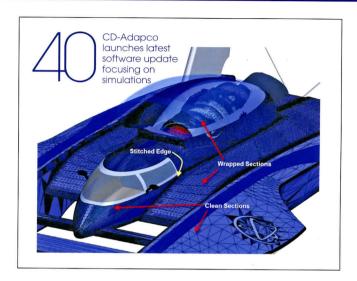
44-45 Fincantieri's brave new world

46-48 GHENOVA evolves with AVEVA

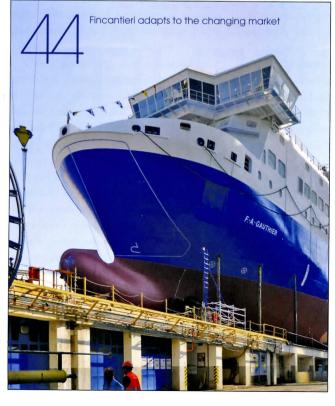
Feature 6 Ice class

50 Guidelines for Arctic development

51 PPG puts on its winter coat







Digital Editions

The Naval Architect is published in print and digital editions. The current and archived digital editions (from January 2004) may be read on PC, iPad or other touchpad.

Visit http://www.rina.org.uk/na-digital.html to read the digital editions, or download the free RINA Publications App.

