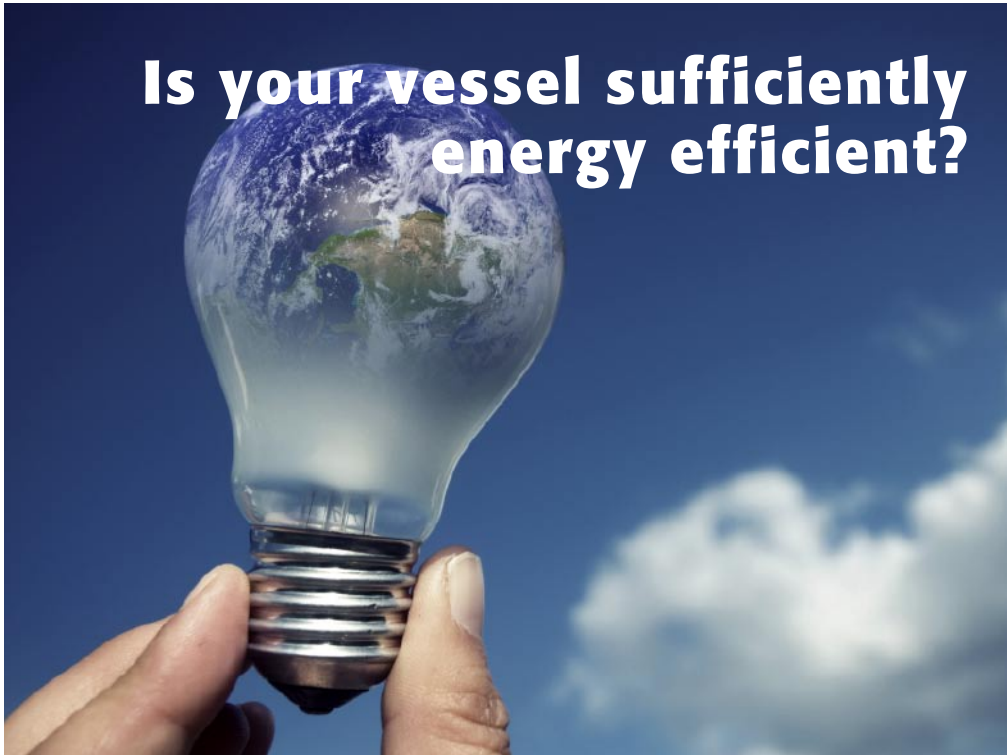


DEIF Newsletter

May 2010 • 3rd edition

Is your vessel sufficiently energy efficient?



How to ensure optimum operation – under any conditions and at all times.

Fuel-efficient operation of any vessel is by definition subject to a number of variables: speed, load, wind, current, etc. Optimising the way a vessel operates can therefore be an extremely complex and challenging task. But not always.

Turning challenge into advantage

Together with the cleantech company Decision3, DEIF has now developed a way to exploit the complexities of dynamic operating conditions,

turning previous challenges into advantages. The solution is a new system called GreenSteam™.

This new and advanced system keeps your vessel optimally powered for any condition and at all times. In simple terms, the system's secret is that it monitors the various conditions for each individual vessel and stores the information. The information is then used to calculate the optimum settings for the vessel.

System relies on DEIF technology

GreenSteam™ relies on DEIF's cutting-edge technology to collect the information needed

to carry out calculations: smart controllers for optimum power production, robust wind sensors for detailed wind speed and direction, reliable instrumentation for accurate rpm, pitch and rudder angle indications.

In the following pages you will learn what makes DEIF's technology so special. Read, for instance, about our smart controllers, the WSDI-2 wind indicator and the TRI-2 CAN rudder indicator.

For more information on GreenSteam™, please contact Claus T. Larsen, ctl@deif.com, +45 9614 9661

Content

Yes we CAN

Now you CAN too. See how on page 2.

Putting on a show

Page 3 has the latest on our product line-up for this year's SMM.



Attacks from the air

And what to do about them. More on page 3.



What is in it for you?

DEIF's brand in brief on page 4.

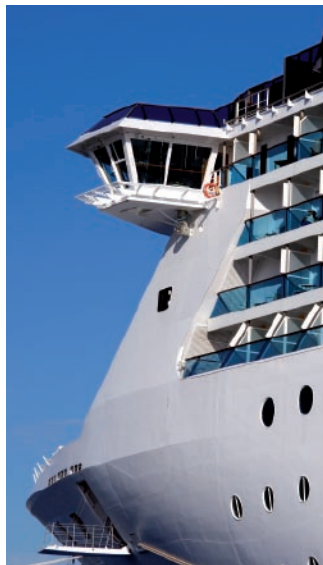
Tips & tricks:

Now, where does this thing go?

For snappy advice on the most hassle-free way to set up your wind indication system see page 4.



Yes, we CAN



Not sure if DEIF can help you optimise operation and save fuel? Our answer is a complete series of bridge indicators – all featuring CAN communication protocol.

DEIF's XL series is available in a CAN version and the latest release of the new bridge wing indicator, BRW-2, is based on XL. Our recently updated panoramic rudder indicator, TRI-2, also features CAN.

DEIF's entire CAN indicator series offers a choice between a single CAN solution for

redundant systems based on network and equipment duplication or a redundant dual CAN network where each indicator has access to both of the two independent CAN networks.

The more accurate information a ship owner can get on the working relationship between engine rpm and propeller pitch, the more energy efficient his vessel is likely to become. Modern ship design therefore integrates more and more precise and reliable types of indicators into navigation and

control systems. General focus on ship automation, cable weight reduction and installation costs all mean that data distribution on modern ships is moving away from parallel analogue signal cables towards redundant data networks – often based on CAN bus.

For more information on DEIF's CAN indicators, please contact John Larsen, +45 9614 5754, jol@deif.com or Bo Madsen, +45 9614 9657, bsm@deif.com.

Wind indicator gets 'thumbs up' from DNV and CCS

Two of the world's leading classification societies, DNV (Det Norske Veritas) and CCS (China Classification Society), have certified DEIF's new wind indicator, WSDI-2.

The two approvals add to DEIF's certifications list which already includes GL (Germanischer Lloyd) and other important classification societies.

The WSDI-2 displays the exact wind speed and direction and connects directly to the high performing and also certified WSS ultrasonic wind sensor. The WSDI-2 even interfaces to a number of non-DEIF wind sensors in the market via the standard NMEA0183 serial interface.

DNV is widely credited for an extremely high focus on risk

avoidance and management. CCS is currently the only provider of classification services in the Chinese marine market. Consequently, DEIF is delighted that our wind indicator complies with the rigorous standards of the two internationally recognised and influential societies.

The two approvals are quality stamps that further qualify our wind indicators and sensors for advanced application designs such as dynamic positioning systems and energy optimising systems for vessels relying on accurate wind measurements as important control parameters.

For more information about the WSDI-2, please contact John Larsen, jol@deif.com, +45 9614 5754.



So, what are the latest marine-tech innovations?

DEIF is happy to fill you in. Visit us at this year's SMM.

The time is nearing for the world's no. 1 marine trade fair. Once again, DEIF has prepared a strong product line-up for you. Among this year's highlights are two versatile control units, a complete wind system, a cost-cutting multi-instrument and an indicator upgrade.

Paralleling and protection

The flexibility and functionalities of the GPU-3/PPU-3 make it the ideal controller for PLC-based power management systems. The integrated micro PLC enables you to dedicate logic conditions to different commands. Serial communication makes it easy to interface to PLCs, SCADA systems, etc.

Flexible and digital wind indication

DEIF's new ultrasonic and digital wind system consists of two

units: the wind sensor static, WSS, and the wind speed and direction indicator, WSDI-2.

The WSS is based on ultrasonic measurement principles. Because it has no moving parts, it requires no regular service check-ups. Nor does it ice up or wear down.

The new WSDI-2 indicator unit displays relative and true wind speeds and is directly compatible with most sensors in the market. Its flexibility will knock the wind out of practically any competing product.

Manage your consumption of time and power

The new and marine-approved MIC-2 is an ideal multi-instrument for monitoring and controlling your power distribution systems. It meets almost any demand for efficient communication and integrates into nearly all applications.

TRI-2 CAN update

The panorama rudder indicator, TRI-2, has been updated with the CANbus communication protocol. The update gives you easy and reliable access to the precise rudder information you need to optimise operation.

Wide range of customisable solutions

At our stand, you will be able to learn more about the above as well as the wide range of other customisable solutions we have available. Our highly-skilled application managers will be more than happy to answer your questions and provide you with the technical information

you need. We look forward to seeing you there.

SMM 2010 takes place 7-10 September. You will find DEIF at stand no. 290 in Hall B 6. For information on how to register please visit the official SMM website.

7 - 10 september 2010
daily 9.30 am - 6 pm

www.smm-hamburg.com

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Violent attacks from the sky

Why protecting your wind sensor is a good idea – and how DEIF can help you.

Hungry birds sometimes mistake the clicking sounds from ultrasonic wind sensors for bug noises. Such mistakes can result in quite violent attacks on sensor heads as peckish birds try to get hold of the seemingly very lively bugs inside. To protect your wind sensor from bird attacks DEIF has introduced a WSS bird avoidance kit.

The kit is an optional extra and is installed on top of the sensor. The spike system is designed not to hurt birds, but simply create a barrier to make it difficult for birds to land on top of the sensor.

To learn more about the kit, please contact John Larsen, jol@deif.com, +45 9614 5754



What you can expect from the DEIF brand



From Chongqing, China, to Talcahuano, Chile – DEIF continuously seeks to improve our high standards of quality.

From 12-16 April, distributors and colleagues – also from our subsidiaries – took part in our annual marine seminar.

At DEIF, we want to meet our customers with the same reliable and competent approach regardless of continent, country or county. We want to ensure that our customers can rely on the same uniquely high standards of service, support and technical solutions – no matter where in the world they operate.

Have our efforts to ensure a consistent global customer approach proved successful, then? This is for you to decide. But we want to leave you in no doubt that it is a major focus of our attention and we consider it one of our key competition parameters.

We go about this task in a number of ways. One is to organise seminars and programmes at our head office in Denmark. From 6-9 April, new sales employees from our subsidiaries around the world participated in our sales education programme.

Therefore, if you have any comments, ideas or suggestions that will help us improve our global customer service and performance, do not hesitate to let us know. You can reach us by contacting your local DEIF representative from our website at www.deif.com, or send us a message at info@deif.com.

Tips & tricks:

To set up the WSS wind system right and tight from the start why not use DEIF's high quality extension cable? It can be purchased by the metre and supplemented with either the

robust IP67 connector kit, or the IP66 connection box kit including screw terminal block. For more details, see the WSS datasheet or the installation manual on www.deif.com.



No thank you. If you do not want to receive this newsletter in future, please send an email to newsletter@deif.com