

MARKETINGBETREUUNG

durch die **envise** Werbeagentur

EINIGE GUTE GRÜNDE,

sich die Arbeit durch **envisé** erleichtern zu lassen:

IST-ZUSTAND



STÖRFAKTOREN, die Ihnen **envisé** vom Hals schaffen kann:

- Aufbau und fortwährende Pflege eines auf die Kundeninteressen zugeschnittenen Presseverteilers
- Erstellung, Verteilung und Nachbearbeitung von Presseaussendungen
- Sichtung und Sortierung der relevanten Medien
- Erstellen eines Mediaplans (z.B. Schaltplan Print-Anzeigen) nach Budgetvorgaben
(Das Budget wird von **envisé** gemäß eines ersten Mediaplan-Layouts vorgeschlagen und mit Ihnen abgestimmt)
- Synchronisierung des Mediaplans mit Messen, Special Events und Schwerpunktthemen in den jeweiligen Print-Ausgaben
- Bearbeitung aller Anzeigen-Anfragen von – meist aufdringlichen – Verkäufern der Verlage
- Bearbeitung aller redaktionellen Anfragen, ständige Recherche nach Möglichkeiten für redaktionelle Beiträge
- Bereitstellung von vorhandenen Logos, Firmendaten oder Bilddateien für alle Medien-Anfragen

IHRE VORTEILE

- freie Zeit und Ressourcen für Ihr Sales-Team, seiner eigentlichen Arbeit nachzugehen: **VERKAUFEN**
- eine wesentlich höhere Qualität der PR & Marketing-Arbeit
- Markenbildung und Stärkung der Marke im internationalen Geschäftsumfeld
- eine Vereinfachung der Sales-Argumentation und weniger Einwandsbehandlung im Verkaufsgespräch durch die Eigendynamik einer durch PR-Arbeit gestärkten und ausformulierten Marke
- die Generierung eines regelmäßigen Presse-Echos (Grundrauschen)
- eine Erhöhung der redaktionellen Beiträge durch das bereits vorhandene Standing von **envisé** bei den Verlagen
- Regelmäßige Meetings mit envisé machen die Zusammenarbeit effektiver und verringern Informationsverluste

MEDIAPLAN

Was bietet ein individuell auf Ihre Bedürfnisse zugeschnittener Mediaplan...

- einen schnelle Überblick über das momentane Angebot der verschiedenen Verlage der Branche
- die bestmögliche Ausnutzung des festgelegten Budgets
- optimale Planung zu wichtigen Terminen wie bspw. Messen
- einen regelmäßigen Überblick über das gesamte Marketingaufkommen des Jahres
- volle Kostenkontrolle

MEDIAPLAN

becker marine systems | 2012



Vorschlag Schaltplan | 2012
Übersicht Themen | 2012
Übersicht Mediadaten | 2012
Schaltplan | 2011

REFERENZ

Presse-Echo durch Marketingbetreuung (Becker Marine Systems):

An den von **envise** gepflegten BMS-Presseverteiler (national & international) wurde Anfang 2011 diese Pressemitteilung versandt:

becker marine systems

PRESS RELEASE

No. 1/2011

Becker Mewis Duct® - The bestseller

The Becker Mewis Duct®, a highly efficient energy-saving device, was named after the inventor Friedrich Mewis and is developed, manufactured and installed by Becker Marine Systems. The duct is placed in front of the propeller with the purpose of improving the water flow to the propeller. The advantage of the Becker blades are non-rotatable fins that create a pre-swirl: a pre-swirl water and a duct. The stator blades are non-rotatable fins that create a pre-swirl. This means that they change the angle of the flow towards the propeller in such a manner that it operates as a counter-rotated device with a more favorable angle of attack. The effect of the duct is to increase the velocity of flow towards the propeller which is again an improvement in the propeller's working condition. The duct itself creates a forward directed thrust due to its foil section shape. Becker Marine Systems delivers each Becker Mewis Duct® individually adjusted for the actual hull form and propeller after a thorough design phase using Computational Fluid Dynamics (CFD) computations.

Due to the number of propulsion tests for vessels made with and without the Becker Mewis Duct® a reputable statistical statement can be formed. The average fuel saving is at 6%. Combined with a Becker Rudder, the propulsion improvement and fuel saving could be further enhanced, with fuel savings of up to 9%. Compared to other types of fuel saving devices and experiences with similar devices this is a very good and positive result.

The reliable concept with a fuel saving guarantee for suitable vessels offers significant benefits for the environment by reducing the emission of NO_x and CO₂. **Picture 3** shows a summary of the reduction in carbon dioxide emissions based on the predicted and measured Becker Mewis Ducts® that were in operation and tested in one year.

The success of the Becker Mewis Duct® speaks for itself. Since its introduction in 2008, 96 orders have already been placed, 17 thereof have already been installed. The year alone two Becker Mewis Ducts® have been ordered by the Greek COS Ship Management Ltd. for 74,400 dwt bulk carriers in January. In February an order for five Becker Mewis Ducts® came from BW Fleet Management Pte. Ltd., Singapore for 286,000 dwt Bulk/Ore Carriers.

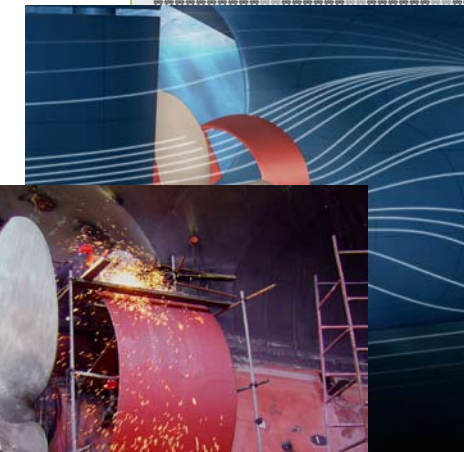
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Becker Mewis Duct® CO₂-Savings
status 22nd February 2011

Becker Mewis Duct® CO₂-Savings

Becker Mewis Duct® CO₂-Savings



Bereitstellung Bildmaterial

REFERENZ Presse-Echo durch Marketingbetreuung (Becker Marine Systems):

Ein kleiner Ausschnitt von redaktionellen Beiträgen verschiedener Fachmagazine.

SCHIFFBAU & SCHIFFSTECHNIK | PROPULSION

Praxis bestätigt Potenzial für Brennstoffeinsparungen

MEWIS DUCT® Die vor gut zwei Jahren von Becker Marine Systems GmbH unter der Bezeichnung **Mewis Duct®** vorgestellte Innovation zur Verbesserung der Propulsion hat sich nach vielversprechenden Ergebnissen der CFD-Berechnungen und Modellversuchen inzwischen erfolgreich in der Praxis bewährt. Der Beitrag stellt sowohl die Ergebnisse der Modellversuche sowie die in der Großausführung gewonnenen Messungen und Beobachtungen vor.

Friedrich Mewis

Seit dem Jahre 2008 versteht die Becker Marine Systems GmbH (BMS), Hamburg, die sogenannte Mewis Duct® (MD), eine Vorrichtung zur Vergrößerung der Antriebsleistung von langsamen vollen Schiffen. Gegenwärtig sind zwölf MDs installiert, von denen drei Systeme bereits länger als ein Jahr erfolgreich im Einsatz sind, 70 weitere sind bestellt. Von IBMV Rostock sind mittlerweile Hunderte von CFD-Propulsionsrechnungen vorgenommen worden, die die Grundlage der Optimierung in der erzielten Qualität bilden. Für 15 Projekte liegen bislang Modellversuchsergebnisse vor. Die erzielte Leistungseinsparung beträgt im Mittelwert nach insgesamt 30 Versuchen beachtliche 6,5 % (Abb. 5). Leistungseinsparung bedeutet in gleichem Umfang



Abb. 1: Mewis Duct® für einen 118 000 tsw-Bulkcarrier auf der SMM 2010, Düsendurchmesser außen 4,66 m

Die, die sich derzeit auf dem Transport von Spanien nach China befindet, ist inzwischen am Schiff montiert.

Wirkungsweise der Mewis Duct®
Bei der Mewis Duct® handelt es sich um eine hydrodynamisch wirksame energieparende Vorrichtung, auch als Propulsion verbessernde Maßnahme bezeichnet (in Englisch: Energy Saving Device (ESD)). Dabei werden zwei seit langem bekannte Lösungen kombiniert:

- Anordnung von Stoßmutterleiflächen (Fins) vor dem Propeller zur Erzeugung von Vortrall, wodurch die Drallverluste im Propellerstahl reduziert werden (seit mehr als 100 Jahren bekannt, siehe Wagner (1939)).
- Anordnung einer ringförmigen Leifläche (Duct) vor dem Propeller, die die Strömung des Wassers in Richtung des Propellers lenkt und so die Anströmung des Propellers verbessert.

Die auf der SMM 2010 ausgestellte MD hat eine anschauliche Vorstellung von den Effizienzen dieser Vorrichtung vermittelt. Die ausgestellte

Reduzierung der CO₂-Emissionen. Auch in der Großausführung sind umfangreiche Messungen und Beobachtungen vorgenommen worden.

Die auf der SMM 2010 ausgestellte MD hat eine anschauliche Vorstellung von den Effizienzen dieser Vorrichtung vermittelt. Die ausgestellte



Abb. 2: Die erste montierte Mewis Duct® auf dem 47 000 tsw-Open Hatch Cargo

Schiff & Hafen – Januar 2011

Mewis duct will enhance efficiency

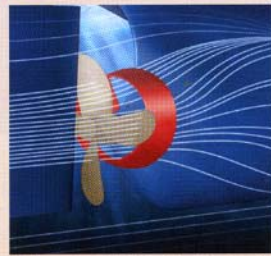
Becker Marine's Mewis duct can improve energy efficiencies by controlling the water flow to tanker propellers. This combines two devices – a pre-swirl stator and a duct to improve seawater flows.

The stator blades are non-movable fins that create a pre-swirl. This means they change the angle of the flow towards the propeller in such a manner that the duct operates as a counter-rotating device with a more favourable angle of attack. The duct is placed in front of the propeller to improve the water flow.

The duct's effect is to increase the velocity of flow towards the propeller. It creates a forward directed thrust due to its foil section shape.

Becker Marine expects operators can reduce fuel consumption by 6 per cent using a Mewis duct, based on fluid dynamic testing. Savings of up to 8 per cent could also come from tankers incorporating a Becker flap or twisted rudder.

Product markets are a key market. However, the latest tanker installation was in March when a Mewis duct was retrofitted on a 1998-built 37,000 dwt chemical tanker, *Bow Flora*. So far, fuel savings are running at around 6 per cent and CO₂ savings are expected to be 1,187 tonnes annually. A Mewis duct has been operating on the 45,000 dwt, 2004-built chemical tanker, *Tambouran*, since November 2009 with annual CO₂ savings of 728 tonnes and fuel savings of 5 per cent.



Performance of Becker's Mewis duct and propeller is modelled on computer

Tanker Shipping & Trade – April 2011



Mewis Duct tests reveal cost savings

Tests have revealed that Becker Marine Systems' Mewis Duct can help shippers reduce vessel fuel consumption by an amount as high as 8 per cent.

Results from comparison trials on vessels with and without the system indicated that vessels with the Mewis Duct saved an average six per cent in fuel, but an additional two per cent could be gained by combining the system with a Becker rudder. The corresponding emissions reduction was also favourable. And based on assumptions the Mewis Duct in operation used mid-February some 724 t of CO₂ was prevented from being released to atmosphere.

Since its introduction in 2008, 90 units have been ordered, of which seventeen have already been installed. This year alone two Becker Mewis Ducts have been ordered by the Greek OGC Ship Management for installation on 74,000-ton bulk carriers. In February, Becker received an order for five Becker Mewis Ducts for the 200,000-ton bulk carrier under construction for BNV Fleet Management, Singapore.

The advantage of the Mewis Duct, which is placed in front of the propeller with the purpose of improving the water flow to the propeller, is that it combines two positive devices: a pre-swirl stator and a duct. The stator blades are non-movable fins that create a pre-swirl. This means they change the angle of the flow towards the propeller in such a manner that it operates at a counter-rotational device with a more favourable angle of attack. The effect of the duct is to increase the velocity of flow towards the propeller, which is again an improvement to the propeller's working conditions.

The duct itself creates a forward directed thrust due to its foil section shape.

Shipping World & Shipbuilder – Juni 2011

Innovations & News
Marine Propulsion

The Becker Mewis Duct
The Becker Mewis Duct, a highly efficient energy saving device, was named after the inventor Friedrich Mewis and is developed, manufactured and installed by Becker Marine Systems. The advantage of the Becker Mewis Duct is that it combines two positive devices: a pre-swirl stator and a duct. The stator blades are non-movable fins that create a pre-swirl. This means they change the angle of the flow towards the propeller in such a manner that the Becker Mewis Duct operates as a counter-rotational device providing with a more favourable angle of attack.



The effect of the duct is to increase the velocity of flow towards the propeller, which is again an improvement to the propeller's working conditions. The duct itself creates a forward directed thrust due to its foil section shape. Due to the number of propeller units for vessels made with and without the Becker Mewis Duct's, a reliable statistical statement can be formed. The average of increased fuel saved is at 6%.

The vessel concept with a fuel saving generator for smaller vessels offers significant benefits for the environment by reducing the emissions of NOx and CO₂. The Becker Mewis Duct has been in operation and will deliver fuel savings of up to 8% per cent. This is a result of 7% can save on one year.

Propeller upgrades by Danish Marine Components
Through the original company was founded in 1961, Danish Marine Components is the first company in the world to produce propellers in the 800s of the last century. Ever since that time, more than 4,000 propellers have been built and delivered to a wide variety of clients. DMCC differs from most propeller manufacturers. It is not only the production, but moreover the research & development what makes them more special.

Maritime by Holland Magazine – Mai 2011

Mewis Duct demonstrates energy-saving potential

Significant gains in propulsive efficiency are reported by Becker Marine Systems from initial applications of its Mewis Duct, which by September 2010 had attracted some 50 orders. Located in front of the propeller with the aim of improving flow to the screw, the device combines a pre-swirl stator and a duct.

The non-movable stator blades create a pre-swirl, giving the propeller a more favourable angle of attack, and the duct increases flow velocity towards the propeller and creates a forward-directed force with its wing section shape. These features are said to combine in yielding potential energy savings of up to 8 per cent for full form slower ships, such as tankers and bulk carriers.


Mewis Ducts are tailored to the specific application, Becker exploiting computational fluid dynamics to research the ship hull and propeller in full scale and evaluate the most influential parameters in designing the system. After finalising the CFD research, a model basin is commissioned to carry out self-propulsion tests and compare the specific power curve of the vessel with and without the Mewis Duct.

These tests with different configurations predict the expected propeller shaftline power reduction. Full scale comparison follows the extensive model testing, with strain gauges on the propeller shaftline measuring the torque and rpm at defined speed and around 4.5 per cent was demonstrated. A 6 per cent reduction was predicted at the design draught at service speed.

Sea trials results from the first Mewis Duct installation in November 2009 indicated the high energy-saving potential, says Becker. Full-scale power measurements met predictions from the model tests and in light ballast draught conditions and at the service speed a reduction in power requirement of around 4.5 per cent was demonstrated. A 6 per cent reduction was predicted at the design draught at service speed.

Average annual savings of 430 tonnes of fuel for this ship equated to around US\$ 200,000 lower bunker costs, 1,400 tonnes fewer carbon dioxide emissions and 50 tonnes fewer NOx emissions.

Significant reductions in fuel consumption and emissions are reported from the first Mewis Duct systems in service in September 2010. The overall references by their fitted 50 systems for various ship types and sizes, including orders in series for 320,000 dwt tankers booked in Korea. Efficiency gains of 7 per cent are anticipated for these VLCC installations, lowering annual CO₂ emissions from each by 4,500 tonnes.



A fuel-saving Mewis Duct installation

Marine Propulsion – Januar 2011

REFERENZ

Anzeigenschaltungen in der Marketingbetreuung (BMS):

Strategisch platzierte Anzeigen bauen die Marke auf, schaffen einen Wiedererkennungswert – und begünstigen redaktionelle Beiträge.



becker marine systems

environmentally friendly becker products

Innovative engineering for environmentally-friendly products.

Becker Marine Systems faces its responsibility for sustainable and environmentally-friendly development by continuously reducing the environmental footprint of Becker products.

Furthermore we research and develop energy-saving product innovations like the Becker Mewis Duct®. Combined with a Becker Rudder, the Becker Mewis Duct® enables our customers to save up to **8% of fuel**.

16 Becker Mewis Duct® have already saved over **10,000 t of CO₂** until April 2011. Further 96 Becker Mewis Duct® have already been ordered.

reliable

Our proven rudder systems are the perfect choice for all types of ships. A tough working environment requires a sturdy, individual design combined with superb manoeuvrability. Seasoned captains rely on Becker rudders for their reliability, safety and exceptional manoeuvrability.

WWW.BECKER-MARINE-SYSTEMS.COM

Visit us at the **Nor-Shipping 2011** International Trade Fair in Oslo, Norway, in the German Pavilion, Hall C, Stand No. C01-01a on May 24th-27th, 2011.



becker marine systems

tough

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Visit us at the **MANITEC 2011** International Maritime Conference & Exhibition in Shanghai, China, German Pavilion, Hall WA, Stand 4C21-3.



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CO₂ saver

The Becker Mewis Duct® is an easily installed optimiser for vessels with high block coefficient and your best choice to significantly save fuel, NO_x and CO₂. The Becker Mewis Duct® in operation today already saved our environment over 25,000 t of CO₂. The efficient device is placed in front of the propeller, has no moving parts and saves in average 6% of fuel – in combination with a Becker Rudder even more than 8% are possible.

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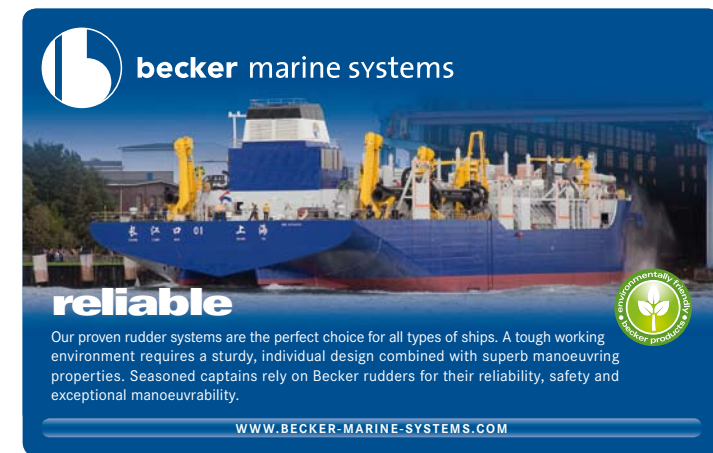
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strong

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envise Werbeagentur