

# MERCHANT



Trusted in  
the Merchant Fleet  
for 50 years



14 M  
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40  
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12 M  
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10 M  
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6 M  
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5 M  
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4 M  
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40  
20  
3 M



# FORAN

## Brunvoll Thruster Systems in



2003 "Manuka"  
2009 "Nord Goodwill"



2006 "Fure West"  
2007 "Bahia Castillo"



2007 "SPT Challenger"



2007 "Formation"



2000 "Jaeger Arrow"



# ANY SHIP

## a thousand Merchant Ships



2005 "Saffet Ulusoy"  
1996 "Maersk Kure"



2007 "Silver River"

2008 "RBD Esperanza"



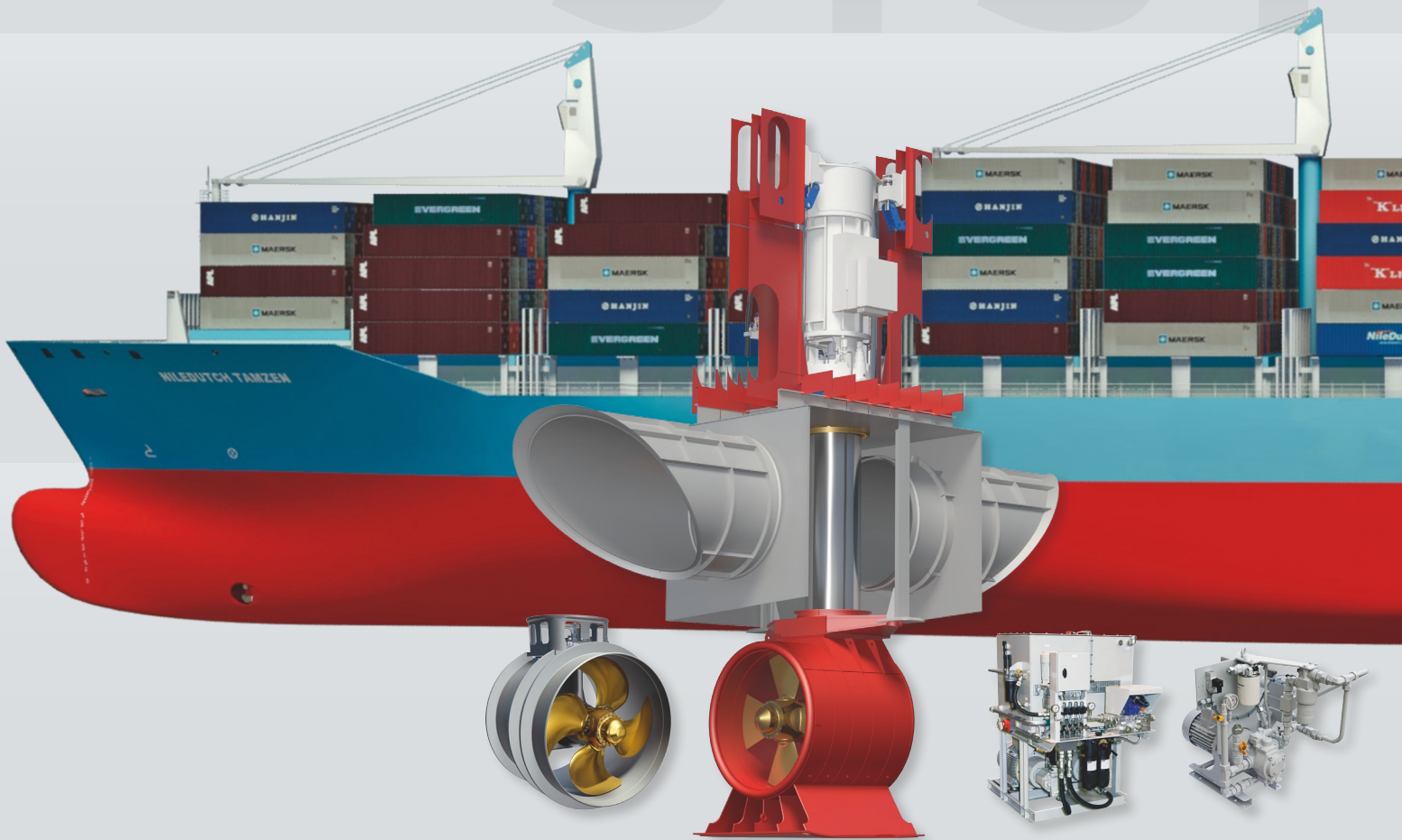
2009 "CSAV Rio Bueno"



2007 "JRS Carina"



# SYSTEM



**Demanding operations**  
– complex harbours  
– relentless demands for efficiency  
– focus on safety and environment

**Brunvoll technology provides power and precision in challenging operating conditions**

**Quality solutions and systems – a reputation for reliability**

We design our thruster solutions to generous specifications ensuring high endurance and maximum component life. Trusted Brunvoll technology provides peace of mind for dependable manoeuvring, positioning, and propulsion.

**Complete thruster systems from a single-source supplier**

Brunvoll offers a consistent range from 100 kW to 3,500 kW – including tunnel thrusters, LowNoise thrusters, and rim-driven thrusters (RDTs).

Brunvoll provides fully integrated thruster solutions complete with drive, control, alarm and monitoring systems, electronic cabinets, and hydraulic power units.

**BruCon from Bridge to Blade**

BruCon is Brunvoll's modular control, monitoring and alarm system for manoeuvring, positioning and propulsion – enabling:

- Precise control of manoeuvring, positioning and propulsion
- Optimized performance
- Reduced wear
- Smarter preventive maintenance
- Reliable service
- Access to Brunvoll support 24/7



# EMMS



## Multidisciplinary in-house expertise

- Mechanical. Hydraulic. Electric. Electronic. Hydrodynamic. Our comprehensive expertise, focused only on thrusters, saves time, saves effort, and boosts long-term benefits.
- Fully integrated design, engineering, production and service enable unmatched expertise, continuity and experience. The result is unique flexibility in a demanding market.
- Designers, shipbuilders, owners and crews worldwide appreciate the partnership with Brunvoll and the short path to effective solutions.
- Our insight into propeller design, performance and thruster interaction enables optimized solutions with better thrust, lower energy consumption, low noise, low vibration and improved lifetime performance.

## Lifetime service and support

- Our streamlined organization focuses on thruster systems only.
- All our thruster systems are Brunvoll design – our service personnel know them inside out.
- Brunvoll's experienced teams of in-house service engineers have multidisciplinary skills.
- Fast and knowledgeable response to service calls is available 24/7.
- For short delivery times, we keep extensive stocks of spare parts for all Brunvoll thrusters in service.



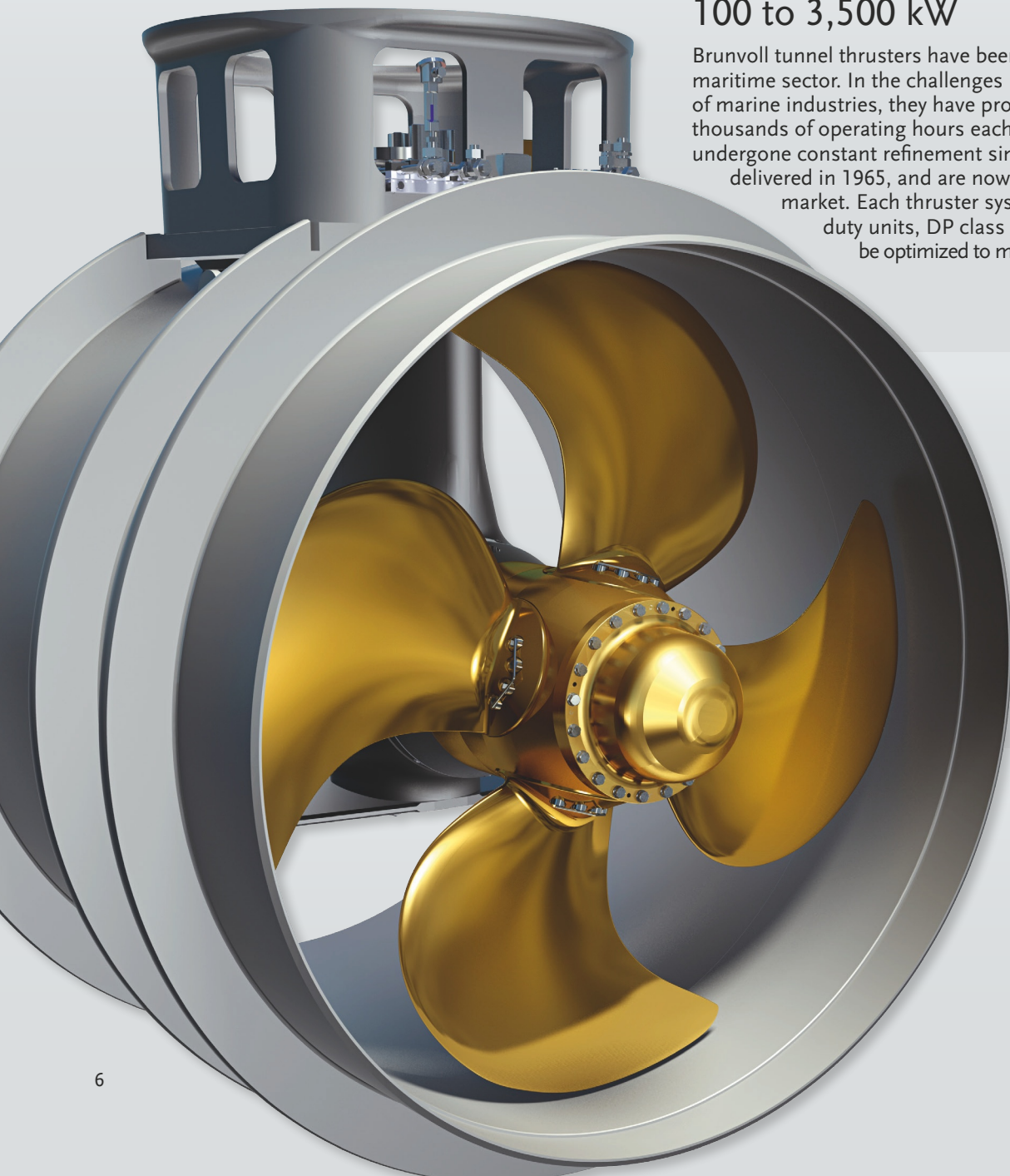
# THRU

One consistent high-quality Brunvoll

## Tunnel

### Tunnel Thrusters from 100 to 3,500 kW

Brunvoll tunnel thrusters have been a success throughout the maritime sector. In the challenges presented by a wide variety of marine industries, they have proved their reliability with thousands of operating hours each year. Our thrusters have undergone constant refinement since the first unit was delivered in 1965, and are now state of the art in the market. Each thruster system – whether auxiliary duty units, DP class or propulsion class – can be optimized to meet individual requirements.





# THRUSTERS

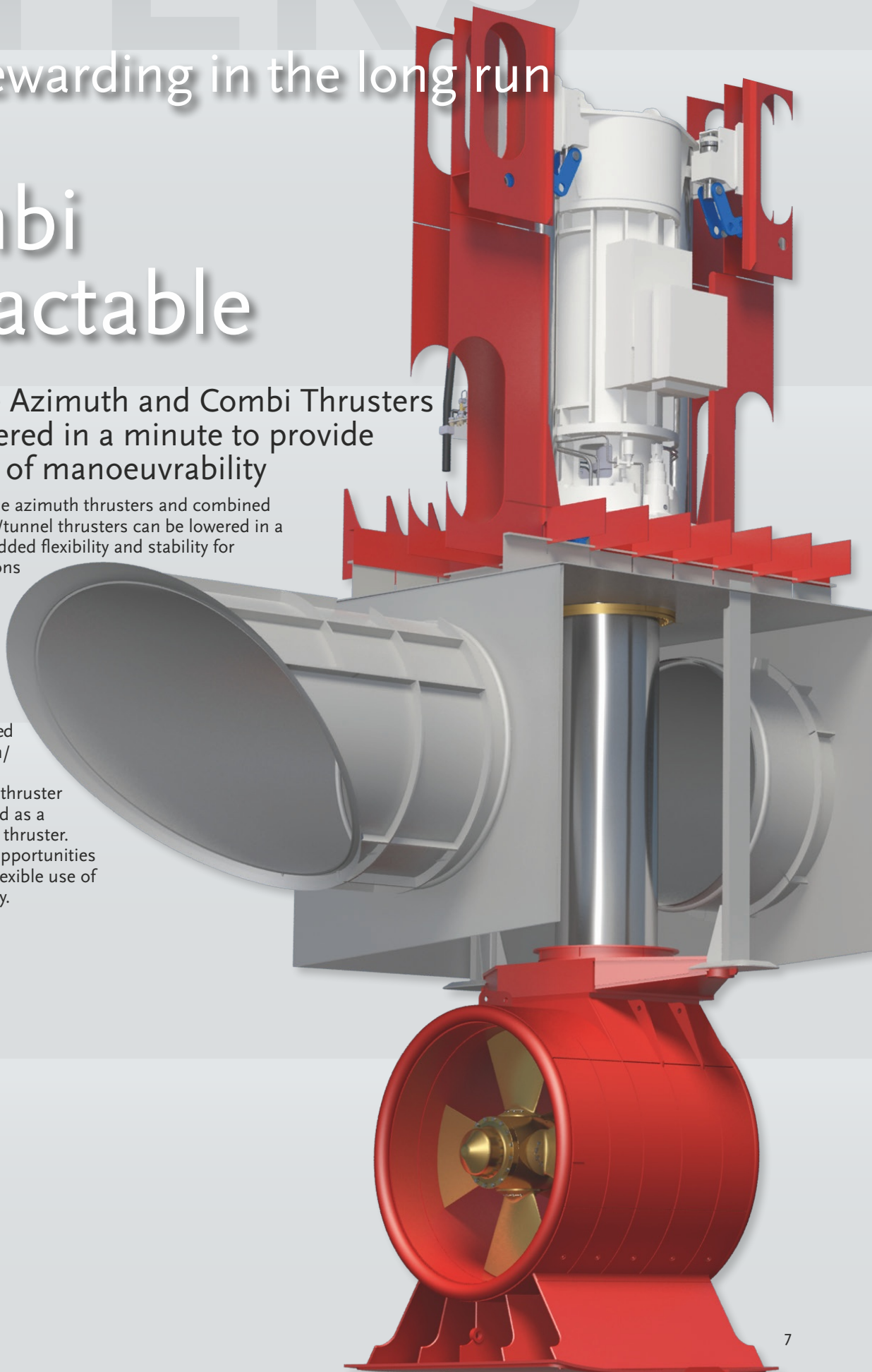
range – rewarding in the long run

## Combi Retractable

Retractable Azimuth and Combi Thrusters can be lowered in a minute to provide a new level of manoeuvrability

Brunvoll's retractable azimuth thrusters and combined retractable azimuth/tunnel thrusters can be lowered in a minute, providing added flexibility and stability for demanding operations and challenging coastal conditions. They also provide emergency "take-home" propulsion.

The Brunvoll Combined Retractable Azimuth/Tunnel Thruster is a retractable azimuth thruster that can also be used as a conventional tunnel thruster. It provides unique opportunities for innovative and flexible use of thruster functionality.





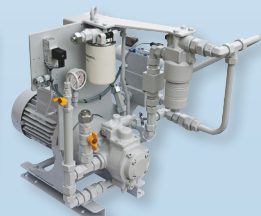
# Winter conditions in the Baltic Sea can be extreme – Brunvoll Thrusters have proven reliable for decades

Brunvoll has delivered many thruster systems to shipowners operating in demanding Baltic waters.

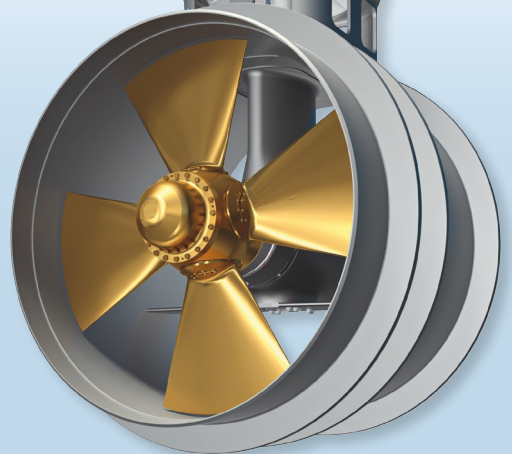
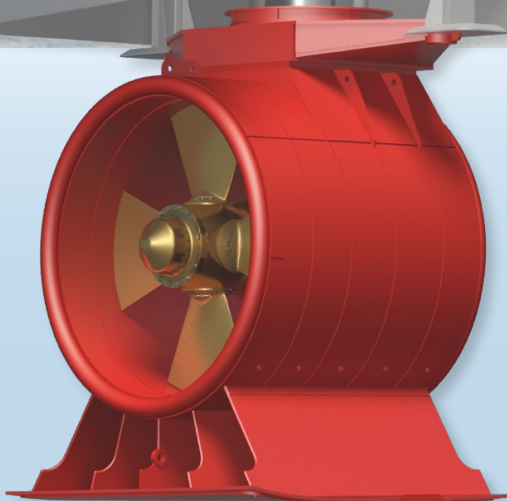
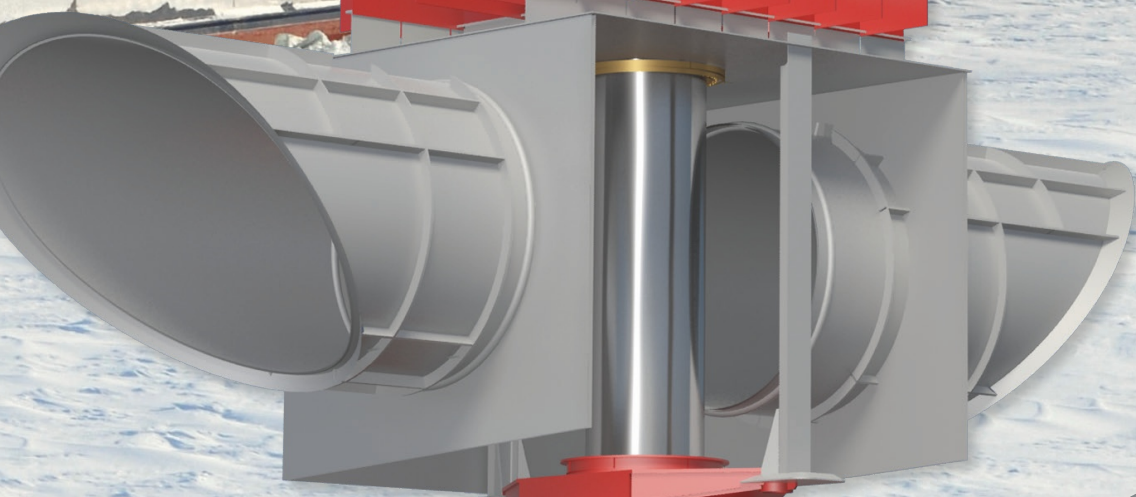
“Credo” is a geared cargo carrier, built to the highest Finnish/Swedish Ice Class IA Super, to enable smooth year-round traffic including ports in the northern part of the Gulf of Bothnia and the easternmost part of the Gulf of Finland.



2005 “Credo”  
Owner: AB Donsötank  
Yard: Edward Shipyard  
Bow: Combi AR63 LTC 1750 850 kW  
Stern: FU63 LTC 1550 670 kW









# Brunvoll Thruster Systems for any kind of RoRo and Container Ships



2008 "Hanna"  
Owner: Gebruder Ahrens  
Yard: J.J. Sietas  
Bow: FU63 LTC 1750 750 kW

2007 "Bahia Negra"  
Owner: Hamburg Süd  
Yard: Daewoo Shipbuilding & Marine Engineering  
Bow: FU80 LTC 2250 1,300 kW



2007 "Yasmine"  
Owner: Cobelfret  
Yard: Flensburger Schiffbau  
Bow: 2 x FU100 LTC 2450 2,000 kW







2008 "Mistral"  
Owner: Reederei-Moje  
Yard: J.J. Sietas  
Bow: FU 63 LTC 1750 750 kW  
Stern: FU 45 LTC 1375 450 kW



1996 "Maersk Kure"  
Yard: Odense Steel Shipyard  
Bow: FU100 LTC 2750 2210 kW  
Stern: 2 x FU80 LTC 2250 900kW



2005 "Ville de Bordeaux"  
Owner: Louis Dreyfus Armateurs  
Yard: Jintling Shipyard  
Bow: 2 x FU80 LTC 2250 1,200 kW



# Brunvoll Thruster Systems for any kind of Tankers



2006 "Bit Okland"  
Owner: Tarbit Shipping  
Yard: Shanghai Edward Shipbuilding  
Bow: FU80 LTC 2250 1,450 kW

2007 "SPT Crusader"  
Owner: Bergshav Management AS  
Yard: Tsuneishi Corporation  
Bow: FU100 LTC 2450 2,000 kW



2006 "Excelerate"  
Owner: Exmar  
Yard: Daewoo Heavy Industries  
Bow: 2 x FU80 LTC 2250 1,500 kW  
Stern: FU100 LTC 2450 2,000 kW







2004 "Ramona"  
Owner: Rederi AB Ålvtank  
Yard: Shanghai Edward Shipbuilding  
Bow: AR 63 LTC 1750 850 kW



2004 "Berge Arzew"  
Owner: Bergesen DY  
Yard: Daewoo Heavy Industries  
Bow: FU 100 LTC 2450 1,600 kW



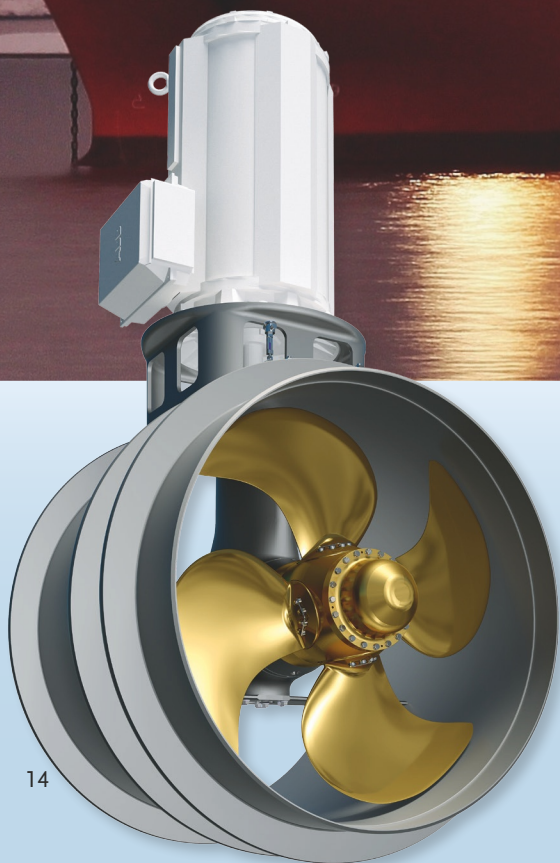
2006 "Iberica Knutsen"  
Owner: Knutsen OAS Shipping  
Yard: Daewoo Shipbuilding & Marine Engineering  
Bow: FU100 LTC 2450 2,000 kW



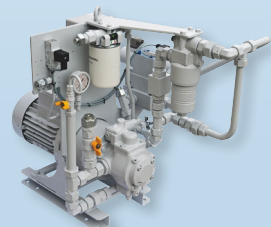
# The “Arctic Princess” and “Arctic Lady” transporting LNG from the far north to world markets - manoeuvring with Brunvoll Thruster Systems

The Snøhvit development at Melkøya in Norway is the northernmost liquefied natural gas (LNG) terminal in the world, at a latitude of 71° north, with fierce storms and freezing temperatures.

The “Arctic Lady” and her sister ship the “Arctic Princess” were the first winterized LNG carriers, specially designed to provide safe and reliable service in these extreme weather conditions.



2005 “Arctic Princess” and 2006 “Arctic Lady”  
Owner: Höegh Fleet Services  
Yard: Mitsubishi Heavy Industries  
Bow: FU100 LTC 2750 2200 kW









Brunvoll information resources are available in the publications shown here.

Please contact us if you would like to receive any of our brochures.

You are also welcome to read or download them as PDF files at [www.brunvoll.no](http://www.brunvoll.no)

## THRUSTER RANGE

Thruster Systems for any kind of ship



## CONTROL SYSTEMS

BruCon from Blade to Bridge  
The Modular Control System for Manoeuvring, Positioning and Propulsion

## SERVICE

Renowned for Efficient and Reliable Service world wide

## BRUNVOLL

Company Presentation

## CRUISE

The World's No.1 in Cruise Ships

## FISHING & RESEARCH

Trusted by the most demanding Fishermen and Researchers

## MERCHANT

Trusted in the Merchant Fleet for 50 years

## NAVY

Trusted for shock qualified naval thruster solutions worldwide

## OFFSHORE

Trusted world wide for reliability and high performance in any offshore application

## YACHTS

Superb thrusters for superyachts



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