# COOLING THE WORLD'S MOST ADVANCED CRUISE SHIP WITH NOVENCO<sup>®</sup> ZERAX<sup>®</sup> FAN



#### **NEXT GENERATION OF VESSELS**

AIDAprima, the first of two new cruise vessels for Aida Cruises, is the latest and largest ship ever built for the German shipowner. AIDAprima and the sister ship are the most advanced cruise liners in the world and with the NOVENCO® ZerAx® fans built into the air handling units (AHUs), they are set to be the most energy efficient vessels in their class. Both ships are in this aspect truly next-generation vessels.

The passenger experience is exceptional, among other things because Aida Cruises has gone to great lengths to ensure that the ships are the most fuel efficient cruise liners ever built.

### SPECIAL SOLUTIONS

For the AIDAprima a special AC system had

to be designed. The system should match uncompromising demands for quality, but also meet exceptionally stringent specifications for energy consumption. The owner's detailed specifications outlined a unique AC system that required the highest quality components and an entirely new design. It demanded the lowest possible energy consumption with easy maintenance and the ability to monitor and control everything to a level of detail never seen before.

#### **IMPLEMENTING INNOVATION**

The designed solution combines all the newest trends and components. The AIDAprima is the first vessel to feature NOVENCO ZerAx axial flow fans in AHUs. Even when built into AHUs the ZerAx can provide an incredible 92% efficiency and up to 50% less power consumption than traditionally fans. The ZerAx fans are key components in lessening the environmental impact of the AC system, and it is crucial for Aida Cruises.



Highly efficient NOVENCO® ZerAx® axial fan



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## FACTS

- ENERGY SAVINGS OF UP TO 50%
- HIGHEST SYSTEM EFFICIENCY OF UP TO 85%
  - INNOVATIVE FAN DESIGN

## THE NEXT GENERATION

The ZerAx is NOVENCO's next generation within the axial flow fans category. Years of experience and an exhaustive development process went into the design. All aspects of the renowned NOVENCO NovAx axial fans were turned over, evaluated and optimised. The result is a new fan with truly innovative design where the performance is remarkable and the efficiencies are groundbreaking. The materials are primarily aluminium that are cast and milled very precisely. The assembly is done with high precision and within environmentally safe production processes.

In the Aida Prima project, the ZerAx is used in the AZL version designed specifically for building into AHUs. These fans are compact units with short fan casings, integrated inlet cones and connection flanges.

With incomparable efficiencies of up to 92%, low sound levels, product lifetimes of 20+ years and recyclability rates of 98%, the ZerAx fans are true energy-savers of the future, that herald a new generation of axial flow fans.



Air handling unit with NOVENCO® ZerAx® fan inside



ZerAx<sup>®</sup> AZL built into AHU

