



Milgem TCG HEYBELIADA: Advanced Wakefield Adapted Design (AWAD) Of Escher Wyss Controllable Pitch Propellers Contribute To The Outstanding Performance Of TCG Heybeliada.

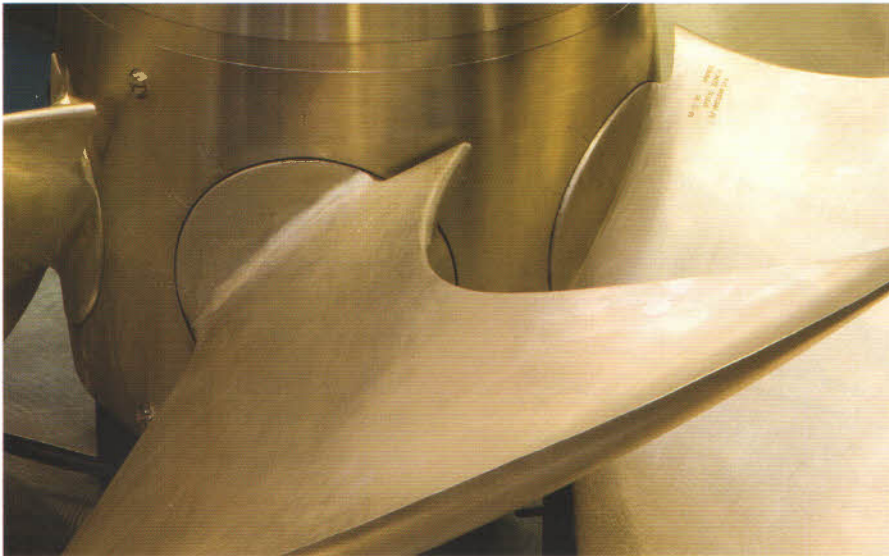
ANDRITZ Hydro with their Escher Wyss Propellers team congratulates TCG Heybeliada to her great performance!

Escher Wyss Propellers has specialised on tailor made Controllable Pitch Propellers (CPP) for Naval and Coast Guard as well as MegaYachts and

Special Application vessels.

The Escher Wyss Propellers' CPP system features a proprietary propeller hub / trunnion bearing design. In this design the trunnion is an integral part of the propeller blade; i.e. they are one piece. The blade is attached to the hub on the

inside of the hub. This way a smooth surface at the palm of the blade is achieved, without any outside bolts as sources for cavitation. Additionally, the operational load of each blade is transferred into the hub body by means of not one but two individual bearings. An inner and outer bearing in the body

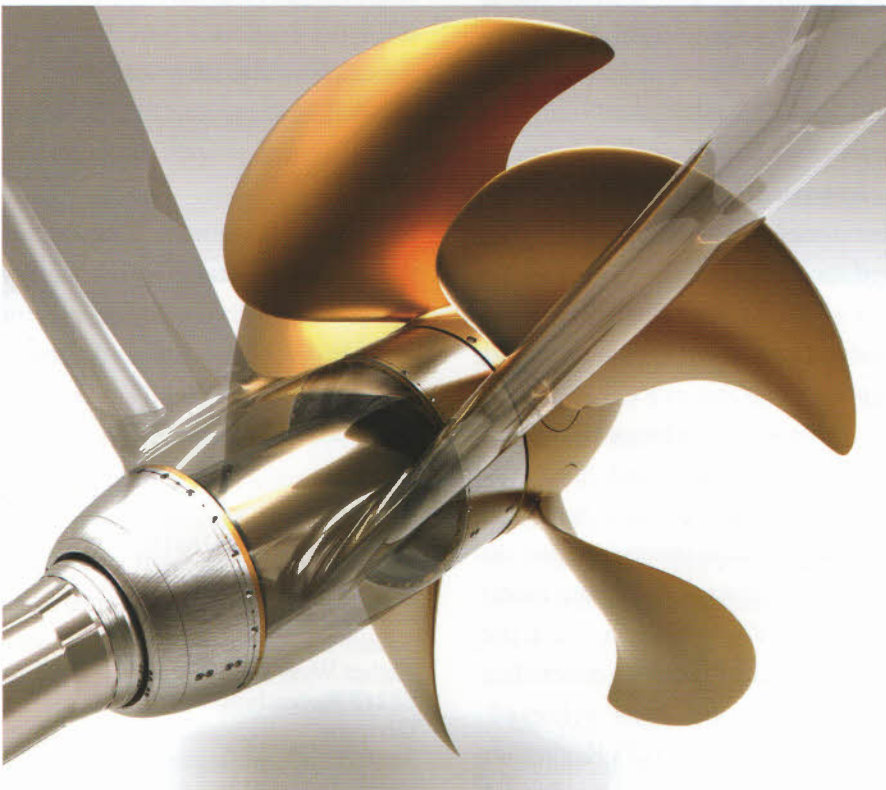


Escher Wyss Propeller blade without outside bolts

of the hub distribute the load of the blade into the hub body. This way an even load distribution is achieved. The hub body is effectively a heavy duty structure and allows for high loads at maximum mechanical strength. This design also makes a compact hub yielding better than average hub-to-blade ratios of up to 0,29.

However, an effective mechanical design is only one side of the coin. In each and every case it is necessary to carefully analyse the environment in which the respective propeller is forced to operate. In this case: the wakefield of the TCG Heybeliada.

Generally, wake adapted propeller design



Hydrodynamic interaction of propeller, shaftline and shaft bracket

ANDRITZ Hydro

50 Years
of reliable partnership



Since the invention of the first controllable pitch propeller (CPP) generations in the early 1930s the Escher Wyss CPPs by ANDRITZ Hydro represent the "State of the Art" in propulsion systems for vessel with advanced requirements.

More than 50 years of successful partnership with the German Navy and many of the Navies and Coast Guards world wide. Pushed forward by ever changing challenges and requirements for Corvettes, Frigates, Minehunters, Offshore Patrol and Supply Vessels.

Escher Wyss Propellers by **ANDRITZ Hydro**.
A strong partner. Now and in the Future.

ANDRITZ HYDRO GmbH

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