



BIGA GROUP Ltd.

SPECIAL WELDING, SHIP / OFF SHORE / INDUSTRY SERVICE

Why is it important to have a clean propeller, rudder and sea chest grating ?

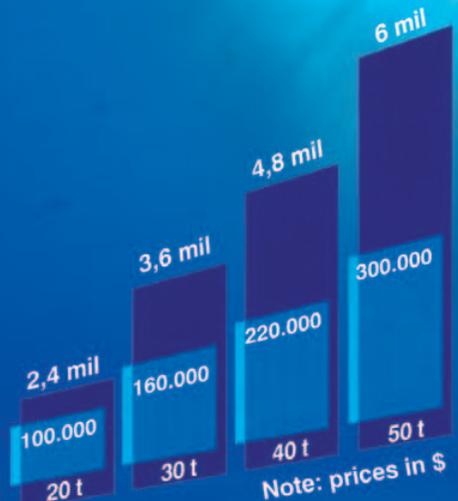
Propeller polishing is a highly cost effective means of maintaining a vessel's performance, It is the ship owner's interest to reduce ship running costs through the potential savings associated with a **clean propeller, rudder and sea chests.**

1. **Propeller fouling generates energy losses of up to 10%** requiring additional power (fuel) to maintain the same speed.
2. **A rough rudder causing additional turbulence reduces the vessel's speed up to 2%.**
3. **Poor flow of sea water through the sea chests adds additional stress to the main and auxiliary engines.** Unrestricted flow is required for fuel savings and the longer duration of engines.

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Yearly fuel expense (\$),
Yearly saving with clean propeller
Daily fuel usage



PREVENTION

BIGA GROUP helps you maintain underwater components routinely to reduce friction, ensure that the propeller, and sea water cooling system operates at optimum efficiency and flow.

How do we do it?

BIGA GROUP use an underwater hydraulic operated rotary tool for the cleaning of propellers, rudder and sea suction grates.

The polisher is designed purposely for the cleaning and polishing of the propeller and underwater components.

Various flexible abrasive heads adapt to the structure of the propeller to all required positions. A number of discs are used to reach the required scale.

This process involves the removal of growth using an appropriate abrasive head. Once the growth is removed, the buffering is followed using very fine discs.

HOW LONG DOES THE PROCESS TAKE?

The duration for an underwater polish of a 4 to 5 bladed propeller with a 6.5m diameter would be approximately 4 hours. The clean of vital underwater components and propeller can be done very easily integrated with the vessels programme, this clean task can be carried out while the vessel is at anchor.

GUARANTEE OF JOB WELL DONE

On completion of the underwater cleaning and polishing we deliver photos and a shot video of the cleaned and polished parts.

Upon completion we carry out and deliver at no expense an inspection of the ship's hull in a 20 minute photo and video document presentation.

