

ECO Polishing

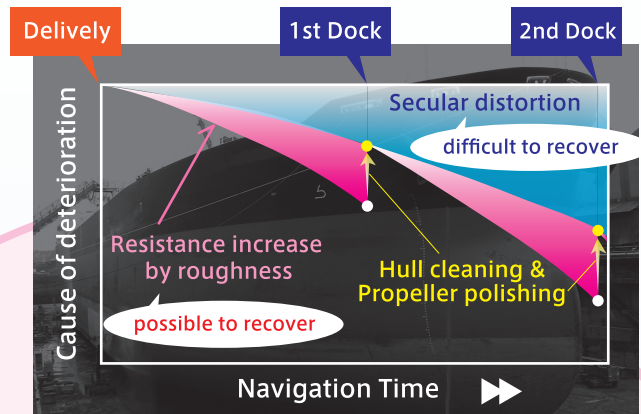
FOR PROPELLER BLADES

F.O.C. Saving
3.5%

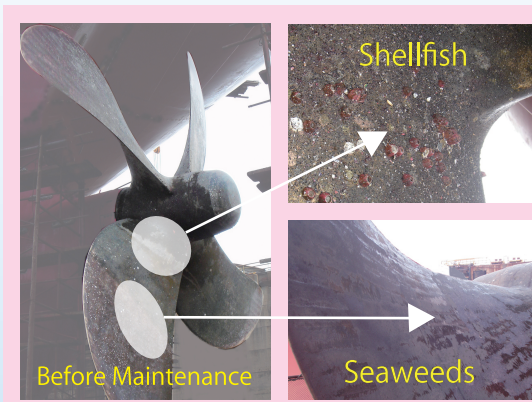
Decrease of Ship speed

The fuel efficiency of the ship begins to fall immediately after going on service. This is caused by secular distortion of main engine and bigger resistance caused by rougher surface on hull and propeller. In some vessel types, its speed downs abt. 0.3-0.5 knot in 10 years after going on service.

船的燃料从出航不久就开始下降。原因是主机的经年变化，船体和螺旋桨表面粗糙度增加引起的摩擦增大。根据船型不一，航行10年后，船速会下降0.3-0.5节。



Propeller Maintenance



Propeller surface is roughened by adhesion of shellfish and seaweed. By these, propeller performance deteriorates.

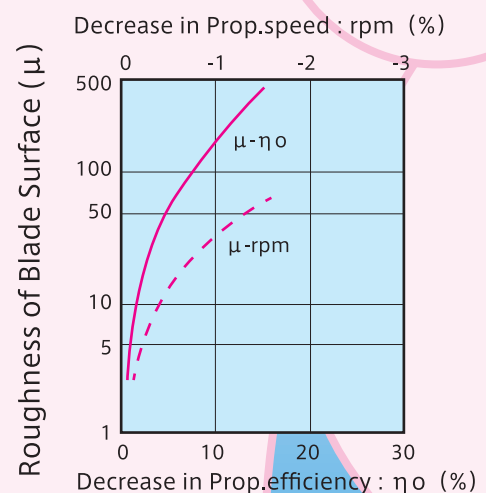
However, by polishing the propeller surface, surface roughness will be smoothed and propeller efficiency can be recovered and Vs so fuel cost can be improved.

螺旋桨会由于贝壳，海藻等的附着表面粗糙度增加，性能劣化。但是螺旋桨可以通过表面研磨，降低表面粗糙度，使效率恢复。可以提高船速和燃料利用率。

Fuel Improvement

The propeller efficiency recovers about 3.5% with Nakashima's own developed **ECO Polishing**. Using our special polishing tool, roughness of propeller surface can be improved from $50 \mu R_z$ to $15 \mu R_z$. Consequently approx. 0.2 knots can be expected.

通过我公司的特殊工具 **ECO Polishing**，可以使螺旋桨表面粗糙度从 $50 \mu R_z$ 降到 $15 \mu R_z$ ，使桨的效率约恢复3.5%。可以提高船速约0.2节。



NAKASHIMA