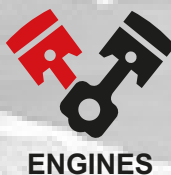




YOUR OPTIMIZATION OF ESSENTIAL MECHANICAL SHIP COMPONENTS

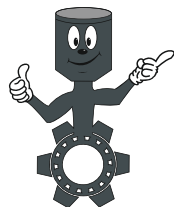
***ENVIRONMENTAL BENEFITS
LIFE EXTENSION
FUEL SAVING & EMISSION REDUCTION
MAINTENANCE OPTIMIZATION***

***Innovative Component protection against wear and tear
with the***



**WEARTEC GmbH & Co. KG, Lahnstr.41, 35606 Solms,
Operation site: Kalkwerk 4, 35756 Mittenaar-Bicken „Germany“
Tel.: +4964427069, E-Mail: info@weartec.de Webseite: weartec.de**

Application areas in the Maritime Industry



*Compressors /
Chillers / Reefers :*



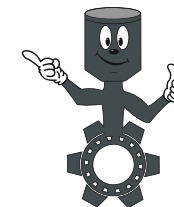
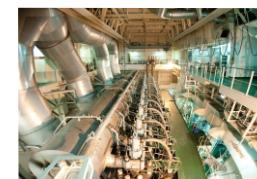
Hydraulic systems:



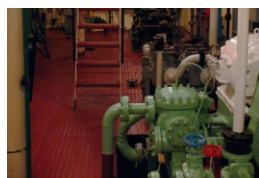
Crane gearbox:



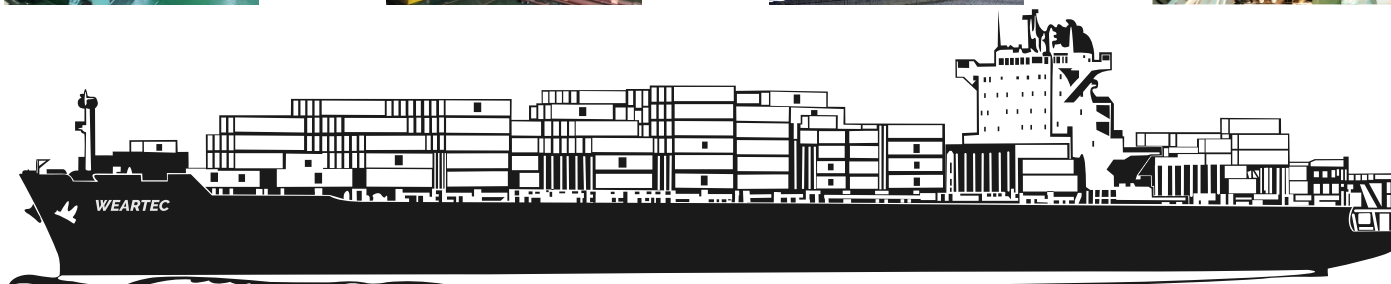
Main engine (2 & 4 Strokes):



Pumps:



Fans / Ventilation:



Winch gearbox:



Azimuth Thruster:



Separators / Purifiers:



Auxiliary engines:



Main gearbox:



*Rudder engine (gearbox),
Stern tube:*



- Dramatically/improves metal surfaces through a better contact patter, minimizing the deterioration of lubricant viscosity/shearing forces and lubricant wear, through a physical reaction
- Improves the seal between piston and bushing / liner
- Increases the service life of aggregates

- Ensures optimum machine performance, with reduced maintenance and vibration
 - Gives operational safety
 - Reduces fuel consumption, emissions in addition CO² and NO_x in the single-digit %-range.
- Further, there is a fine particle reduction in the double-digit %- range



Further benefits in addition to the fuel consumption and emission reduction;

- Reduction of oil consumption / lube oil usage
- Blow-by reduction at effected cylinders
- Keeps the lube oil cleaner and therefore extends the lube oil life
- Vibration, oscillation and noise reduction
- Temperature reduction
- Extended life of the treated component
- Reduction of maintenance costs
- Reduction of overhaul costs
- Less down-time
- A better contact pattern, on all components
- Cost saving through a better running engine
- Improvement of engine performance
- Wear protection durability
- Gives the engine a better combustion and with that a smoother running engine
- Smooth engine start running abilities

Field test on the vessel NAAMA BORCHARD
from F&L Schiffahrt GmbH & Co. KG
proven saving with Aqua Metro measurement technology:

Fuel consumption saving between 7.63% to 9.17%.

A CO₂ saving between 4.99% to 9.14%.