PROPULSION PRODUCT OVERVIEW





ENVIRONMENTALLY MINDED

- Equipment fully compatible with EAL oils that full fills VGP2013
- Suitable for use with water lubricated stern tubes





FEATHERING

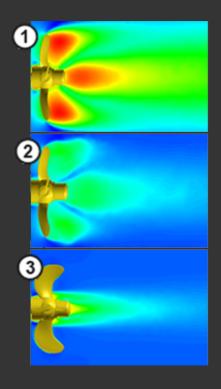
- Improvements:
 - Flexibility
 - Fuel consumption
 - Efficiency
 - Less mechanical wear
 - Less NOx emissions





FEATHERING - MINIMUM RESISTANCE

- 1. Locked propeller shaft without feathering
 - High resistance
- 2. Self-milling
 - Inadequate lubrication
 - Medium resistance
- 3. Locked propeller shaft with feathering
 - Low resistance
 - No mechanical loss





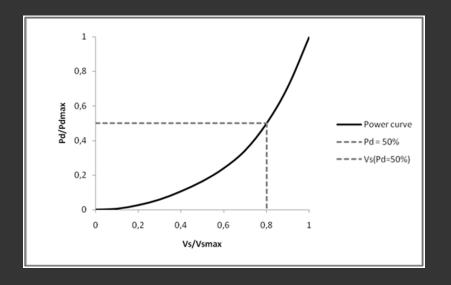
EXAMPLE: FEATHERING WITH TWIN SCREW

- Twin screw coastal tanker
- Shutting off one engine
- Simplified engine maintenance
- Benefits:

50 % input power

50 % fuel consumption

80 % vessel speed





STAINLESS STEEL CLADDING

- Water lubricated sterntube
- Shaft exposed to sea water
- A green solution
- Cost competitive
- Protection





CIRCULATED LUBRICATION WITH OIL CONDITION MONITORING

- Constant oil flow
- Automatic separation of contamination
- Monitoring circulated oil
- Enables planned service
- Minimizing downtime

