



CERTIFICATE NUMBER

08-LD374388-PDA

DATE

04 November 2008

ABS TECHNICAL OFFICE

London Engineering Department

# CERTIFICATE OF Design Assessment

This is to Certify that a representative of this Bureau did, at the request of  
**IMO AB**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate. It will remain valid as noted below or until the Rules or specifications used in the assessment are revised (whichever occurs first).

PRODUCT: Pump, 3-Screw

MODEL: ACE Optiline 4

ABS RULE: SVR 2008 1-1-4/7.7, 4-6-1/7.3

OTHER STANDARD:

AMERICAN BUREAU OF SHIPPING

John L. Morgan  
Engineering Type Approval Co-ordinator

**IMO AB**

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**Product:** Pump, 3-Screw

**Model:** ACE Optiline 4

**Intended Service:**

Lubrication and cooling, transfer, fuel oil and hydraulic oil handling

**Description:**

Three screw self priming pump with sealess magnetic drive.

**Ratings:**

Maximum inlet pressure 7 bar g, minimum inlet pressure -0.85 bar g, maximum differential pressure 16 bar g outlet, temperature range -20°C to 180°C, flow rate 10 to 210 l/min.

**Service Restrictions:**

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

**Comments:**

Based on the service as specified in 4-6-1/7.3 of the Rules, each pump is to be tested for capacity and hydrostatic test performed at the manufacturer's plant in the presence of the ABS Surveyor as applicable.

**Notes/Documentation:**

This Product Design Assessment (PDA) is valid only for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

**Term of Validity:**

This Design Assessment Certificate number 08-LD374388-PDA, dated 04/Nov/2008 will expire on 03/Nov/2013 or at an earlier date should there be alterations to the product's design or changes to the referenced ABS Rules and other specifications, which affect the product. Product use on or after 1 January 2009, will be subject to compliance with the ABS Rules or specifications in effect when the vessel, MODU or facility is contracted. The product's acceptability on board ABS-classed vessels or facilities is defined in the service restrictions of this certificate.

**STANDARDS****ABS Rules:**

SVR 2008 1-1-4/7.7, 4-6-1/7.3

