

CERTIFICATE NUMBER

DATE

08-HS356071/1-PDA

16 July 2008



**ABS**

ABS TECHNICAL OFFICE

Houston SED - Ship Systems

# CERTIFICATE OF Design Assessment

This is to Certify that a representative of this Bureau did, at the request of  
**LOAD SYSTEMS INTERNATIONAL INC.**

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:** Wireless Load Cells and Adaptor Plate

**MODEL:** GS Series : GC005, GC012, GC018, GC035, GC060, GC100 and GC170; Adapter Plate: PC660-54

**ABS RULE:** 2008 Steel Vessels Rules 1-1-4/7.7, 4-8-3/13.3.1, 2008 Mobile Offshore Drilling Unit Rule 4-3-3/9.3.2

**OTHER STANDARD:** KEMA 08ATEX0068 X, CSA Certificate 1332949 Issued Date 17 August 2007;

AMERICAN BUREAU OF SHIPPING



Hans P. Haendler

Engineering Type Approval Co-ordinator

**LOAD SYSTEMS INTERNATIONAL INC.**

4495 WILFRID - HAMEL BLVD SUITE 110

QUEBEC

QC G1P 2J7

Canada

Telephone: 418-650-2330

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**Product:** Wireless Load Cells and Adaptor Plate

**Model:** GS Series : GC005, GC012, GC018, GC035, GC060, GC100 and GC170; Adapter Plate: PC660-54

**Intended Service:**

Detect the hoist load of a crane and/or lifting applications on ground, offshore platforms and ships.

**Description:**

GS Series load sensors are used for the detection of the hoist load of a crane and communicate their result via a two-way radio network to a display.

The 90 degree adapter plate PC660-54 is designed to attach the load cells to the cranes.

**Ratings:**

Operating Temperature: -35° to 85°C (-30 to 185°F)

Battery: 1 "D-Cell" Lithium or Alkaline

Radio Frequency Band: 900 MHz standard - European Community's 868 MHz as an option; Radio Power: 15 dBm

Material: Stainless Steel

CSA: Class 1, Group A, B, C & D; Exia Intrinsically Safe, Temperature Code T4

KEMA: II 1 G Exia IIC T4 or 150 °C

**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:**

Only the following battery may be used in the GS Series Sensors with the CSA intrinsically safe or ATEX certified part: Battery Type D, Part Number TL-5920, Manufacturer Tadiran, Voltage per Cell 3.6V, Temperature Code T4. The restriction/comments contained in the CSA and KEMA reports are to be adhered to. Sensors without the intrinsically Safe or ATEX condition may use standard alkaline "D" cell batteries.

**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-HS356071/1-PDA, dated 16/Jul/2008 will expire on 15/Jul/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:**

2008 Steel Vessels Rules 1-1-4/7.7, 4-8-3/13.3.1, 2008 Mobile Offshore Drilling Unit Rule 4-3-3/9.3.2

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**International:**

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