



CERTIFICATE NUMBER

09-HS453004-PDA

DATE

14 May 2009

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  
**GENERAL CABLE - Franklin**

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: Cables, Fiber Optic Marine Shipboard Cable

MODEL: 1C1Z-TPL, 1C1Z-ATPL, 4M1Z-TPL, 4M1Z-ATPL Series

ABS RULE: 2009 Steel Vessels Rules 1-1-4/7.7, 4-8-3/9.5 & 4-8-3/9.13 and 2008 MODU Rules 4-3-3/5.21

OTHER STANDARD: Intertek / ETL Semco, Report No. 3174223CRT-001-Rev.0 dated 27March 2009  
UL 1651, UL 1685-FT4/IEEE 1202 Flame Test  
CSA C22.2 No. 232;

AMERICAN BUREAU OF SHIPPING

Hans P. Haendler

Engineering Type Approval Co-ordinator