DATE

06-HS191959-PDA

03 November 2006



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

## SPECTREX 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:

Flame Detector

MODEL:

20/20SI-C-ST, 20/20SI-ST, 20/20L-ST, 20/20LB-C-ST, 20/20LB-ST, and 20/20MI.

ABS RULE:

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 as follows: 2006 Steel Vessel Rules 1-1-4/7.7, 4-7-3/11.1.10, 4-7-3/11.3.3.

OTHER STANDARD:

FM Project Id: 3020071 Dated 10 March 2006.; Certificate Numbers Sira 00ATEX1162, 00ATEX1163, 04ATEX2010. Project Numbers 51A13638 Dated 6 February 2002, 52V11392 Dated 15 September 2005.

SOLAS Regulation II-2/7. FSS Code Chapter 9.;

AMERICAN BUREAU OF SHIPPING

Ans P. Haendler

Engineering Type Approval Co-ordinator