

Certificate No.: KR100-0005509

## Certificate of Pipe Measurement System

This is to report that we, the undersigned, attended at the Kongsberg Maritime China Jiangsu Ltd. to review the length measurement system for radar measurement pipe of Kongsberg radar level gauging system with following details

1. Place of system

: Kongsberg Maritime China Jiangsu Ltd.

2. Date of attendance

: 23rd February, 2012

3. System

: Length measurement system for radar measurement pipes

4. Reviewed items

: Measurement lathe and related devices

Thermometers for the system.Distance gauges on the lathe

- Calculation logic for reference pipe and radar measurement pipe

5. Radar usage

: Cargo tanks at LNG & LPG vessels

We have recognized that this measurement system has the ability to certify the length of Kongsberg Radar Stand pipe with  $\pm$  0.1 mm resolution considering all equipments and calculation logic at the time of our attendance

From these observations, we have found that the length measurement system in above mentioned premises for radar measurement pipe of Kongsberg radar level gauging system in LPG/LNG vessels are sufficiently accurate to measure the length of radar stand pipe to be used for intended purposes.

Intertek Kimsco Co., Ltd.



Capt. H. J. Kim Marine Team Leader