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Office: Lloyd's Register EMEA - Energy, Coventry

Date: 29 February 2012

This certificate is issued to Gantry Railing Limited to certify that the undersigned Surveyor to Lloyd's Register EMEA did at their request attend at their Sudmeadow works, Gloucester on 27 February 2012 for the purpose of witnessing the testing of the undernoted Gantry Railing Limited Clip in accordance with the requirements of Gantry Railing Limited Order No. 10357.

Gantry Railing Limited Type 9112/08 Clip.

Bolt Material to BS EN ISO 898-1 Grade 8.8

Nut Material to BS EN 20898-2 1994 (ISO 898-2:1992) Grade 8 (plus washer).

Design Load 20 KN

#### **Test Procedure**

The above Clip was subjected to lateral testing in accordance with Gantry Railing Limited Test Procedure No. TESTBS5950. The procedure is based on BS 5950 Part 1: 2000 – Section 2.1.2.5 and Section 7.

The Clip was bolted down onto a test rig simulating normal fixing conditions with a measured torque of 60 Nm.

# Pre Load Test (Design Load)

The Clip was subjected to a pre-load of 20 KN for one minute duration for a preliminary bedding down load.

# Proof Test (1.3 x Design Load)

A test load of 26 KN was applied in gradual stages.

## Strength Test (1.6 x Design Load)

The proof load was increased in gradual stages to 32 KN.

### Proof / Strength Test Result

The pre-load test, proof test and strength test were all considered acceptable. There was no indication of mechanical damage or distortion on the Clip or bolt.

#### Failure Load

The strength load was increased gradually to 40 KN (2 x design load). Upon visual examination the Clip had no mechanical damage or distortion.

Calibration of test equipment was verified.



Stephen Wereuith

Surveyor to Lloyd's Register EMEA

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