

# Test Certificate

Office: **Lloyd's Register EMEA - Energy, Coventry**

Date: **04 March 2010**

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 **17 November 2008 to 18 November 2008** for the purpose of witnessing the testing of the **underrated Gantry Railing Limited Clip** in accordance with the requirements of **Gantry Railing Limited Order No. 6762** on Lloyd's Register EMEA.

Gantry Railing Limited Type 3226/15 Clip  
Bolt Material to BS EN ISO 898-1 Grade 8.8 (A325)  
Nut Material to BS EN 20898-2 1994 (ISO 898-2:1992) Grade 8

Design Load 250 KN (5600 PSI)

#### 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 600 NM (450 Ft Lb).

#### Pre Load Test (Design Load)

The Clip was subjected to a pre-load of 250 KN (5600 PSI) for one minute duration for a preliminary bedding down load.

#### Proof Test (1.3 x Design Load)

A test load of 325 KN (7300 PSI) was applied in gradual stages.

#### Strength Test (1.6 x Design Load)

The proof load was increased in gradual stages to 400 KN (9000 PSI).

#### Proof / Strength Test Result

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

Note: All measuring equipment used during the tests held current calibration status.



Lloyd's Register  
EMEA  
Coventry Office

R. A. Nuttall  
Surveyor to Lloyd's Register EMEA

A member of the Lloyd's Register Group