



Test Certificate

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

Date: **04 September 2014**

This Certificate is issued to **Gantry Railing Limited** to certify that the undersigned Surveyor did, at their request, attend their **Sudmeadow Works, Gloucester** on **02 September 2014** 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. 13436.

Gantry Railing Limited Type 9220-30 Clip.
M20 Bolt Material to BS EN ISO 898-1 Grade 8.8
M20 Nut Material to BS EN ISO 898-2 Grade 8

Design Load 300 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 welded to a plate with a 5mm (throat) fillet weld all around the base.

The Stet was bolted down onto a test rig simulating normal fixing conditions with a measured torque of 350 Nm.

Pre Load Test (Design Load)

The Clip was subjected to a pre-load of 300KN for one minute duration for a preliminary bedding down load.

Acceptance Test Load (1.3 x Design Load)

A test load of 390KN was applied in gradual stages.

Strength Test Load (1.6 x Design Load)

The proof load was increased in gradual stages to 480KN.

Proof / Strength Test Result

The pre-load test, proof test and strength test were all considered acceptable.

Failure Load

The clip was not taken to failure. Upon dis-assembly of the components, there was very little distortion to the cap, base and the bolts. The areas of contact and load transfer between the rail/clip and clip/base showed consistent pressure distribution. The clip was in a serviceable condition.

Calibration status of test equipment verified and traceability to UKAS confirmed.



Stephen Meredith
Surveyor to Lloyd's Register EMEA

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