



Test Certificate

Office: Lloyd's Register EMEA - Energy, Coventry

Date: 12 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 2119 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 130 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 130KN for one minute duration for a preliminary bedding down load.

Acceptance Test Load (1.3 x Design Load)

A test load of 169KN was applied in gradual stages.

Strength Test Load (1.6 x Design Load)

The proof load was increased in gradual stages to 208KN.

Proof / Strength Test Result

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

Failure Load

The test was stopped at 445KN. The clip was not taken to failure load. Upon dis-assembly of the components, there was no visible distortion to the cap, base and bolt. Yielding of the thrust face of clip cap was consistent, along with the area of contact between clip cap boss and front of clip base. The clip was still in 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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