



Test Certificate

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

Date: **23 August 2018**

This Certificate is issued to **Gantry Railing Limited** to certify that the undersigned Surveyor to Lloyd's Register EMEA did, at their request, attend their **Sudmeadow Works, Gloucester** on **24 July 2018** 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. 16682**.

Gantrail Type 2530 - comprises 2524 Body & 2530 Cam
M30 Bolt Material BS EN ISO 898-1 Grade 8.8
M30 Nut Material BS EN ISO 898-2 Grade 8
Design Load 200kN

Test Procedure

The above Clip was subjected to lateral testing in accordance with Gantry Railing Limited Test Procedure No. Cliptst Issue 4 & recorded as GTR-0145. The procedure is based on BS 5950 Part 1: 1985 – Section 2.1.2.5 and Section 7.

The Clip was bolted down with the M30 bolt at the middle position onto a test rig simulating normal fixing conditions with a measured torque of 1000Nm.

Pre Load Test (Design Load)

The Clip was subjected to a pre-load of 200kN for one minute duration as a preliminary bedding down load.

Acceptance Test Load (1.3 x Design Load)

A test load of 260kN was applied in gradual stages.

Strength Test Load (1.6 x Design Load)

The proof load was increased in gradual stages to 334kN. The desired 1.6 x Design Load was achieved.

Proof / Strength Test Result

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

Failure Load

No failure occurred as the test was stopped at 334kN. Upon disassembly of the components, the clip body showed evidence of pressure marks & plastic deformation along the front face. The M30 Grade 8.8 bolt had bent from the test load.

Pressure gauge serial No. 58814, 0-10000 psi, calibrated 05/05/2017, HES Certificate Ref. No. GP- 105(77619).

Pressure Gauge serial No. CL.1.6, 0-10000psi, calibrated 05/05/2017 HES Certificate Ref. No HG63G(77618).

Calibration verified to Chamois Metrology Ltd. (UKAS 0822)

Torque Wrench Serial No. 2007/223056-1000 Nm, calibrated 19/07/2018, due 19/07/2019. Certificate No. U1805593,

Certificate Issued by Quasartronics Ltd (UKAS 0511)

David Hodges
Surveyor to Lloyd's Register EMEA

A subsidiary of Lloyd's Register Group Limited


 Lloyd's Register
David Hodges
23 August 2018
PRJ1082370
Birmingham
Lloyd's Register EMEA
LR101.2016.05

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