



Test Certificate

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

Date: **13 May 2016**

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 **27 April 2016** 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. 15148**.

Gantry Railing Limited Type 3112 Clip.
M12 Bolt, Material BS EN ISO 898-1 Grade 10.9
M12 Nut, Material BS EN ISO 898-2 Grade 10
Design Load 30kN

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-113. The procedure is based on BS 5950 Part 1: 2000 – Section 2.1.2.5 and Section 7.

The Clip was bolted down with the cap at the centre position onto a test rig simulating normal fixing conditions with a measured torque of 160 Nm.

Pre Load Test (Design Load)

The Clip was subjected to a pre-load of 30kN for one minute duration as a preliminary bedding down load.

Acceptance Test Load (1.3 x Design Load)

A test load of 39kN was applied in gradual stages.

Strength Test Load (1.6 x Design Load)

A test load of 48kN was applied in gradual stages

Proof / Strength Test Result

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

Failure Load

The strength load was increased gradually to 62kN (2 x Design Load) without failure. Upon disassembly of the components, the clip body was in good condition with no signs of deformation. The fixing bolt & nut showed signs of damage but had not failed. The bolt had deformed & bent adjacent to the contact point with the clip. The clip washer was in good condition.

Gantry Railing Ltd Equipment Record Card Item No. 151.
Pressure gauge serial No. S8813 (HFPG273 Hydraulic) 0-2000 psi,
calibrated 29/08/2014, Certificate No. PG273.
Certificate issued by Hi-Force Hydraulic Tools (UKAS 022)
Calibration due 28/08/2016 (Ref. E.R.C Item No. 151)
Gantry Railing Ltd Equipment Record Card Item No. 155
Torque Wrench Serial No. M140052-330 Nm, calibrated
13/07/2015, due 13/07/2016. Certificate No. U154095,
Certificate Issued by Quasartronics Ltd (UKAS 0511)



David Hodges
Surveyor to Lloyd's Register EMEA

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