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TEST REPORT

(This Report is issued subject to the terms & conditions set out below)

Your Ref: - Our Ref: MM-31732/LL/1 Date: 02 January 2013

Page 1 of 2

Subject : Testing of GFRP Rebar submitted by Sato Kogyo (S) Pte Ltd on 02 January 2013.

Tested For : **FiReP Rebar AG**
Alte Jonastrasse 83
CH-8640 Rapperswil
Switzerland

Attn: Mr. Marc Schurch

Date and Place of Test : 02 January 2013 at Setsco Laboratory, Singapore

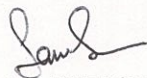
Method of Test : Tension Load Test
The test sample was clamped on the Universal Testing Machine in a vertical position. Tension load was applied at a rate of 220MPa/min until failure. Maximum load and E-Modulus were then recorded.


Description of Sample : Three (03) pieces of GFRP Rebar with approximately total length of 1500mm (Refer to Photograph 1 attached) were received as follows:

| S/No | Description | Qty |
|------|----------------|-----|
| 01 | Ø40 GFRP Rebar | 03 |

Results : Tension Load Test
Refer to Table attached.

Witnesses : Mr. Funakoshi (Sato Kogyo)
Ms. Tay Li Ying (Basler & Hofmann)


LAWRENCE LIM
Testing Officer


NG AIK MIU
Engineer (Mechanical Testing)
Mechanical Technology Division

ReportsOthers/2012/meiyi

Terms & conditions:

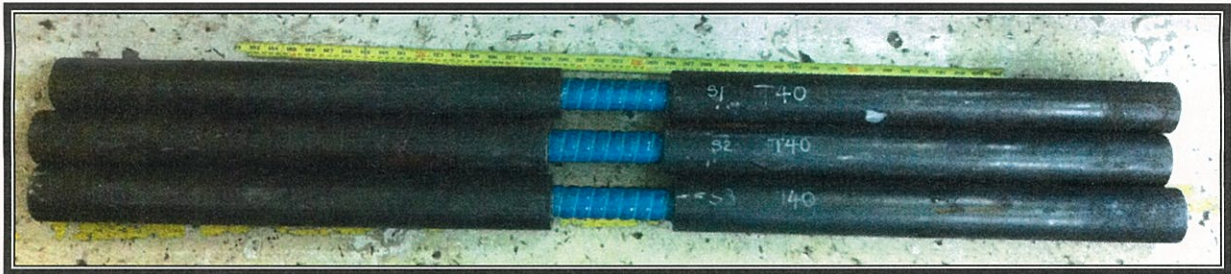
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Results:

Table 1 : Tension Load Test

| Sample Reference | Ø40mm GFRP Rebar | | |
|---|---|--------|--------|
| | S1 | S2 | S3 |
| Nominal Cross-sectional Area (mm ²) # | 1257 | | |
| Overall Length (mm) | 1500 | | |
| Exposed Length (mm) | 151 | 156 | 162 |
| Maximum Load (kN) | 1040.6 | 1049.5 | 1023.5 |
| Tensile Strength (N/mm ²) | 827.8 | 834.9 | 814.2 |
| Tensile E-Modulus (GPa) | 62 | 66 | 66 |
| Mode of Failure | Failure of the bar (See Photograph 2 attached) | | |

- Based on Client's Sample Reference.



Photograph 1 : Show samples submitted



Photograph 2 : Show tested samples

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for