

No.: SC091221449

Date: Feb. 04,2010

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TANCHOR CHANNELS CO., LTD 3F, BUILDING 3, NO 1221 YAN AN XI RD SHANGHAI

The following sample(s) was/ were submitted and identified on behalf of the client as:

Sample Name

**TANCHOR** 

Sample Number

SC091221449

Test Required

Please see next pages

Product or Lot No.

hot rolled

**Product Specification** 

HBC52/26 350MM LENGTH

Manufacturer

TANCHOR CHANNELS CO., LTD

Date of Receipt

Dec. 8, 2009

Test Period

Dec. 8, 2009 to Feb. 04, 2010

Test result(s)

For further details, please refer to the following page(s)

\*\*\*\*\*\* To be continued\*\*\*\*\*

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd

Authorized signatory

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#### Tensile Loading Test of TANCHOR Hot Rolled Channel

#### 1. Brief Introduction

TANCHOR CHANNELS CO., LTD (3F, Building 3, No.1221, Yan an xi Rd, Shanghai, P.R.C) consigns SGS-CSTC Standard Technical Services (Shanghai) Co., Ltd. to test the tensile loading test of TANCHOR Hot Rolled Channel. The type of the sample is HBC52/26 350MM, provided by consigner. The embedment of the sample and the mold of the concrete are done by SGS. The molding concrete is commercial concrete transported by pump which strength grade is C40. The curing age is 28 days.

With reference to BS 5080-1:1993 Structural fixings in concrete and masonry --- Part 1: Method of test for tensile loading

### 3. Test Equipments

No.	Equipment	Туре
1	ENERPAC Bolt pull test apparatus	P80
2	Dial indicator	0~50mm
3	Digital Gauge for Force	Z50

\*\*\*\*\*\* To be continued\*\*\*\*\*\*

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#### 4. Test Results

## 4.1 Description of Concrete

Design Strength	Molding Date	Test Date	Provider of Concrete	Concrete Strength Grade
C40	2009-12-9	2010-1-9	Shanghai Shuangqiu commercial concrete Co., Ltd.	C40

#### 4.2 Test Results of TANCHOR Hot Rolled Channel

			_	Test Result				
No.	Design Load (kN)	Acceptable Load of Failure (kN)	oad of Safety ailure factor	Maximum Load (kN)	Average of Maximum Effective Deflection (mm)	Breaking Form of Samples	Conclusion	
1			161.2	4.37	The embedded rod was broken	Meet the design requirements		
2	50	150	3.0	165.7	4.44	The embedded rod was broken	Meet the design requirements	
3				159.6	4.10	The embedded rod was broken	Meet the design requirements	

#### Note:

- 1. The design load and safety factor was declared by client.
- Requested by client, the average of maximum effective deflection is the record of maximum average deflection within 5mm.

Annex 1: Test results of each sample

Annex 2: Sample Drawing

Annex 3: Test Photos

\*\*\*\*\*\* To be continued\*\*\*\*\*\*

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Annex 1: Test results of each sample

Table 1 Test results of Sample 1

No.	Load (kN)	Deflecti	Average Deflection	
		1	2	(mm)
1	10	0.00	0.01	0.005
2	20	0.01	0.01	0.01
3	30	0.23	0.24	0.24
4	40	0.56	0.95	0.76
5	50	0.61	1.66	1.14
6	60	0.84	2.25	1.54
7	70	1.25	3.10	2.18
8	80	1.94	4.28	3.11
9	90	3.04	5.70	4.37
10	100	5.12	7.93	6.52

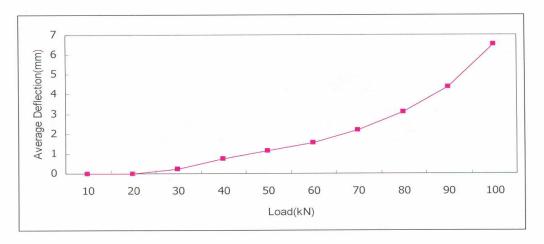


Fig.1 Average Deflection-Load graph of Sample1

\*\*\*\*\*\* To be continued\*\*\*\*\*

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Table 2 Test results of Sample 2

No.	Load (kN)	Deflection	Average Deflection	
		- 1	2	(mm)
1	10	0.00	0.00	0.00
2	20	0.02	0.00	0.01
3	30	0.41	0.18	0.30
4	40	0.66	0.95	0.80
5	50	0.66	1.81	1.24
6	60	0.72	2.78	1.75
7	70	0.78	3.75	2.26
8	80	1.86	4.17	3.02
9	90	3.22	5.65	4.44
10	100	4.98	7.82	6.40

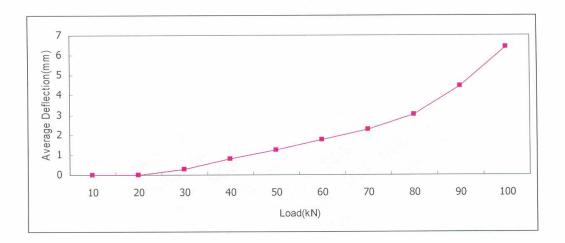


Fig.2 Average Deflection-Load graph of Sample2

\*\*\*\*\*\* To be continued\*\*\*\*\*\*

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Table 3 Test results of Sample 3

No.	Load (kN)	Deflection	Average Deflection	
		1	2	(mm)
1	10	0.01	0.00	0.005
2	20	0.02	0.00	0.01
3	30	0.32	0.21	0.26
4	40	0.58	1.01	0.80
5	50	0.74	1.65	1.20
6	60	0.92	1.94	1.43
7	70	1.02	2.91	1.96
8	80	1.84	4.02	2.93
9	90	3.24	4.95	4.10
10	100	5.32	7.32	6.32

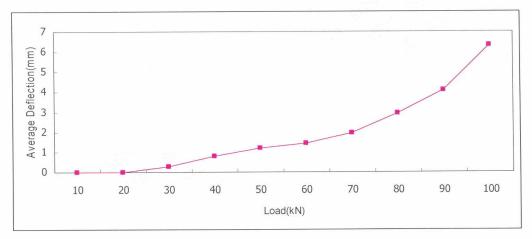


Fig.3 Average Deflection-Load graph of Sample3

\*\*\*\*\*\* To be continued\*\*\*\*\*

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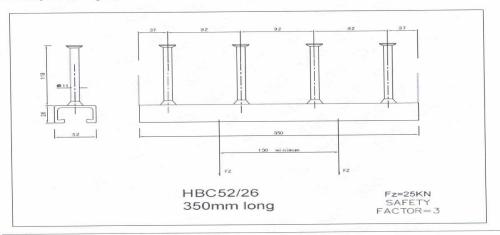


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## Annex 2: Sample Drawing



\*\*\*\*\*\* To be continued\*\*\*\*\*\*

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Annex 3: Test Photos









\*\*\*\*\*\* End of report \*\*\*\*\*\*

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