

No.: SC110420375

Date: May. 25. 2011

Page: 1 of 10

TANCHOR CHANNELS CO., LTD.

3F, BUILDING 3, NO.1221, YAN-AN RD, SHANGHAI, P. R. C.

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

Sample Name

: Tanchor Cast-in channel

Sample Number

SC110420375

Test Required

Please see next pages

Test Method

Please see next pages

Product specification

HBC40/22

Manufacturer

TANCHOR CHANNELS CO., LTD.

Material and Mark

Hot-rolled

Date of Receipt

: Apr. 25, 2011

Test Period

Apr. 25, 2011 to May. 25, 2011

Test result(s)

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

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

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

ally Xie

Sally Vic

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 Cast-in Channel. The type of the sample is HBC40/22, 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 C30. The curing age is 28 days.

2. Test Method

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	

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4. Test Results

4.1 Description of Concrete

Design Strength	Molding Date	Test Date	Provider of Concrete	Concrete Strength Grade
C30	2011-04-25	2011-05-23	Shanghai Pengzhong concrete products Co., Ltd.	C30

4.2 Test Results of TANCHOR Hot Rolled Channel

Accept	Accept		Test Result				
No.	Design Load (kN)	able Safe	Safety factor	Maximum Load (kN)	Average of Maximum Effective Deflection (mm)	Breaking Form of Samples	Conclusion
1		48		76.7	0.93	The sample is shown deformation. The concrete is broken.	Meet the design requirements
2	16		48 3.0	3.0	78.1	1.44	The sample is shown deformation. The concrete is broken.
3				77.4	2.24	The sample is shown deformation. The concrete is broken.	Meet the design requirements

Note: The design load and safety factor was declared by client.

Annex 1: Test results of each sample

Annex 2: Sample drawing and photo

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	5	0.00	-0.05	-0.03
2	10	0.00	-0.08	-0.04
3	15	-0.01	-0.05	-0.03
4	20	-0.07	0.04	-0.02
5	25	-0.14	0.14	0.00
6	30	-0.17	0.22	0.03
7	35	-0.19	0.30	0.06
8	40	-0.21	0.44	0.12
9	45	-0.22	0.49	0.14
10	50	-0.23	0.57	0.17
11	55	-0.22	0.67	0.23
12	60	-0.10	0.85	0.38
13	65	0.17	1.21	0.69
14	70	0.36	1.49	0.93

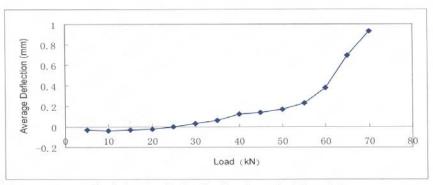


Fig.1 Average Deflection-Load graph of Sample1

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

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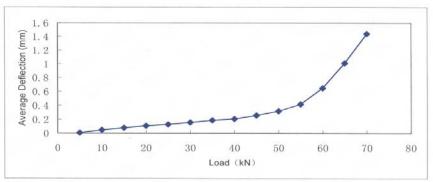


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Table 2 Test results of Sample 2

No.	Load (kN)	Deflecti	Average Deflection	
	Load (KIV)	1	2	(mm)
1	5	0.00	0.01	0.01
2	10	0.07	0.02	0.05
3	15	0.13	0.03	0.08
4	20	0.18	0.03	0.11
5	25	0.22	0.03	0.13
6	30	0.27	0.04	0.16
7	35	0.32	0.05	0.19
8	40	0.37	0.05	0.21
9	45	0.45	0.07	0.26
10	50	0.54	0.10	0.32
11	55	0.67	0.16	0.42
12	60	0.98	0.31	0.65
13	65	1.43	0.58	1.01
14	70	1.97	0.90	1.44



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Table 3 Test results of Sample 3

No.	Load (kN)	Deflection	Average Deflection	
		1	2	(mm)
1	5	0.00	-0.05	-0.03
2	10	0.02	-0.05	-0.02
3	15	0.05	0.22	0.14
4	20	0.11	0.30	0.21
5	25	0.16	0.36	0.26
6	30	0.26	0.43	0.35
7	35	0.36	0.48	0.42
8	40	0.52	0.51	0.52
9	45	0.68	0.64	0.66
10	50	0.90	0.83	0.87
11	55	1.09	1.01	1.05
12	60	1.32	1.19	1.26
13	65	1.85	1.57	1.71
14	70	2.45	2.02	2.24

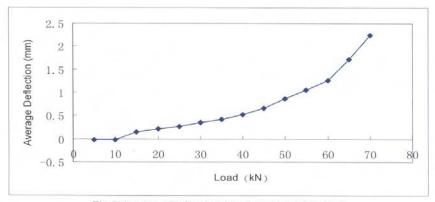


Fig.3 Average Deflection-Load graph of Sample3

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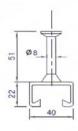


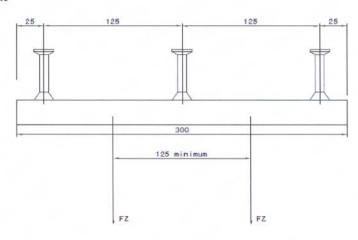
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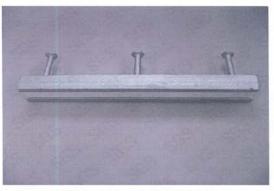
Annex 2: Sample Drawing and photo





HBC40/22

Fz=8.0KN SAFETY FACTOR=3



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Annex 3: Test Photos

Sample 1:



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Sample 2:









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Sample 3:









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

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