

## TEST REPORT

No. : SC091221455

Date : Dec. 23,2009

Page: 1 of 5

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 : SC091221455  
Product Specification : HBC52/26  
Product or Lot No. : Hot rolled  
Manufacturer : TANCHOR CHANNELS CO., LTD  
Material and Mark : Q235  
Test Required : Chemical composition analysis, Tensile test, Adhesion test,  
Neutral salt spray test (NSS), Coating thickness test  
Date of Receipt : Dec. 8,2009  
Test Period : Dec. 8,2009 to Dec. 23,2009  
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

*Sally Xie*  
Sally Xie  
Authorized signatory

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# TEST REPORT

No. : SC091221455

Date : Dec. 23, 2009

Page: 2 of 5

## 1. Chemical composition analysis:

Test method: OES

Element	C	Si	Mn	P	S
Result, %	0.11	0.16	0.40	0.027	0.013

## 2. Tensile test:

Test method: ISO 898-1:2009

Test item	Tensile strength ( $R_m$ ) (N/mm <sup>2</sup> )	Yield strength ( $R_{eL}$ ) (N/mm <sup>2</sup> )	Elongation after fracture(A) Gauge length=50mm, (%)
Result	471	376	24.5

## 3. Adhesion test:

Test method: ASTM D 3359-09 method B

Sample Description: Coated metal part

Lab Environmental Condition: 23± 2 °C, 50± 5%RH

Test Condition:

Tape: 3M® 610<sup>#</sup>

Space: 2mm

Test Result: 5B

Note: According to ASTM D3359-09 method B, in the adhesion classification—5B is the best, 0B is the worst.

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

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## TEST REPORT

No. : SC091221455

Date : Dec. 23, 2009

Page: 3 of 5

### 4. Neutral salt spray test (NSS):

Test method: EN ISO 9227:2006

Concentration of solution collected: (50±5) g/L NaCl

Chamber temperature: (35±2)°C

Volume of salt solution collected: (1.5±0.5)mL/(80cm<sup>2</sup>·h)

pH of collected solution at (25±2)°C: 6.5~7.2

Exposure period: 150h

Test result(s):

Sample	Exposure period	Appearance rating
Tanchor	150h	Appear white rust ,no red rust.Area of defects is >50%, rating is 0.

Note: Appearance rating refers to EN ISO 10289:2001, as follows

Area of defects A%	Appearance Rating
No defects	10
0<A≤0.1	9
0.1<A≤0.25	8
0.25<A≤0.5	7
0.5<A≤1.0	6
1.0<A≤2.5	5
2.5<A≤5.0	4
5.0<A≤10.0	3
10.0<A≤25	2
25<A≤50	1
50<A	0

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

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## TEST REPORT

No. : SC091221455

Date : Dec. 23, 2009

Page: 4 of 5



Before test (NSS)

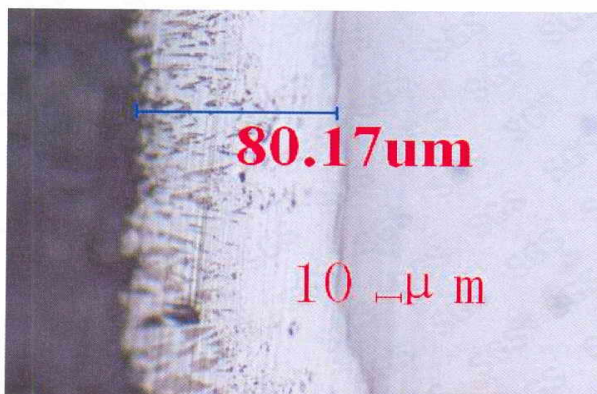


After test (NSS)

### 5. Coating thickness test:

Test method: EN ISO 1463:2004

Result, (μm)					Average thickness (μm)
80.3	80.2	80.2	80.1	80.2	80.2



Coating photo

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

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SHML 110350



## TEST REPORT

No. : SC091221455

Date : Dec. 23, 2009

Page: 5 of 5



Sample photo

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

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**SHML 110351**